

May 2022

Overview report by Main Panel D and Sub-panels 25 to 34

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Main Panel D

Introduction

1. The purpose of this report is to provide key data on submissions, feedback on the process of assessment and an overview of research in the sector. It refers only to research selected by institutions for assessment in REF 2021 and submitted to the sub-panels which constitute Main Panel D. The report does not reflect all of the research in the disciplines covered by Main Panel D being undertaken throughout the UK. The report has been discussed and collectively agreed by all members of Main Panel D with input from each of the 10 constituent sub-panels.
2. The main panel was comprised of 10 sub-panels, each responsible for a Unit of Assessment (UOA). Together they spanned the breadth of arts and humanities research, as well as covering some fields with a strong social sciences element. This configuration has offered the opportunity for an overview of arts and humanities research submitted to the REF within a consistent framework for assessment. In this respect the main panel discharged its key responsibility for the overall governance of the process to ensure that all submissions, across all 10 sub-panels, were treated equally and fairly, in accordance with the published 'Panel criteria and working methods' (REF2019/02) and the 'Guidance on revisions to REF 2021' (REF2020/02).

Executive Summary

3. The remarkable breadth and quality of arts and humanities research in the UK, the extent of its contribution to national life, and the range and variety of its productive collaborations with research produced in other disciplines, have been amply evidenced throughout REF 2021. The average overall quality profile for all submissions in Main Panel D tells an impressive story. It shows that 41 per cent of the submitted research was assessed to be world-leading (4*); 40 per cent to be internationally excellent (3*); 17 per cent assessed as internationally recognised (2*); and 2 per cent as nationally recognised (1*).
4. It should be noted that changes in the assessment framework implemented after the publication of Lord Nicholas Stern's review of university research funding in 2016 mean that the profiles for REF 2014 and REF 2021 are not directly comparable. Nevertheless, Main Panel D and its 10 sub-panels are confident that the arts and humanities research submitted for assessment demonstrates notable improvements in the quality of all three elements of the assessment framework - outputs, impact and environment. This is evidenced in the main panel's overall quality profile, which shows an 11 percentage points increase in world-leading research (4*), from 30 per cent in REF 2014 to 41 per cent in REF 2021. Some of this improvement arises from post-Stern changes in the configuration of REF, leading to the selection of strong outputs from work produced by all staff with a significant responsibility for research, rather than the selection of individual researchers. Clear improvements in the average impact and environment profiles have also contributed to overall progress. It should be noted that impact strategies are now

included within environment statements, rather than within the impact element of submissions, which is a further reason why these results are not directly comparable with those of REF 2014. 98% per cent of the individual submissions to its sub-panels included a percentage of 4* in their overall quality profiles, which indicates the wide distribution of outstanding arts and humanities research in the UK. The overall quality profile for each submission is weighted according to the number of Category A full-time equivalent staff in each submission when calculating the outcomes at sub-panel level.

5. The panels' work was divided into two phases: the criteria-setting phase followed by the assessment phase. By the second phase the membership of all sub-panels had been extended to include sufficient expertise to assess all of the material submitted, including representatives from industry and stakeholders in research from outside academia. The membership of the main panel and sub-panels balanced individuals with experience of previous research assessment exercises with those who could contribute fresh perspectives. Extensive calibration and moderation processes, both within the main panel and across the framework as a whole, ensured the consistent application of the published criteria. The material submitted for assessment, and the related evidence, was scrutinised with a degree of sustained rigour that located peer review at the heart of the assessment process.
6. The outbreak of the coronavirus pandemic in the early months of 2020 necessarily changed the timeline for institutional submissions and the assessment process, and meant that most of the work of assessment was conducted online. The main panel would like to express its appreciation of the staunch commitment of all those involved in REF 2021 in responding to these challenges. This dedication has ensured that no aspect of the rigour of the process has been compromised.
7. The main panel was struck by the variety of **research outputs** submitted for assessment, representing a very wide range of types of research, including many examples of strong practice research. 37.6 per cent were judged to be world-leading (4*) and a further 40 per cent to be internationally excellent (3*). Though sub-panels encountered differences of approach in the use of double-weighting, it was notable that its effective use had a positive effect on output quality profiles. Each sub-panel typically included two or more members who acted as advisers to provide guidance on the assessment of interdisciplinary research (IDR) submitted in that UOA and to work with advisers in other sub-panels to ensure its equitable assessment. All sub-panels are confident that such research was assessed on an equal footing with research with a more disciplinary focus.
8. After the introduction of **impact** as an element in the assessment framework in REF 2014, in REF 2021 institutions have benefited from increased experience of the submission of impact. All sub-panels were impressed by the range and ambition of the submitted case studies, demonstrating the significant public benefit of our research in many different contexts. These included, but were not limited to, impact on the economy, society, culture, public policy and services, health, production, environment, international development and quality of life. Research users, drawn from a wide range of sectors outside academia, made an invaluable contribution to the assessment process. Many organisations and institutions provided testimonials and data in support of impact case studies, and the main panel wishes to record its gratitude for the vital contribution made by these research users, organisations and institutions, both through their wide range of expertise and the body of evidence made available. Across Main Panel D, 46.4% of submitted impact was judged to be of outstanding quality (4*), with a further 37.6 per cent judged to be very considerable (3*). Some impact case studies demonstrated that

the underpinning research had been specifically undertaken to achieve the impacts, but there were many other instances where significant impacts had not been planned or anticipated when the research was first undertaken.

9. Assessment of the **environment** statements highlighted significant advances in the national infrastructure for research in the arts and humanities. The average FTE-weighted environment sub-profile for the main panel as a whole was 47.8 per cent world-leading (4*), 40.3 per cent internationally excellent (3*) and 10.9 per cent internationally recognised (2*). This indicates research environments that, through their sustainability and vitality, are conducive to the production of research of world-leading quality. Sub-panels were pleased to note the prevalence of stronger policies, actions and initiatives relating to Equality, Diversity and Inclusion (EDI), though this improvement was not consistent across all submissions. In many instances, proactive work in relation to research integrity, and the bold and sustained initiatives in relation to open research that are shaping publication practices in arts and humanities disciplines, were also noteworthy.
10. International members of the main panel made a substantial contribution to both the criteria-setting and assessment phases of the process, and to calibration and moderation exercises within Main Panel D and across all main panels. They confirmed that “the assessment had been carried out fairly and that it adhered to the published criteria and working methods” (paragraph 175 below). Overall, they confirmed that “outcomes align with international standards of research excellence” (paragraph 175 below). User members of the main panel reported that they “were reassured by the range of processes to ensure consistency and fairness including a range of calibration and moderation exercises, both within and across sub-panels, and good quality of challenge and discussion facilitated by the Fairness in REF Bias Mitigation and Intention Plans” (paragraph 142 below).
11. The main panel and its constituent sub-panels received exemplary support from four advisers and six secretaries, each seconded from a UK higher education institution (HEI) for the duration of the exercise. They, together with the sub-panel chairs, ensured that all phases of the assessment process were conducted in line with the Panel criteria and working methods (REF 2019/02) as published and that sufficient information was available to assure a robust process. The entire exercise has been managed and underpinned by outstanding support from the REF Director and REF team based at Research England.

Panel Membership

12. EDAP published a report on panel membership in August 2021 (REF 2021/01, Analysis of REF 2021 full panel membership) to which readers are directed for information on their analysis of panel membership by protected characteristic.

Overview of submissions

13. Main Panel D sub-panels received 554 submissions comprising a total of 15,700 staff (headcount). The details were as follows:

Table 1: Main Panel D submission details

		Number of submissions	Category A staff submitted – FTE	% change in category A staff submitted	Category A [and C for 2014] staff headcount	Number of outputs submitted	Outputs per submitted staff FTE	Impact case studies
Main Panel D	2021	554	14,304.54	33.8%	15,700	34,920	2.44	1,578
	2014	582	10,692		11,856	39,323	3.32	1,647
25 (Area Studies)	2021	23	579.82	20.0%	616	1,432	2.47	65
	2014	23	483		503	1,727	3.43	71
26 (Modern Languages and Linguistics)	2021	47	1,614.50	16.5%	1,688	3,877	2.40	161
	2014	57	1,386		1,464	4,943	3.38	192
27 (English Language and Literature)	2021	92	2,671.31	35.5%	2,903	6,519	2.44	279
	2014	89	1,971		2,155	6,933	3.22	283
28 (History)	2021	81	2,360.21	32.2%	2,472	5,766	2.44	248
	2014	83	1,786		1,885	6,458	3.43	267
29 (Classics)	2021	17	448.43	17.1%	463	1,070	2.39	49
	2014	22	383		401	1,388	3.46	59
30 (Philosophy)	2021	35	692.0	17.1%	739	1,707	2.47	87
	2014	40	591		641	2,174	3.39	101
31 (Theology and Religious Studies)	2021	31	505.12	22.3%	550	1,247	2.47	74
	2014	33	413		443	1,562	3.53	78
32 (Art and Design: History, Practice and Theory)	2021	86	2,607.19	62.5%	3,169	6,388	2.45	269
	2014	84	1,604		2,027	6,356	3.14	239
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	2021	84	1,523.27	33.4%	1,711	3,707	2.43	197
	2014	84	1,142		1,318	4,261	3.23	197
34 (Communication, Cultural and Media Studies, Library and Information Management)	2021	58	1,302.69	39.3%	1,392	3,207	2.46	149
	2014	67	935		1,019	3,521	3.46	160

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14. There are a number of factors contributing to the differences in figures between 2014 and 2021 shown in the table above:
- The rules relating to staff submission changed between the two exercises. In 2014, HEIs could choose which of their Category A eligible staff to submit. In 2021, HEIs were required to submit all staff who met the Category A eligibility criteria and demonstrated significant responsibility for research (as defined by the HEI within parameters laid out in the 'Guidance on Submissions' (para 141)).
 - The rules relating to the number of outputs required per member of staff submitted changed between the two exercises. In 2014, all staff had to submit 4 outputs, unless the individual applied for a reduction on the basis of equality-related circumstances affecting their ability to conduct research. In 2021, an average of 2.5 outputs had to be submitted per staff FTE, with between one and five outputs attributed to each member of submitted staff. In 2021, submitting units were able to apply for a reduction in the number of outputs required where the impact of the combination of equality-related individual staff circumstances over the period on research activity merited such an application.
 - The formula to determine the number of impact case studies required for each submission changed between the two exercises. In 2014, the maximum staff FTE associated with 2 case studies was 14.99; this increased to 19.99 in 2021, and the number of case studies required for larger submissions was reduced.
15. Please see also the description of the differences between REF 2014 and REF 2021 provided in the 'Summary report across the four main panels' (paragraphs 13 to 17). These differences mean that comparisons between REF 2014 and REF 2021 outcomes have only limited utility, especially in the case of outputs, and should be made with extreme caution.
16. The increase in FTE between 2014 and 2021 is therefore likely to be due to a combination of the change of rules between the two exercises, and (to a lesser extent) growth in the sector. The reduction in numbers of outputs and impact case studies submitted to most sub-panels, despite this growth in FTE, is a consequence of the changes in rules relating to these aspects of the submission. It is notable that these rule changes impacted differentially on the sub-panels, with the growth in FTE ranging from +16.49 per cent to +62.42 per cent, with the consequence that Sub-panel 32, which experienced the largest increase in FTE, saw an increase in the number of submitted case studies, unlike all other Main Panel D sub-panels.
17. The range of size of submitting unit also varied very considerably across the Main Panel D sub-panels, as illustrated by the table below.

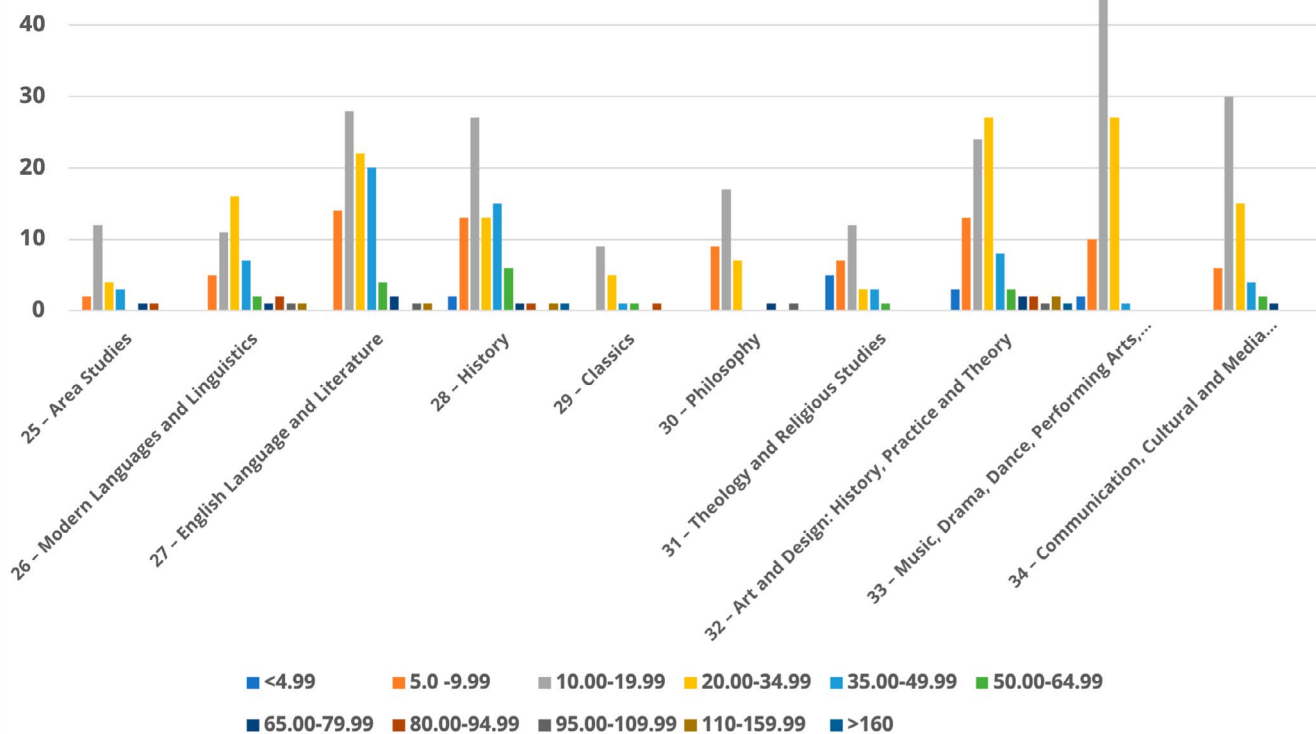
Table 2: Submission sizes (page 8).

Table 2: Submission sizes

	REF 2021 - Average submission size (FTE)	REF 2021 - largest unit	Category A staff submitted - FTE
Main Panel D	25.82		
25 (Area Studies)	25.21	88.05	7.00
26 (Modern Languages and Linguistics)	34.35	115.35	6.00
27 (English Language and Literature)	29.04	116.00	5.00
28 (History)	29.15	172.75	3.50
29 (Classics)	26.38	90.65	12.50
30 (Philosophy)	19.80	98.10	5.00
31 (Theology and Religious Studies)	16.29	55.20	3.00
32 (Art and Design: History, Practice and Theory)	30.29	191.67	3.30
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	18.13	39.63	3.60
34 (Communication, Cultural and Media Studies, Library and Information Management)	22.47	73.86	5.0

18. It is notable that whilst 4 of the sub-panels received submissions in excess of 100 FTE, one (UOA 33) had no submission over 40 FTE. Sub-panel 33 also had the smallest difference between the largest and smallest submissions received (36.03) compared with 188.37 for UOA 32, which had the largest such difference. All but one UOA (29 (Classics)) had submissions with fewer than 10 FTE.
19. Chart 1 shows the distribution of size of submission across the different sub-panels, showing that in some sub-panels there was a very broad spread of size of HEI and in others there was more of a clustering, with the majority of submissions comprised of between 10.00 to 34.99 FTE.

Chart 1: number of submitted units within specified FTE bands by sub-panel



20. Sub-panels were aware that biases might exist in relation to size of submission as well as differences in institutional type and mission, and aimed to address these through the application of their Intention Plans (see paragraph 33 below) to ensure the fair application of the criteria.

Table 3: Overall quality profiles (page 10).

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	Average percentage of research activity meeting the standard for:				
	4*	3*	2*	1*	Unclassified
Main Panel D	41	40	17	2	0
25 (Area Studies)	44	42	13	1	0
26 (Modern Languages and Linguistics)	41	40	18	1	0
27 (English Language and Literature)	48	39	12	1	0
28 (History)	43	37	18	2	0
29 (Classics)	45	39	15	1	0
30 (Philosophy)	40	41	17	2	0
31 (Theology and Religious Studies)	38	41	19	2	0
32 (Art and Design: History, Practice and Theory)	37	41	19	3	0
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	39	36	20	4	1
34 (Communication, Cultural and Media Studies, Library and Information Management)	38	41	19	2	0

21. As noted in the 'Summary report across the four main panels' paragraph 6, the sub-profiles that lead to the profiles given above are FTE-weighted, that is, they are produced by weighting the proportion of activity at each starred level for each submission by the FTE. As the assessment process progressed, Main Panel D and its sub-panels reviewed unweighted sub-profiles, which are simple averages of the scores given to each submitting unit, to check that the sub-panels were applying the criteria consistently.
22. As noted above (paragraph 17 and tables 2 and 3), the range of size and type of HEI submitted to each sub-panel differed considerably. Sub-panels also received submissions from a broad range of institutions - from well-established research intensives to those developing and embedding research within a largely teaching- or training-led mandate, with differing balances across different disciplines. Both the combination of range of size and type of submitting unit and the differential effect across the sub-panels of the changes to assessment rules introduced following the Stern review contributed to the differing pattern of outcomes given above.

Main and sub-panel working methods

23. The main panel confirms that all sub-panels conducted their assessments in line with the 'Panel criteria and working methods' (REF2019/02) and 'Guidance on revisions to REF 2021' (REF2020/02), and that the quality criteria were applied consistently across the sub-panels.

Effects of Covid-19 on working methods

24. As a consequence of the pandemic, the vast majority of the assessment process was carried out virtually, with in-person meetings only becoming possible towards the very end of the assessment process. Formal and informal meetings took place over Zoom and Teams, with sub-panels applying protocols to ensure confidentiality (such as disabling chat and moving attendees into the waiting room or breakout rooms).
25. Mindful of Zoom fatigue, sub-panels adopted a range of mechanisms to lessen the impact of virtual attendance on members. These included:
- Ensuring regular breaks of sufficient length to enable panel members to get adequate screen breaks and refreshments;
 - Mixing plenary sessions with breakout sessions to vary the ways in which sub-panel members interacted;
 - Sub-panel chairs and deputies taking turns to lead items (and inviting other sub-panel members to lead as appropriate);
 - In multi-day meetings, having some days that started later or finished earlier, or introducing periods of time when panel members could work independently or in pairs on assessment matters.
26. The main panel noted that meeting virtually did have some benefits, for example enabling regular meetings of the Main Panel D executive group (the chair, deputy and advisers) and the sub-panel executives (the chair, deputy(ies), adviser and secretary); facilitating the input of international members (although time differences could be challenging) and reducing the environmental impact of meetings by removing the need to travel. There were also EDI benefits with respect to inclusivity and through enabling members to balance caring responsibilities and attendance at virtual meetings.
27. The main panel was confident that conducting meetings virtually did not compromise the robustness and rigour of the process, but there was undoubtedly a human cost. Workloads were higher, including for sub-panel executives, with respect to meeting choreography and management. There was no space for informal, serendipitous interactions such as would normally take place in multi-day face-to-face meetings, and which would have contributed both to the completion of assessment and the development of effective working relationships between sub-panel members. In a future exercise there is undoubtedly room for a proportion of meetings to be conducted virtually, but the main panel would strongly recommend this be in combination with face-to-face meetings, both to assist in workload management, and to support the wellbeing of sub-panel members.

Methods of allocation

28. Readers were identified on the basis of their expertise to assess the various elements of a submission allocated to them and to recommend quality grades. They examined all such material in sufficient detail so as to form robust quality judgments.
29. Each **output** was allocated on the basis of panel members' expertise to assess the research, taking into account conflicts of interest. Where necessary, additional expertise was deployed either through discussion with a wider group of sub-panel members, the service of specialist advisers or joint assessment with a member from another sub-panel. This was a collaborative process, and each submission was assessed by a range of sub-panel members, who collectively contributed to a robust assessment of every submission.
30. In the case of **impact case studies** at least one reader was an academic member and at least one a user member or impact assessor with appropriate expertise. **Environment submissions** were assessed by a team of assessors, with grades scrutinised by each sub-panel as a whole. The leads for environment were academic members of the sub-panel, supported by at least one further reader. Reviewing impact and environment in small groups helped to ensure the robustness of decision-making through facilitating challenge, including of any perceived bias (see paragraph 142 below).

Conflicts of interest

31. In line with Annex D of REF 2019/02, the main panel and its sub-panels maintained records of major and minor interests throughout the assessment process, and conflicted panel members were not involved in the assessment of submitted items or HEIs in which they had declared a disqualifying interest, or in any deliberations about these, withdrawing from any discussion of conflicted individual items or HEI submissions as appropriate. This applied to all members of the sub-panel executives (chairs, deputies, advisers and secretaries), who were also not involved in the allocation of submitted material in which they had declared a disqualifying interest. Sub-panel executives reviewed declarations of minor interest to determine what level of action was needed to avoid inappropriate engagement in the assessment process.

Approach to ensuring Equality, Diversity and Inclusion, including use of Intention plans, at main and sub-panel levels

32. Main Panel D and its sub-panels were conscious that over the REF 2021 period, the language and terminology relating to equality and diversity evolved and indeed is continuing to evolve. For this reason, whilst published REF documentation such as REF 2019/01 and REF2019/02 refer to "Equality and Diversity", this report uses the formulation "Equality, Diversity and Inclusion" (EDI). It should be stressed that this is a change in terminology, not a change in the assessment criteria.
33. Members of Main Panel D and its sub-panels undertook REF-focused unconscious bias training (Fairness in REF 2021 Assessment) and as an outcome of this developed Fairness in REF Intention plans (also known by some sub-panels as Bias Mitigation Plans) covering their working methods and each aspect of the assessment. An example of these will be made available in the EDAP report. These were living documents, reviewed at each meeting and updated as necessary to reflect panel members' experience of

assessment. They helped sub-panel members to be mindful of, and as far as possible put to one side, their biases and preconceptions when undertaking assessment, and empowered colleagues across each sub-panel (including the secretariat) to challenge where bias appeared to be evident. The plans therefore reinforced the importance of critical collegiality in the way in which sub-panels functioned as well as introducing the need for both the sub-panel executives and reviewers themselves to be aware of health and wellbeing in the management of bias. The sub-panels found these a valuable addition to the process and reflect further on them in their reports below.

34. Sub-panels did not have access to information about individual staff circumstances or protected characteristics of submitted staff, when carrying out their assessment.

Roles of main panel international, interdisciplinary and user members, including interactions with sub-panels

35. The main panel benefitted greatly from the knowledge and expertise of three international members, three research user members (user members) and one interdisciplinary expert (IDR member).
36. International members played a full role in the business of the main panel as well as engaging in sub-panel calibration and moderation processes to ensure consistency with international standards. International members regularly attended and observed the proceedings of sub-panel meetings.
37. User members played a significant role in the assessment of impact including engaging in sub-panel and main panel level calibration and moderation processes, and undertaking assessment at sub-panel level alongside impact assessors and sub-panel members. User members provided advice to sub-panels and supported the consistent application of the criteria across the assessment of impact.
38. The IDR member played a full role in the business of the main panel to advise on the assessment of interdisciplinary research, including taking part in calibration of interdisciplinary outputs at sub-panel and main panel level. The IDR member supported the sub-panel IDR advisers and advised on the consistency of assessment standards for IDR research.
39. All sub-panels had one and most had at least 2 IDR advisers who assisted the chair and deputy in ensuring IDR material was appropriately allocated, attended cross panel IDR discussions, led discussions on the assessment of IDR at sub-panel meetings and monitored IDR assessment. Further information on the sub-panel processes relating to the assessment of IDR is provided in the sub-panel overview reports.

Main and sub-panel calibration exercises

40. In preparation for the assessment phase for each element of the submission, the main panel and its sub-panels undertook initial calibration exercises that were designed to ensure the criteria and quality thresholds were consistently applied within and between the sub-panels. These initial calibration exercises were followed by a process of ongoing calibration that ran throughout the assessment phase, including a continuous process of review of grading patterns, conducted by sub-panel chairs and their deputies, discussions at each sub-panel meeting, and regular discussions at main panel meetings.
41. International, IDR and user members of the main panel played central roles in the overall calibration process. They chaired review groups within the main panel, participated in the calibration of submitted materials, oversaw moderation activities as the assessment progressed, arbitrated in specific instances where agreements could not be reached, and observed sub-panel meetings throughout the assessment phase. The main panel and sub-panel members who had served in REF 2014 engaged in the calibration exercises alongside new panel members so as to assist continuity in the interpretation of the quality levels across the two exercises.
42. Calibration materials specific to each sub-panel were selected from submitted research outputs, impact case studies and environment templates, avoiding conflicts with sub-panel members. These were considered against the assessment criteria set out for outputs, impact and environment and in the case of outputs as further amplified in REF 2019/02 (paragraphs 204-205), to ensure consistency of approach and adherence to the published criteria.
43. A sample of material reviewed at sub-panel level was also reviewed at main panel level to ensure the consistent application of criteria across the main panel, and to enable the discussion of complex issues.
44. Each sub-panel selected a range of calibration materials that illustrated assessment issues distinctive to their disciplines and, generally, across the main panel as a whole, i.e.:

Research outputs	the range of output types in each UOA requests for double-weighting IDR Covid statements research areas
Impact case studies	the impact period a range of HEI types and sizes a range of impact types a range of evidence types Covid statements continuing case studies
Environment Templates	a range of HEI types and sizes a range of environment types e.g. small and/or specialist v multidisciplinary HEIs presence/absence of REF5a

45. As part of the initial calibration exercises the main panel reviewed a selection of materials across all of the sub-panels and provided feedback both at this stage and throughout the ongoing process of calibration. At each stage of calibration where there was a spread of grades from sub-panel members or where grades deviated significantly from the mean these were reviewed and discussed, to identify why different grades were being applied and to enable sub-panel members to reach an agreed position.
46. A moderation process to review impact grades across the sub-panels and to test that the criteria was being applied consistently, involving international and user members as well as main and sub-panel members, was carried out towards the end of the assessment of impact; this ensured that sub-panels had a consistent approach to applying grades.
47. A series of further calibration exercises involving output, impact and environment material was carried out across all four main panels throughout the assessment period, with a view to ensuring as far as possible the consistent application of standards for the assessment of submissions. The four main panel chairs and a sample of main panel, international and user members participated. The outcome confirmed an appropriate degree of consistency of approach between the four main panels.

Cross referrals, joint assessment, specialist advice and dealing with work that spans UOA boundaries

48. In allocating material for review, all sub-panels ensured that appropriate expertise was brought to bear on the element of the submission in question. In some instances, further readers reviewed submitted material where, for example, a judgement could not be reached because of a requirement for additional specialist knowledge, or there was disagreement between reviewers, and this might involve the chair or deputy chair of a sub-panel acting as arbitrator. Specialist advisers were used to review outputs in languages outside a sub-panel's competence, or where other specialist advice was required; further comments may be included in sub-panel reports. Cross-referral and joint assessment were employed as laid out in paragraphs 90 – 94 below, where the sub-panel in question considered that it did not have sufficient expertise to reach an informed judgement on an output. A small number of impact case studies were cross-referred within Main Panel D, with particular reference to ensuring the underpinning research met the quality threshold.
49. Sub-panels ensured that appropriate expertise was brought to bear in the assessment of interdisciplinary research, whether flagged by the HEI or identified as such by the sub-panel, through a range of different mechanisms:
 - through assessment within the sub-panel to which the work was submitted, where the necessary expertise was present
 - through joint assessment, where a combination of expertise across sub-panels was required; this involved discussions between the readers with identified expertise
 - through cross-referral, where expertise to assess the output lay wholly outside the sub-panel to which the output was submitted.

Resolving common issues encountered by sub-panels

50. Common issues encountered by the sub-panels were identified through regular formal and informal meetings of members of Main Panel D as well as through discussions between the main panel advisers. These were normally resolved at main panel meetings, drawing where appropriate on advice from the REF team, and always referring to 'Guidance on submissions' and the 'Panel criteria and working methods' for guiding principles. On a small number of occasions, where issues were relevant across the four Main Panels, discussions took place at the MAP (Main and Advisory Panel Chairs) meeting.

Approach to assessing outputs and developing output sub-profiles

51. Each output was assessed against the criteria of originality, significance and rigour, with particular reference to the expansion of the quality descriptors in the Panel criteria and working methods (paragraphs 204-205 reproduced above). Integer scores on the scale 0-4 were assigned to each output, with each sub-panel operating mechanisms to identify and discuss items which fell on the borderline between assessment scores. All instances of unclassified grades were reviewed and approved by the sub-panel as a whole or by the sub-panel executive acting on behalf of the sub-panel.
52. The review and agreement of double-weighting statements was undertaken either by the allocated reviewers or by the sub-panel executive and any challenging instances were discussed in plenary by the relevant sub-panel as a whole. All double-weighting decisions were formally approved by the whole sub-panel or by the sub-panel executive acting on behalf of the sub-panel.

Approach to assessing impact and environment and developing impact and environment sub-profiles. profiles

53. Each impact case study was assessed by (at least) one user member/impact assessor, working alongside academic colleagues from the sub-panel (see paragraph 30 above). In the assessment of impact and environment, panellists normally reviewed material independently before meeting in small groups to discuss and agree proposed scores. These were then reviewed and agreed by the relevant sub-panel.
54. In developing the impact sub-profiles, sub-panels used a consistent approach to grading, against the criteria of reach and significance. Each case study was graded on a nine-point scale consisting of integer and half-integer scores from 0-4, with the integer scores corresponding to the level descriptors for the impact sub-profile. Half-integer scores of 0.5, 1.5, 2.5 and 3.5 were allocated to case studies that were judged on balance either to be on the borderline between two of the quality levels, or to incorporate aspects of both levels.
55. An impact case study with a half-integer score contributed to the impact sub-profile by the assignment of half its grade to each of the two starred levels that the borderline grade fell between. All instances of unclassified grades were closely scrutinised and agreed by the sub-panel.
56. Sub-panels assessed and scored the unit environment templates (REF5b) drawing on the institutional level environment template (REF5a) to inform and provide context for their assessment. Data on doctoral degrees awarded (REF4a) and on research income

and income-in-kind (REF4b and c) were taken into account when assessing the relevant section of the template, informing but not driving the scoring. Data was annualized and considered per FTE so as to ensure appropriate comparisons were drawn, and sub-panels also took into account the context in which units were operating, and any non-HESA income reported in section 3.

57. In developing the environment sub-profiles, sub-panels used a consistent approach to grading, against the criteria of vitality and sustainability. Each section of the environment template (that is, Unit context and structure, research and impact strategy; People; Income, infrastructure and facilities; and Collaboration and contribution to the research base, economy and society) was graded on a nine-point scale consisting of integer and half-integer scores from 0-4, with the integer scores corresponding to the level descriptors for the environment sub-profile. Half-integer scores of 0.5, 1.5, 2.5 and 3.5 were allocated to sections of the environment templates that were judged on balance either to be on the borderline between two of the quality levels, or to incorporate aspects of each.
58. A section of the environment template with a half-integer score contributed to the environment sub-profile by the assignment of half its grade to each of the two starred levels that the borderline grade fell between. All instances of unclassified grades were reviewed and discussed by the sub-panel as a whole.

Reviewing emerging assessment outcomes

59. Sub-panel executives regularly reviewed emerging scoring patterns for individual assessors and where outliers were observed, reviewed the scoring in the context of the appropriate application of the quality criteria.
60. Periodically throughout the exercise Main Panel D reviewed emerging assessment outcomes for all aspects of the process (outputs, impact and environment). Where it appeared that there might be issues with the consistent application of the quality criteria, a range of strategies, overseen by the main panel, were employed by the relevant sub-panels, to determine whether this was the case and take action if required. This included informal discussions with the Main Panel D chair and other members of the executive, moderation exercises across sub-panels and the assistance of the Main Panel D international and user members (see paragraphs 35 – 39 and 172 – 176).

Endorsing the quality profiles

61. Main Panel D endorsed the sub-profiles for outputs, impact and environment at sub-panel level as these stages of the assessment were completed, and then the full set of outcomes at its final meeting. In so doing, it noted that sub-panels confirmed the following:
 - a. That the overall quality profile for each submission was a fair reflection of the research activity in that submission, and that the sub-panel's assessment had taken account of all the different components of the submission.
 - b. That each submission had been assessed against the published criteria and according to the published procedures.

c. That each submission had been examined in sufficient detail to form robust judgements, and that appropriate expertise had been deployed in assessing submissions.

62. The ongoing processes of calibration, reviewing sub-panel progress and emerging outcomes and moderation, and the cross-panel working of the international, interdisciplinary and impact members of the main panel all gave the main panel full confidence in the outcomes.

Outputs

63. The table below shows the average output sub-profiles, weighted by FTE, for Main Panel D and its constituent sub-panels.

Table 4: Output sub profiles

	Average percentage of research activity meeting the standard for:				
	4*	3*	2*	1*	Unclassified
Main Panel D	37.6	40	20.1	2	0.3
25 (Area Studies)	41.5	41.5	15.3	1.6	0.1
26 (Modern Languages and Linguistics)	35.8	42.7	20.2	1.1	0.2
27 (English Language and Literature)	45.9	39.6	14	0.5	0
28 (History)	40.5	37.8	20.4	1.2	0.1
29 (Classics)	41.8	39	16.6	2.4	0.2
30 (Philosophy)	36.6	43.4	18.8	1.1	0.1
31 (Theology and Religious Studies)	33.9	43.4	21	1.5	0.2
32 (Art and Design: History, Practice and Theory)	30	41.9	23.9	3.5	0.7
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	35.8	34	24.7	4.9	0.6
34 (Communication, Cultural and Media Studies, Library and Information Management)	33.2	41.7	22.5	2.3	0.3

64. The main panel noted the significant improvement in profiles compared to 2014. Evidence suggests that the increase in the quality profiles is largely attributable to changes in the submission requirements since the previous exercise. The main panel supports these changes, judging that the reduction in the per capita output requirement from 4 outputs to an average of 2.5 is more conducive to the production of longer form outputs including extended creative practice, which is a distinctive feature of Main Panel D research. The increase in the volume of monographs submitted, as well as longer form practice research outputs (including multi-component outputs), the increase in the

use of the double-weighting provision for a range of output types, and the correlation between double-weighting, longer form outputs and higher scores have all contributed to an increase in the quality profile compared to 2014.

65. The main panel also noted the range in output profiles between the sub-panels, which is more marked than in 2014. The main panel undertook a rigorous process of calibration and moderation (detailed under Working Methods in paragraphs 40 - 47), with the active support and engagement of its international members and reassured itself that variance in FTE-weighted sub-panel profiles is attributable to the nature of the individual submissions in terms of size and quality, rather than differential application of the assessment criteria.
66. Variance in double-weighting requests also had a significant impact on the sub-panel average profiles, and this is covered in more detail below.
67. The main panel was keen to acknowledge the importance of much of the work graded as 2*. In arts and humanities disciplines, the process of developing longer form outputs rests to a large extent on work that is not world-leading in itself but it becomes the foundation stone for such work. Without on-going support for this fundamental work, the capacity of the sector to produce world-leading research will be severely compromised.

Double-weighting

68. The main panel was pleased to note an increase in units making use of the provision to nominate items for double-weighting, where they met the criteria in terms of scale and scope. The figures in Table 5 indicate the scale of the increased use of this provision across Main Panel D compared to REF 2014, with the largest volume of double-weighting requests in those disciplines with the greatest volume of monographs. Over 95 per cent of requests for double-weighting were accepted.
69. Whilst there has been an increase in the use of double-weighting for longer-form practice research outputs, it is still evident that some submitting units did not take full advantage of this provision, despite the explicit amendment to the 'Panel criteria and working methods' (REF 2019/02) to make clear that the provision applies to all output types, where they meet the criteria.
70. Judgements about whether or not to accept a double-weighting request were made separately from any judgement of output quality. It is the case, however, that longer form outputs in the arts and humanities, where they represent an extended process and period of research, did tend to attract higher scores.

Table 5 – Double weighting requests in 2021 compared to 2014 (page 20).

Table 5 – Double weighting requests in 2021 compared to 2014

	REF 2014		REF 2021	
	Number of outputs with a double-weighting request	% of the outputs submitted	Number of outputs with a double-weighting request	% of the outputs submitted
Main Panel D	2254	5%	6065	17%
25 (Area Studies)	31	2%	189	13%
26 (Modern Languages and Linguistics)	204	4%	667	17%
27 (English Language and Literature)	506	7%	1572	24%
28 (History)	804	12%	1353	24%
29 (Classics)	166	12%	246	23%
30 (Philosophy)	107	5%	187	11%
31 (Theology and Religious Studies)	112	7%	300	24%
32 Art and Design: History, Practice and Theory)	87	1%	606	9%
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	167	4%	485	13%
34 (Communication, Cultural and Media Studies, Library and Information Management)	70	2%	460	14%

Duplicate Outputs

71. Where the same output was identified as being submitted within a sub-panel, either within a single submission or from different institutions, the same grade was awarded.

Output Types

72. Paragraph 206 of the 'Panel criteria and working methods' clearly states that all sub-panels would 'welcome all forms of research output that fulfil the eligibility criteria for the REF' and that 'the sub-panels will neither advantage nor disadvantage any type of research or form of output.' Paragraph 207 goes on to advise that 'No sub-panel will use journal impact factors, or any hierarchy of journals in their assessment of outputs. No output will be privileged or disadvantaged on the basis of the publisher, where it is published or the medium of its publication'. The main panel wishes to affirm its adherence to this aspect of the criteria, also confirming that it did not use citation data. World-leading research was found in every type of output submitted.
73. Clearly, different disciplines and sub disciplines received different combinations and proportions of types of output, and these are commented on further in the sub-panel overview reports. The glossary of output types included in Annex C of the 'Panel criteria and working methods' significantly improved the categorisation of outputs compared to 2014. However, there were still anomalies in the ways in which some submitting units classified their outputs. Whilst this had no impact on the assessment of individual outputs, it does limit the accuracy of any analysis by output type. The categories still do not entirely capture the range and diversity of output types received within Main Panel D, and the main panel would recommend further consideration of this issue early in the next REF cycle. Table 6 below shows the percentage of output types assessed across each of Main Panel D's constituent sub-panels.

Table 6: Types of output assessed by each sub-panel (page 22).

Table 6: Types of output assessed by each sub-panel

Output code	Output type	MPD	25	26	27	28	29	30	31	32	33	34
A	Authored Book	24.16%	20.97%	20.55%	40.59%	33.66%	28.48%	15.92%	40.21%	10.85%	15.77%	21.24%
B	Edited Book	5.32%	2.58%	5.67%	8.13%	4.69%	11.03%	0.79%	4.08%	4.33%	6.93%	3.42%
C	Chapter in Book	16.59%	14.52%	18.56%	15.99%	15.05%	25.70%	14.14%	21.05%	14.84%	18.16%	17.20%
D	Journal Article	40.26%	60.08%	51.48%	29.94%	45.07%	27.64%	68.42%	31.83%	29.89%	30.00%	51.45%
E	Conference Contribution	0.85%	0.32%	0.75%	0.08%	0.11%	0.48%	0.07%	0.21%	3.10%	0.46%	0.29%
F	Patent	0.04%								0.21%		
G	Software	0.02%		0.03%			0.12%			0.07%		
H	Website content	0.20%		0.26%	0.36%	0.11%			0.10%	0.17%	0.43%	0.07%
I	Performance	1.02%			0.73%					1.68%	5.01%	0.25%
J	Composition	1.35%		0.16%	0.02%				0.31%	0.24%	11.29%	0.40%
K	Design	0.15%								0.62%	0.19%	0.07%
L	Artefact	1.22%								6.05%	0.22%	0.15%
M	Exhibition	2.39%		0.03%		0.02%	0.12%			11.58%	0.84%	0.25%
N	Research report for external body	0.23%	0.56%	0.13%	0.04%	0.05%		0.20%	0.10%	0.50%	0.15%	0.55%
O	Confidential report for external body	0.03%				0.02%				0.12%		
P	Devices and Products	0.05%								0.23%	0.03%	
Q	Digital or visual media	1.14%		0.10%	0.16%				0.21%	2.77%	2.94%	2.51%
R	Scholarly Edition	1.03%	0.73%	1.32%	2.32%	0.84%	5.45%	0.07%	1.26%	0.07%	0.90%	0.00%
S	Research datasets and databases	0.07%		0.16%	0.04%	0.14%	0.36%			0.02%	0.06%	
T	Other	3.68%	0.08%	0.34%	1.31%	0.09%	0.12%	0.07%	0.42%	12.62%	6.59%	2.04%
U	Working Paper	0.09%		0.08%	0.10%	0.16%	0.24%	0.26%		0.02%	0.03%	0.11%
V	Translation	0.11%	0.16%	0.41%	0.18%	0.00%	0.24%	0.07%	0.21%			
	Total number of outputs assessed *	29527	1240	3864	4954	4418	825	1520	955	5768	3233	2750

* Double-weighted outputs count as one item.

Edited Books

74. All of the sub-panels noted that institutional approaches to the submission of edited books varied and not all HEIs provided information on the research component of the editorial role, to inform the assessment. The main panel agreed that where the editorial role was not evident within the submitted material (including following any audit request, as appropriate) the editorial element should either be disregarded in the assessment, and only the submitted book chapter would be assessed. Panellists were advised to ensure that the same threshold judgement applied to co-edited outputs as applied to co-authored outputs, that is, that assessors need only be satisfied that the author made a significant editorial contribution in order to assess the editorial work as a whole.
75. The sub-panels noted a qualitative distinction between two broad types of edited books. The first comprised collections of chapters, for which the editorial introduction is a general overview of the topic and a description of the following contents. The second is the edited book in which the editorial introduction clearly identifies the origination of a distinctive intervention for which the following chapters function as an elaboration or expansion of the topic. The latter were the edited books that scored most highly, with the strongest submissions clearly articulating the research dimensions of the editorial role.

Overlap

76. The Panel criteria and working methods specifically addressed the submission of outputs with significant material in common ('overlap') in paragraphs 214 and 215. As in 2014, it was noted by sub-panels that some submissions included material that was repeated in more than one output submitted by an individual researcher, or had been published previously and submitted to REF 2014. In all such cases, sub-panels used their professional judgement to ensure that the outputs in question were assessed in such a way as to adhere to the spirit of the criteria, whilst enabling the greatest credit to be awarded to an institution. There were instances where the extent of the overlap was so great that one of the outputs was graded as 'unclassified'.
77. The Guidance on submissions (REF 2019/01) requested the inclusion of additional information in those instances where a submitted output contained significant information in common with an output published prior to 2014, to provide an explanation of 'how far any work published earlier was revised to incorporate new material'. Frequently, this was not a provision with which HEIs complied, nor was it always evident in the publication itself, which was considered to be a regrettable change to publication practice. Audit queries were often used to investigate such cases further, but the main panel suggests that further consideration be given in future exercises as to how best to encourage submitting units to address this issue.

Language Skills

78. High-quality research in some areas requires a good command of languages, whether European or non-European, which was not always apparent. In weaker outputs, this manifested itself in fundamental errors of interpretation and understanding, but also resulted in top-down Anglo-centric studies. The main panel wished to endorse this concern as raised by sub-panels, noting the need to ensure that rigorous language skills are included in research training.

Output format

79. Sub-panels received considerably more outputs in a wider variety of digital formats, compared to REF 2014. In some instances, these were straightforward PDFs of journal articles and book chapters, or material submitted on USB pens (the latter being categorised in REF as 'physical outputs'). Sub-panels recognised that many of the digital outputs were submitted in that form as a COVID mitigation.
80. There were many more digital versions of monographs, which were often more challenging for panellists because of a tendency for publishers to use endnotes rather than footnotes, making navigation of large digital books harder to manage. This did not negatively impact the scores attributed to such outputs but raised questions amongst panel members as to whether this practice could be amended in future publications.
81. Images in digital monographs were at times poorly reproduced – an important issue if future scholars are to access the very best reproduction of visual works that are being described. The colours, texture or other qualities of what is being represented are often critical to the understanding of the work, especially technically if the research is focused on the craft of a subject.
82. Outputs hosted on HEI or external platforms and websites were not always easy to access and at times necessitated raising an audit query. The main panel would strongly recommend further consideration of the categorisation of outputs and approaches to standardisation in formats for future exercises. It is anticipated that any future REF exercise would not necessitate the submission of material on USBs and that any digital repository would accommodate the full range of submitted output forms.

Practice Research

83. The 'Panel criteria and working methods' (REF 2019/02) provided submitting institutions with detailed guidance on the presentation of practice research – primarily but not exclusively aimed at those HEIs submitting into UOAs 32, 33 and to a lesser extent, 34. Practice research submissions were significantly improved in terms of detailing the research dimensions of the submitted outputs.
84. The sub-panels saw much world-leading practice research, ranging from work of individual researchers through to collaborative, socially-engaged and applied research co-created with community or professional partners.
85. Many such outputs were supported by a precise 300-word statement that articulated the research context, methods and methodology, insights and dissemination. Outputs were often further supported by additional contextual information. The strongest practice research outputs were characterised by precision, depth and brevity in presenting the research dimensions of the work. Multi-component outputs worked best when the relation between the items submitted was made clear, with good signposting, and where the summative nature of the submission could be read across all its constituent elements.
86. In all forms of practice research, weaker submissions did not always sufficiently identify or articulate a research dimension in the materials submitted, with limitations in critical depth, rigorous process or research contextualisation.
87. More detailed reflections on practice outputs are included in the individual sub-panel reports.

Interdisciplinary Research (IDR)

88. The sub-panels were pleased to note that interdisciplinary research is flourishing, in spite of the variable use of the IDR 'flag' in the submission system. They identified ambitious, adventurous and innovative IDR combinations complementing more established IDR fields and together pushing the boundaries of disciplines and fields, fostering cross-border conversations and creating new areas of research. The diverse combinations of theory with practice, arts and humanities with social and natural sciences in individual and collaborative outputs have led to world-leading contributions characterised by thematic, methodological and collaborative innovation, disciplinary and interdisciplinary rigour (interdisciplinary innovation is grounded in disciplinary strength), and theoretical and practical significance.
89. Further reflections from the IDR member on the Main Panel are included at paragraphs 170 – 172.

Cross-referrals and joint assessment

90. The interconnected relationships between the sub-panels in Main Panel D, and the wider disciplinary spectrum of the whole exercise encompassing all the main panels, were evident in the volume and range of cross-referrals and joint assessment. The majority of items assessed in this way were subject to cross-referral, with a smaller number of outputs identified for joint assessment. These followed a similar process to cross-referral, but instead of taking advice from another sub-panel, the relevant members from each sub-panel both reviewed the output in question and agreed a score together.
91. Of the 29,527 research outputs assessed by sub-panels within Main Panel D, 1,086 (4%) were cross-referred out to other sub-panels. In such instances the receiving sub-panel provided the 'home' sub-panel with advice, and the latter remained responsible for the grading. Of these 1,086 cross-referred outputs, 71% were to other sub-panels within Main Panel D and the remaining 29% to sub-panels within the other three main panels.
92. The sub-panels within Main Panel D received a total of 992 outputs through cross-referral. Of these, 77% were from other sub-panels within Main Panel D and the remaining 23% were from sub-panels within the other three main panels.
93. Table 7 (page 26) details the cross referrals into and out of Main Panel D's sub-panels.

Table 7: Cross-referrals

	Cross referrals out to other sub-panels			Cross referrals in from other sub-panels		
	Within MPD	Outside MPD	Total out	From within MPD	From outside MPD	Total in
Main Panel D	772	314	1086	707	215	922
25 (Area Studies)	6	1	7	105	27	132
26 (Modern Languages and Linguistics)	110	18	128	72	35	107
27 (English Language and Literature)	72	2	74	79	18	97
28 (History)	208	40	248	72	33	113
29 (Classics)	23	44	67	156	42	198
30 (Philosophy)	50	10	60	41	0	41
31 (Theology and Religious Studies)	35	15	50	34	1	35
32 (Art and Design: History, Practice and Theory)	56	82	138	66	4	70
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	85	66	151	59	15	74
34 (Communication, Cultural and Media Studies, Library and Information Management)	86	36	122	23	23	46

94. Table 8 (page 27) summarises the outputs jointly assessed within Main Panel D sub-panels and between Main Panel D sub-panels and those of the other 3 main panels.

Table 8: Joint assessment

	Outputs jointly assessed with other sub-panels		
	Outside MPPD	Total	Category A staff submitted - FTE
Main Panel D	230	85	315
25 (Area Studies)	8	2	10
26 (Modern Languages and Linguistics)	23	6	29
27 (English Language and Literature)	24	1	25
28 (History)	6	11	17
29 (Classics)	4		4
30 (Philosophy)	11	7	18
31 (Theology and Religious Studies)	2	0	2
32 (Art and Design: History, Practice and Theory)	43	30	73
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	47	13	60
34 (Communication, Cultural and Media Studies, Library and Information Management)	53	14	67

Effects of Covid-19 on outputs

95. The sub-panels were aware of the adverse circumstances in which HEIs were preparing submissions to REF 2021. Most frequently, this was evident in:

- Cancelled exhibitions, performances, events, affecting practice research outputs
- Delayed publication, with outputs submitted in proof or pre-publication format
- Scanned copies of outputs where the HEI was unable to collate hard copies for submission

96. Sub-panels were careful to apply a principle of no-detriment in the assessment of such outputs, ensuring that the impact of Covid did not negatively affect the score attributed to individual outputs, and raising audit queries where any additional information was necessary to complete the assessment.

Impact

97. The sub-panels received a total of 1,578 impact case studies. This compares to 1,647 impact case studies in REF 2014, representing a decrease of 4.19%. The change relates to the increase in the threshold of Category A staff (FTE) with the requirement to submit the minimum two impact case studies (from up to 14.99 FTE in REF 2014, to up to 19.99 FTE in REF 2021).
98. The number of impact case studies per submission ranges from two in the smallest submissions to ten in the largest, with the average submission being 2.85 case studies, reflecting the high proportion of smaller submissions with fewer than 20 FTE.

Table 9: Summary of impact submissions

	Total FTE submitted	Number of ICS submitted	Average number of ICS per submitting unit	Average FTE per ICS	Smallest FTE per impact case	Largest FTE per impact case study
Main Panel D	14,304.11	1,578	2.85	9.06	1.50	19.17
25 (Area Studies)	579.82	65	2.83	8.92	3.50	12.58
26 (Modern Languages and Linguistics)	1,614.50	161	3.43	10.03	3.00	13.26
27 (English Language and Literature)	2,617.31	279	3.03	9.38	2.50	13.00
28 (History)	2,360.21	248	3.06	9.52	1.75	17.28
29 (Classics)	448.43	49	2.88	9.15	6.25	12.95
30 (Philosophy)	692.0	87	2.49	7.97	2.50	12.26
31 (Theology and Religious Studies)	505.12	74	2.39	6.83	1.50	11.35
32 (Art and Design: History, Practice and Theory)	2,607.19	269	3.13	9.68	1.65	19.17
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	1,523.27	197	2.35	7.73	1.80	13.50
34 (Communication, Cultural and Media Studies, Library and Information Management)	1,302.69	149	2.57	8.75	2.50	12.77

99. The number of FTE submitted per impact case study ranges from 1.5 in the smallest submissions up to 19.17 FTE for the largest. On average UOAs in Main Panel D received one case study per 9.06 FTE staff submitted, compared with the average across all main panels of one case study per 11.23 FTE. This is as a consequence of the higher number of small submissions made within Main Panel D than in the other main panels. Whilst outstanding impact case studies were found across the full range of submission sizes (in

terms of FTE), the main panel recognises that the requirement to submit the minimum of two impact case studies presents a significant challenge for very small submissions.

100. The table below shows the average impact sub-profiles, weighted by FTE, for Main Panel D and its constituent sub-panels.

Table 10: Impact sub-profiles

	Average percentage of research activity meeting the standard for:				
	4*	3*	2*	1*	Unclassified
Main Panel D	46.5	37.6	13.4	2.2	0.3
25 (Area Studies)	48.7	39.3	12.0	0.0	0.0
26 (Modern Languages and Linguistics)	48.2	33.2	16.4	1.4	0.8
27 (English Language and Literature)	48.9	38.3	11.9	0.9	0.0
28 (History)	45.3	34.5	16.4	3.7	0.1
29 (Classics)	47.7	41.2	11.1	0.0	0.0
30 (Philosophy)	41.9	36.4	16.9	3.0	1.8
31 (Theology and Religious Studies)	44.6	37.9	15.5	2.0	0.0
32 (Art and Design: History, Practice and Theory)	45.7	40.4	11.3	2.6	0
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	43.8	37.5	14.7	3.1	0.9
34 (Communication, Cultural and Media Studies, Library and Information Management)	47.6	40.3	9.9	2.2	0.0

101. The quality and range of impact case studies is impressive, with high proportions of outstanding impact observed across all units of assessment reflecting the transformative influence of arts and humanities disciplines in public life in the UK and beyond. All sub-panels generally observed significantly improved quality in the case studies submitted compared to the previous exercise, both in terms of the reach and significance of the impacts achieved and the content and presentation of the case studies themselves.

102. As with all three elements of the assessment, sub-panels made extensive use of their own Intention Plans with the aim of mitigating potential biases in their assessment of impact.

103. As with all elements of the assessment, a comprehensive range of calibration exercises was undertaken at sub-panel and main panel level as described in paragraphs 40 – 47 above.

104. All sub-panels confirmed their confidence in applying the assessment criteria and noted the valuable role of user members and impact assessors, with their wide range of expertise as detailed in sub-panel reports, in the robust assessment of impact.

105. Sub-panels were impressed by the diversity of the beneficiaries of impact and by the degree of its significance for those who collaborated, co-created, co-produced or participated in impact activities. This included engagement with arts and humanities research by some of the most marginalised or underserved individuals and groups, supporting them to achieve significant improvements in their lives and prospects, especially in relation to identity, mental health, education and wellbeing.

Range of types of impacts submitted

106. The case studies demonstrated the extraordinarily diverse range of areas in which arts and humanities research has continued to generate far-reaching effects, changes and benefits. The impacts ranged in reach from the deeply local to the national and indeed transnational, including a number of challenging locations around the world, drawing upon research expertise in multiple languages, within innumerable geopolitical, ecological, geographical designations. The strength and maturity that characterises research impact in these inherently outward-facing disciplines is well-established through interdisciplinary collaborations and partnerships within and beyond the academy, co-production of research, and the effective deployment of findings. Notable strengths were observed in the following areas:

Civil society

107. Sub-panels observed an impressive amount of impact which offered valuable strategies for empowering under-served communities, supporting agency, addressing contemporary political and cultural issues such as social inclusion, racism, modern slavery, chemical warfare, post-conflict situations, commemoration of the past, and the repatriation of human remains. Case studies demonstrated some remarkable impacts as a result of work deeply embedded in local and regional communities, as well as some impressive collaborations with national and international groups of beneficiaries. The contribution of higher education research in the arts to the cultural offer for cities and regions across the UK was particularly notable. The sub-panels noted inspiring partnerships and collaborations with LGBTQ+, migrant, and indigenous communities (among others) as well as researchers playing a key role in improving public understanding and enriching public discourse through engagement across a range of civic, political and social issues within the UK and beyond.

Cultural life

108. Submissions to Main Panel D continued to demonstrate a substantial and highly influential contribution to the creative, cultural and heritage sectors across the world. Sub-panels were impressed the extensive range of case studies where high-quality research had been deeply embedded in the activities of museums, galleries, publishers, theatres, broadcasters, television, film, and other creative industries and public bodies on local, national and global scales. A number of submissions evidenced the cultural benefits of collaborative and participatory research in addressing historical legacies, influencing cultural and artistic practice, improving community engagement, enriching understanding of cultures and faiths, or between and within social groups and informing conservation policies and practices. Case studies evidenced impacts benefitting the public through engagement with the products of research available through a wide variety of mechanisms including exhibitions, performances, television, radio, podcasts, trade publications, and digital media.

Economic prosperity

109. Sub-panels noted an exceptional range of tangible economic benefits generated by arts and humanities disciplines in the UK, including the delivery and co-production of innovative technologies, products, networks and services both nationally and beyond. There was evidence of significant entrepreneurial activity ranging from spin-out companies to dynamic outreach and engagement activities, publications, music, film, television and major cultural events. Impressive economic impacts were generated as a result of consultancy and evaluation for beneficiaries within the creative industries, governments, non-governmental organisations (NGOs) and cultural organisations demonstrating notable returns on investment. Research into sustainable heritage and tourism boosted local and regional economies, created jobs and generated increased prosperity. The main panel would encourage further evaluation of this body of case studies to map the economic benefits to the UK.

Education

110. Impact case studies described outstanding transformative influences on HEI and non-HEI level education at local, national and international scales. Research in the arts and humanities was shown to have informed curriculum development and assessment at all levels, as well as influencing professional practice and education policy for a diverse range of stakeholders including students and teachers in schools, colleges and prison education. Case studies evidenced changes to education policy including widening participation and representation within the curriculum. Remarkable impacts were evidenced in the development and delivery of policy and resources on internet safety, digital media and literacy for children and adults alike. Outstanding impact was also found in educational and training activities across a range of organisational settings and professional groups, including within the armed services, psychiatry and faith communities.

Health and wellbeing

111. Sub-panels were highly impressed by the range of impacts supporting good health and wellbeing evident in the case studies, often, but not exclusively, as a result of collaborative working beyond established disciplinary boundaries. Examples include the effective use of research into music teaching and theatrical performance in training nurses, healthcare professionals and carers. Sub-panels especially noted the reach and significance of impacts that had addressed global health challenges, transforming the care and quality of life for individuals and varied patient groups through the roll-out of innovative technologies, products and services in healthcare settings around the world. Case studies also evidenced impressive impacts on healthcare policy and practice, leading to changes in clinical guidelines, governance and standards of healthcare provision and end of life care in the UK and beyond. Furthermore, case studies demonstrated the remarkable capacity of arts and humanities research to deliver outstanding improvements in individuals' mental and physical health, quality of life, and understanding of health-related issues through public engagement and outreach activities both within healthcare systems and beyond.

Policy making

112. Impact case studies described influential contributions of arts and humanities research to expert panels advising governments, local authorities, NGOs and development agencies in the national context and worldwide. Sub-panels noted impacts on an exceptionally broad range of policy matters from equality issues to the use of new digital technologies, from regulatory policy in fields such as television broadcasting

and journalism, language and translation, to arts and heritage policy for the charity sector and creative industries. Some outstanding impact was achieved through collaborative working with policymakers in quality education, gender equality, policing, climate action, human rights, legal settings, religious minorities, and the use of artificial intelligence (AI), data analytics and new digital media.

Public discourse and public understanding

113. Impact case studies confirmed the vitality of the arts and humanities sector in contributing to public understanding and the intellectual life of the UK and beyond and describing genuine change. Case studies demonstrated an impressively broad range of impacts that have enhanced public understanding of complex political, linguistic, cultural and social issues, both through creative practice and more theoretical approaches. Research-led engagement generated significant impact for marginalised and less-represented groups as well as civil organisations and campaign groups, resulting in changes to public understanding and attitudes and increased cultural participation

The environment and climate action

114. Outstanding case studies with a focus on climate action, environmental and ecological matters were observed across submissions within the main panel. Case studies described the increased adoption of conservation measures, and development and use of sustainable materials and practices in a range of regions and natural environments. Impressive and diverse impacts were achieved through creative arts-based approaches in collaboration within the cultural, heritage, education and tourism sectors, frequently with a focus on sustainability. Case studies described the integral role of interdisciplinary research in the arts and humanities underpinning improvements in physical and mental health, generating greater engagement with the natural world and inspiring new creative works. A range of public engagement and outreach activities was at the heart of impacts on enhancing public understanding of nature, conservation, ecology and climate change with some community development projects mitigating climate disaster and environmental risk. Submissions to the panel also developed fresh thinking on issues relating to the ethical questions raised by climate change, as well as informing policies in this area, and the assessment of the various the risks involved.

Social Justice

115. Sub-panels observed a wide range of transformative impacts on social justice and social advocacy. Active intervention with excluded or marginalised communities often lay at the heart of these case studies, including initiatives that have supported the agency of beneficiaries and the assertion of human rights; increased inclusion for working-class performers in the arts; and, challenged racism, sexism and bullying in arts and cultural organisations. The impact of arts and humanities research on social justice is profound and has enhanced communication between regions, continents, ideologies and religions, enabling communities to better understand one another. A number of case studies drew upon the importance of story-telling and the power of individual and collective testimony to promote understanding of notions of place, identity and history as well as generating social change in a range of settings. Arts and humanities-based research has demonstrated a key role in promoting greater awareness and understanding of disability and neurodivergence, celebrating diverse cultures and working towards an informed decolonising of history, literature and the arts and increasing accessibility to and preservation of precious archives and collections.

Reflections on the quality of submitted impact case studies

116. In terms of reach and significance, impact ranging from modest to outstanding was identified in case studies from submissions of all sizes. Sub-panels were invited to further comment on this issue in their sections below.
117. Sub-panels observed a wide range of impacts, from thoroughly planned and delivered changes to unanticipated and serendipitous outcomes. Some impacts were an end product of a programme of research, others were demonstrated during the research process. These were all recognised as equally valuable.
118. Case studies predominantly described impact that actively brought about changes, effects and benefits, although there were instances of impact that prevented harm by limiting or inhibiting an activity.
119. Some of the most persuasive case studies were based on long-standing, sustained commitments to collaborations, beneficiaries and other partners, throughout the assessment period. Often these relationships were deeply local or derived from strong community or civic partnerships nationally or internationally.
120. The strongest case studies presented clear narratives and avoided the use of jargon or highly-specialist language.
121. The outputs from both co-produced research and interdisciplinary research underpinned some of the strongest case studies across all sub-panels. Arts and humanities researchers frequently collaborated across the boundaries of disciplines represented by all four main panels.
122. The strongest case studies clearly identified the beneficiaries of the research and provided full and convincing evidence, in both qualitative and quantitative forms, regarding both the reach and significance of impacts claimed. Where quantitative data was provided, in stronger case studies it was usually specific and, where appropriate, accompanied by relevant contextual information to illustrate the change being claimed. These case studies tended to provide detailed but concise summaries of activities and impact rather than long lists. Some of the less persuasive case studies lacked concrete evidence to support impacts claimed, particularly so around the significance of the impact.
123. Some of the stronger case studies described impact that had been initiated by the needs of specific user groups. This tended to enable a clear narrative linking the impact claims to the underpinning research.
124. The main panel noted that evidencing impacts from public engagement continued to present challenges for some institutions. In some cases, submissions would have benefited from focussing on the actual change for beneficiaries (rather than describing the dissemination or engagement activities). Similarly, the provision of robust independent forms of validation would have strengthened claims.
125. The strongest public engagement case studies clearly demonstrated a connection to external policy frameworks and/or to their regional context, identifying the mutual benefits of a shared purpose and collaborative working with external partners, and the sharing robust data with organisations to reach and influence a diverse range of publics, audiences, and communities of practice.

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126. Case studies were generally more persuasive where evidence listed in section 5, whether quantitative or qualitative, was woven into the narrative of section 4. Where evidence had not been incorporated into the section 4 narrative, the strongest case studies clearly referenced the specific source of corroboration to the corresponding item described in the section 5 list.
 127. The main panel was impressed by the emergence of some new methods of evidencing impact including data analytics and use of social media alongside more traditional forms of evidence which were often drawn upon to support impacts based on public engagement.
 128. Successful cases clearly articulated both the research imperatives and the findings or outcomes of the research in section 2 of the impact case study, and then explicitly described the relationship of the research process, findings or outcome to the impacts claimed in section 4. Some case studies would have benefitted from more clearly establishing the link between the underpinning research and the impacts claimed; the lack of evidence sometimes limited the range of impacts that could be assessed as eligible.
 129. Sub-panels noted that additional challenges to impact assessment were presented when the title of the impact case study and/or the impact summary in section 1 did not relate closely to the impacts described in section 4 of the template.
 130. There were very small number of case studies where the quality of the underpinning research did not meet the 2* threshold within the scope of the relevant UOA descriptor. In all such instances every effort was made to review as much of the material cited in section 3 of the impact case study as possible (using audit where necessary) to confirm such judgements. Other case studies were unclassified as a result of not providing a clear link between the underpinning research and impacts claimed.
 131. In some instances, impact case studies that described multiple impacts presented challenges. The stronger case studies focussed on a smaller number of well-evidenced impacts, with a coherent and convincing account of the strands of impact deriving from a common research project, topic or theme. Less successful examples contained too many, often quite disparate, strands of impact which limited the amount of space available to adequately evidence the stronger elements in sufficient depth.
 132. Case studies that described impact linked to research from very large, complex network projects, often with multiple researchers, presented challenges in clearly identifying the specific contribution of the submitting institution. Limitations on space did not always enable description of large network or acknowledgment of the contribution of all partners; however, the most successful case studies were able to delineate and describe the specific contribution of the research produced by the submitting institution.
 133. Sub-panels noted a tendency in some less convincing case studies to conflate esteem, network or outreach activities with impact. Often these provided evidence only in the form of footfall, visitor numbers, website hits, audience numbers without demonstrating any change. In many cases, identifying and evidencing the changes that occurred as a result of these activities would have enhanced the score.

Effects of Covid-19 on impact

134. Across the main panel, 213 case studies (13.5%) were accompanied by a Covid-19 statement. The proportion of case studies accompanied by a Covid-19 statement varied from 6.76% in Sub-panel 31, Theology and Religious Studies to 22.34% in Sub-panel 33, Music, Drama, Dance, Performing Arts, Film and Screen. All sub-panels recognised that the pandemic had led to some significant disruption both for the generation of impact and the collection of evidence and sources of corroboration. Covid-19 statements often reported the postponement or cancellation of public-facing events, including performances, exhibitions, engagement activities with schools and other organisations as a result of national lockdowns. However, a number of Covid-19 statements described an impressive range of creative and innovative responses to the restrictions including rapid technological developments and novel ways of engaging with beneficiaries.
135. Sub-panels did not make any judgement regarding the format of supporting evidence as part of their assessment of impact case studies.
136. In line with 'Guidance on revisions to REF 2021', paragraph 58, sub-panels took the approach of rewarding all impact that had been achieved and noted the contextual information provided by submitting units which described disruption caused by Covid-19.

Reflections on the process of assessing impact

137. The role of impact assessor was a demanding one, with impact assessment carried out across multiple small group meetings in addition to calibration exercises and attendance at panel meetings throughout the impact assessment phase. The challenging workloads meant that a small number of impact assessors had to step down from their role in sub-panels at the start of the assessment phase.
138. There were some instances where sub-panels raised ethical concerns around the way corroboration of impacts may have been made, particularly where data was gathered from vulnerable individuals and groups. Further concerns were raised around the ways in which 'hard-to-reach' audiences or groups with protected characteristics were described. Sub-panels reports add further comment on this in their sections below.
139. Sub-panels observed that some very small submissions struggled to provide two impact case studies. On the whole, amendments to the REF 2021 guidance on numbers of case studies required somewhat reduced the number of case studies required per submitted Category A Staff FTE. As a result, one case study from a large submission might represent over 19.0 staff FTE, whereas for very small submissions this could be as low as 1.5 staff FTE, placing significant demand on a small number of staff.
140. Institutional support for impact activities and for the preparation of case studies varied across the sector. Sub-panels found some evidence that stronger and clearer narratives often, but not always, resulted from strong internal support for impact.
141. Both the main panel and its constituent sub-panels wish to thank their user members, who contributed thoughtfully, generously and with great rigour to the effective assessment of impact as part of this exercise, and who greatly enhanced the process as a consequence.

Perspective of user members/impact assessors

142. The user members of Main Panel D reported that sub-panel members and sub-panel user members/impact assessors worked closely and coherently as teams to assess impact case studies. User members were reassured by the range of processes to ensure consistency and fairness including a range of calibration and moderation exercises, both within and across sub-panels, and good quality of challenge and discussion facilitated by the Fairness in REF Bias Mitigation and Intention Plans. They were impressed by the outstanding range of impacts underpinned by research in the arts and humanities, particularly noting the widespread presence of case studies based on social justice and inclusion, and serving hard-to-reach groups, which were found across the Main Panel D disciplines. User members reported that the quality of impact evidence provided for assessment was in line with the wider arts and humanities sector.
143. User members also commented that on the whole, submissions demonstrated that impact was well understood by submitting units, and that impacts were generally well presented in terms of changes, effects or benefits. However, it was acknowledged that it is challenging to measure and evidence impact effectively and accurately in terms of its reach and significance. User members welcomed the continuation of work happening across the arts and humanities sectors to further develop practice in evidencing impact. It was noted that sub-panel user members' workloads were particularly demanding, and although this was in part due to the changes to the assessment timetable in response to Covid-19, it was recommended that anticipated workloads and scheduling should be provided for those interested in becoming sub-panel user members for future assessments.

Environment sub-profile for Main Panel D and its sub-panels

144. The table below shows the average environment sub-profiles, weighted by FTE, for Main Panel D and its constituent sub-panels.

Table 11: Environment sub-profiles (page 37).

Table 11: Environment sub-profiles

	Average percentage of research activity meeting the standard for:				
	4*	3*	2*	1*	Unclassified
Main Panel D	47.8	40.3	10.9	1	0
25 (Area Studies)	46.7	46.1	7	0.2	0
26 (Modern Languages and Linguistics)	46.9	42.2	10.5	0.4	0
27 (English Language and Literature)	53.2	37.7	8.6	0.5	0
28 (History)	48	40.9	10.2	0.9	0
29 (Classics)	49.8	41	9.2	0	0
30 (Philosophy)	46.9	44.4	8.2	0.5	0
31 (Theology and Religious Studies)	47.1	38.1	12.7	2.1	0
32 (Art and Design: History, Practice and Theory)	47.9	41.4	9.9	0.8	0
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	44.5	38.5	14.6	2.2	0.2
34 Communication, Cultural and Media Studies, Library and Information Management)	41.5	38.4	18.2	1.9	0

145. Although the differing mix of size and type of submitting HEI returned to each UOA as described above in paragraphs 17 – 20 contributed quite significantly to the spread of percentage of 4* across the sub-panels for the environment element of the submission, Main Panel D was pleased to note that excellence in research environment was demonstrated across a broad range of size and type of HEI.

146. Paragraphs 56 – 58, above, lay out the working methods used to review environment templates. As with other aspects of the submission, calibration within and across the sub-panels was carried out before assessment of the environment templates, and calibration was also undertaken across all four main panels. Moderation exercises were carried out during the assessment process, to ensure the consistent application of the relevant criteria as laid out in Section 5 of the 'Panel criteria and working methods' (REF2019/02).

147. These criteria, outlined in paragraphs 336-361 of REF 2019/02, were considerably more complex and detailed than the equivalent in REF 2014, and this clearly posed challenges for HEIs, as noted in the individual sub-panel reports below. New for REF 2021 were the explicit requirements for detailed coverage of impact and EDI, which were expected to be addressed as appropriate across the templates, and open research and research integrity, which it was expected would form part of section 1 of the template. In some cases submitting units failed to cover these topics at all, or to cross-refer to relevant statements in their Institutional level environment template (REF5a). Also of note was the differential weighting for Main Panel D (as compared with the other main panels)

of the four sections of the template (25%/30%/20%/25%), which for Main Panel D in REF 2014 had been split into 5 equally weighted sections (Research Strategy; People – staffing strategy and development; People – research students; Income, Infrastructure and Facilities and Collaboration; and Contribution to the discipline or research base). In the light of the way in which HEIs responded to the criteria, sub-panels sought to recognise where information relevant to one section was located in another, although the need to search for evidence did pose challenges to effective assessment.

148. Also new for REF 2021 were the REF5a institutional level environment templates, which were provided to assessors alongside the REF5b unit level environment templates (except where small specialist institutions chose not to submit such documents). The focus of assessment by the sub-panels was the unit-level template, but sub-panels made use of the institutional level templates to contextualise and amplify the unit templates, in particular where the latter were lacking in detail with respect to key information, such as, for example, in relation to EDI, open research and research integrity, without directly scoring REF5a content. Such documents were sometimes useful, but the lack of consistent cross-referencing between them, understandable given the context in which HEIs were working to prepare these, was unhelpful to sub-panels. There was also a tension within the HEI narratives between the strategic and aspirational aspects of the documents, and the more practical and operational details (e.g. how staff support worked), which when combined with a tight word limit (especially for larger HEIs) reduced the usefulness of the narratives. Main Panel D was disappointed to observe that HEIs with a broad disciplinary spread rarely devoted significant space within these institutional documents to the arts and humanities disciplines and the role they played in terms of the wider institutional mission, despite the often very substantial numbers of staff they employed within those disciplines.
149. Fairness in REF Intention plans (also known by some sub-panels as Bias Mitigation Plans) were used to help in the assessment of environment, by encouraging sub-panel members to put aside preconceptions relating to size and type of institution. They were also reminders for sub-panel members to be aware of and put to one side any prior knowledge of an HEI that might impact the assessment inappropriately, and to reflect on matters such as the “halo” effect and its reverse when carrying out their assessment (see paragraph 33, for a fuller description of the plans).
150. Sub-panels used a range of mechanisms appropriately to contextualise REF4 data, including reviewing data as annual averages per FTE and being aware of the size of a submission and the proportion of ECRs included in the submission when considering appropriate levels of activity.
151. Submissions were assessed on the terms on which they presented themselves (that is, however they chose to group research activity or describe their activities) and in the light of their stated aims/strategies.
152. Sub-panels were aware of the difficult context in which templates were produced during the pandemic and disregarded minor imperfections in presentation which might have related to this external context.

Observations on strong and weak submissions

153. Sub-panels in their individual reports reflect on the characteristics of strong and weak submissions for their specific disciplines. Some headline general reflections are provided below:

i. Unit context and structure, research and impact strategy

154. Strong submissions provided a strategy that was clear, evidenced, not overstated, and with an action plan or indication of how it would be delivered. Descriptive lists of actual or planned activities were not seen as strategies. An impact strategy was included, and went beyond describing how the submitted impact case studies were generated and supported to outline how impact in the broadest sense was supported and encouraged in the submitting unit. Other aspects of the criteria were addressed as appropriate, avoiding generic statements and providing evidence of how HEI practices applied at unit level. Sub-panels noted that it was frequently the case that open research and research integrity were addressed in a cursory way, and/or cross-referencing to the appropriate sections in REF5a was not provided. Credit was given to work in relation to open research and research integrity which went beyond generally accepted sector norms.

155. Commentary on future strategies is provided in the section on Covid-19 below.

ii. People

156. In the best submissions:

- Support for staff at all career stages was described. Ideally this included equitable approaches to staff development; internal funding; research leave; ECR vitality; mentoring; and support for mid-career staff as well as those at the outset of their careers. A clear and honest explanation was also provided for any changes in staffing over the period together with an indication of how planned changes to staffing linked to the unit's strategy as articulated in section 1, as well as to EDI considerations.
- Robust PGR training and support was described, emphasising how PGRs form a part of the research community, and EDI data in relation to PGR recruitment was provided and considered. A strong PGR community was seen as a positive indicator of vitality, especially where good evidence of the success of PGR training was provided. It was noted that UKRI Block Grant Partnerships (BGPs) and Doctoral Training Partnerships (DTPs) provide important mechanisms for sustainability across Main Panel D, and may enable smaller units or those with a developing research culture to benefit from the support of larger neighbours or those with a more developed research culture.
- Although it was noted that small units (of fewer than 10 FTE) sometimes struggled to provide an appropriate level of detail, in the best submissions EDI was addressed with reference to a broad set of protected characteristics, with data supported by thoughtful analysis and reflections, and concrete (rather than aspirational) plans for the future. EDI in relation to the construction of the REF submission was explained, although sub-panels were disappointed to note that many submissions failed to address this aspect of the criteria. The sub-panels noted a number of distinctive submissions that embedded a discussion of EDI across all areas of the template, demonstrating how equity and inclusion shaped strategy, infrastructure and their work with stakeholders and beneficiaries as well as their wider sector leadership roles.

iii. Income, infrastructure and facilities

157. Strong statements went beyond description to explain (with evidence) how income, infrastructure and facilities supported the development and delivery of excellent research and impact. It was observed that in some of the best examples, disciplinary communities had embraced the opportunities offered by new or non-standard funding e.g. GCRF, philanthropy or national Arts Council funding, although in the latter case full details were not always provided as this is non-auditable income which is not recorded on HEI finance systems or in the HESA finance return.
158. Overclaiming with respect to the REF4b and c data was not appreciated. Given that the time period for REF 2014 was 5 years and for REF 2021 was 7, an increase in overall income over the period was to be expected. Sub-panels used annual average income per FTE staff to consider the relative performance of units, taking into consideration that smaller units and those located in smaller or newer HEIs did not always have recourse to the infrastructure to support the capture and management of research income that larger and/or research-led HEIs are able to provide, and that institutional funding and non-HESA funding sources could also provide valuable support to research and impact.

iv. Collaboration and contribution to the research base, economy and society

159. Stronger narratives went beyond simply turning lists of activities into sentences to describe their strategy/approach to collaboration and contribution to the research base, and also included discussions of the unit's contribution to the economy and society, providing an additional dimension to their impact and engagement work (in an addition to the REF 2021 requirements for the environment template compared with 2014). This might include discussions of their approach to working with particular audiences or beneficiaries, and the achievements realised by these collaborations. Evidence might be included (here or in section 2) of how senior staff supported junior and mid-career staff in developing their profiles. It was noted that what constituted leadership within the discipline looked different for more junior staff. Too great a level of repetition of examples from the rest of the document was not well-regarded.

Summary data on Research Income and PGR data, and any relevant observations.

Table 12: Doctoral Degrees awarded (page 41).

Table 12: Doctoral Degrees awarded

Output type	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Total	Change in degrees awarded 2013/14 to 2018/19	% change in degrees awarded 2013/14 to 2018/19
Main Panel D	3028.37	3,307.76	3,390.68	3,414.60	3,453.86	3,463.45	3,261.05	23,319.77	435.08	14.37%
25 (Area Studies)	148.09	134.09	154.22	144.56	118.50	141.00	117.14	957.60	-7.09	-4.79%
26 (Modern Languages and Linguistics)	364.78	435.80	410.91	436.52	460.82	484.28	423.51	3,016.62	119.50	32.76%
27 (English Language and Literature)	631.55	650.75	647.35	631.44	655.11	704.54	628.40	4,549.14	72.99	11.56%
28 (History)	503.39	550.43	565.66	563.77	582.07	534.27	524.30	3,823.89	30.88	6.13%
29 (Classics)	101.47	98.10	121.76	127.66	125.92	113.13	105.12	793.16	11.66	11.49%
30 (Philosophy)	163.13	175.22	200.20	181.11	192.55	193.72	213.71	1,319.64	30.59	18.75%
31 (Theology and Religious Studies)	235.3	256.65	257.87	235.40	258.45	251.47	227.70	1,722.84	16.17	6.87%
32 (Art and Design: History, Practice and Theory)	347.28	434.94	421.88	486.51	448.89	432.72	431.09	3,003.31	85.44	24.60%
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	346.62	344.41	378.04	367.92	353.05	363.40	349.83	2,503.27	16.78	4.84%
34 (Communication, Cultural and Media Studies, Library and Information Management)	186.76	227.37	232.79	239.71	258.50	244.92	240.25	1,630.30	58.16	31.14%

160. The dip in numbers of awards in 2019/20 may be attributed to the effect of Covid on PhD study. Growth over the period has therefore been calculated on the basis of the change between 2013/14 and 2018/19.
161. Whilst there has been some growth in doctoral degrees awarded over the period, with the exception of Sub-panel 26 this has not been at the level experienced across the previous REF period. The main panel notes the difficulty of securing funding for arts and humanities doctoral study, which is likely to be a factor in this slowing in growth. The importance of doctoral consortia is noted above; these allow HEIs to share resources and training (sometimes available for non-funded as well as funded PGRs), which is particularly valuable for smaller institutions or those with a limited history of PGR recruitment and completions. Consortia arguably have overall helped to foster regional collaboration, partnerships and collegiality, both in terms of PGR support itself and more widely. As doctoral students form the pipeline for future researchers' attention to EDI issues in recruitment are critical if we are to see a genuine diversification across all protected characteristics; this was rarely effectively addressed by HEI submissions.

Table 13: Research income (including income-in-kind)

	2013-14	2014-15	Average income for 2015-16 to 2019-20	Average income for 2013-14 to 2019-20	Total income for 2013-14 to 2019-20
Main Panel D	152,532,432	170,883,638	194,107,236	185,049,115	1,291,548,059
25 (Area Studies)	8,183,305	9,537,811	12,533,940	11,484,402	80,390,818
26 (Modern Languages and Linguistics)	19,918,133	21,160,506	26,406,040	24,729,834	173,108,843
27 (English Language and Literature)	16,131,251	19,079,467	20,096,379	19,384,659	135,692,613
28 (History)	29,047,321	34,136,005	36,939,307	35,415,673	247,820,165
29 (Classics)	8,040,738	9,335,316	8,904,141	8,973,217	60,065,246
30 (Philosophy)	9,785,607	12,110,116	15,161,881	13,957,875	97,705,128
31 (Theology and Religious Studies)	6,424,268	6,776,830	8,965,560	8,289,843	58,028,901
32 (Art and Design: History, Practice and Theory)	30,829,007	35,069,168	36,217,652	35,325,696	246,709,428
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	11,720,794	11,106,933	14,574,165	13,693,009	95,462,568
34 (Communication, Cultural and Media Studies, Library and Information Management)	12,452,008	12,571,486	14,308,171	13,794,907	96,564,349

162. There are substantial limitations to comparisons between REF 2014 and REF 2021 REF4b and c data, including the lack of inflation-adjustment to the figures, the differing time periods for the two assessment processes which require data to be annualised, and the changes in staff submission rules which have changed the basis for the denominator in income per FTE calculations. Changes across the REF 2021 period are indicated in Table 13 above, where it can be seen that most sub-panels saw periods of growth followed by a drop attributable to Covid-19. It should be noted that in some disciplines, especially those covered by sub-panels 32 and 33, substantial sums of non-HESA income are obtained (e.g. from the Arts Councils or other commissioning bodies) which do not appear in these figures. For both Sub-panels 32 and 33, this non-HESA income is a vital source of support for practice research.

Observations on EDI

163. Coverage of EDI varied from the commendably embedded, thoughtful, self-aware and comprehensive to the terse and cursory, and it is clear that although the sector is making progress in this field, much remains to be done. In the strongest submissions, EDI was clearly discussed in relation to PGRs as well as staff, with a distinctive focus on narrating initiatives and measures to address systematic inequalities. Submissions narrated important developments - from staff-led fora for minority groups to research-led clusters or groupings undertaking distinctive research in this area. Leadership in EDI was evidenced in governance and advisory roles, policy initiatives, projects with diverse communities and in areas of low cultural engagement and a range of schemes introduced at unit and HEI level to provide important change.
164. However, it was rarely the case that the full range of protected characteristics, and key points of intersectionality (such as race/gender), were acknowledged and appropriate action taken to ensure a level playing field for all staff. It is noted that in some disciplines, socio-economic status is also an issue, but currently HESA data does not allow for suitable analysis. Some sub-panels noted the contested nature of certain terms (such as BAME), and that the use of language which described gender in binary terms in submissions was unhelpful for those who did not so identify. The language of the equality discourse is continually evolving and a greater awareness of this is needed from both HEIs and the funding bodies, as well as a greater sensitivity to how language used without sufficient care can disenfranchise communities rather than include them. All this said, the main panel and its sub-panels were pleased to note a far greater level of engagement with EDI than in REF 2014 and some genuinely excellent examples of addressing EDI in a research context.

Effects of Covid-19 on environment

165. Sub-panels panels noted the challenges of assessing future strategies in a very uncertain climate. Sub-panels were mindful of the guidance issued to HEIs on how future strategies would be assessed in Guidance on revisions to REF 2021 (REF2020/02), which stated that

“any future plans described will be considered in terms of their reasonableness as plans at the end of the environment assessment period (31 July 2020), in the wider assessment of a unit’s contribution to sustainability. This assessment will not seek to evaluate the realisation of plans after the end of the assessment period.”

166. This was taken into account as appropriate. Main Panel D noted with regret that many HEI Covid-19 statements omitted arts and humanities subjects altogether, or referred to them in an extremely cursory way, which was unhelpful in understanding how our many colleagues in these subject areas were supported during the pandemic, and concerning in the light of the clear EDI implications of the impact of Covid on colleagues. Some sub-panels noted that Covid-19 challenges will need to be taken into account for the next REF (challenges include long Covid, and highly disrupted research time for carers) and that this remains an EDI issue.

Concluding remarks

167. High quality, inclusive and supportive research environments are central to the continued success of the arts and humanities research endeavour, and as such, whilst the scope and format of environment assessment would benefit from review, the continuation of this element in the REF process would be considered essential by Main Panel D, as a means of ensuring that research sustainability and vitality are maintained, and that good practice in a range of areas such as open research and EDI is nurtured.

168. The main panel was pleased to observe generally high levels of vitality and sustainability in the environment templates submitted to its constituent sub-panels, especially given that this was across a broad range of size and type of HEI. This diversity of size and mission-type is a distinctive and vital characteristic of the arts and humanities research environment, ranging from small and specialist institutions through to large and broad-based HEIs. A number of new entrants were able to show positive steps being taken to develop their research cultures; these it is hoped will pay off in future exercises. Initiatives in open research demonstrate innovation, including in non-text-based formats, and although not demonstrated across the board, sector leadership in research integrity is emerging, for example with researchers feeding into policy-making discussions and subject association initiatives, delivering training and driving HEI strategies and developments. The sub-panels also observed a commendably high level of care for PGRs and ECRs; the continuing development of facilities for research which can be linked through to high quality outcomes; and the increasing significance of partnerships of differing kinds (including international), which may in some cases facilitate high quality public engagement or impact. Given the challenging external context in which arts and humanities subjects are operating, collectively this is encouraging, but continued success should not be taken for granted.

Equality Impact Assessment of scoring

169. An Equality Impact Assessment (EIA) of panel scoring is being carried out by the REF team, working with EDAP, using protected characteristics data drawn from HESA and mapped to HEI submissions, with outcomes aggregated to main panel and whole exercise levels. A report outlining outcomes will be published in the summer of 2022.

Interdisciplinary Research

170. Interdisciplinary research (IDR), a term which encompasses multi-, cross- and transdisciplinary research, supports the generation of world-leading outputs, outstanding impact case studies, and sustainable and vital research environments across the spectrum of REF main panels, and Main Panel D sub-panels. The arts and humanities are at the heart of and indispensable partners to STEM disciplines, and to social sciences. IDR is flourishing and has grown substantially in quantity and quality since REF 2014. It is equally pervasive among established researchers and ECRs. Ambitious, adventurous and innovative IDR combinations complement more established IDR fields and together they push the boundaries of disciplines and fields, fostering cross-border conversations and creating new areas of research. Interdisciplinarity intersects with inter-lingual and cross-regional research, making all the sub-panels even more global, inter-regional and multilingual than in REF 2014. The diverse combinations of theory with practice, arts and humanities with social and natural sciences in individual and collaborative outputs have led to world-leading contributions characterised by thematic, methodological and collaborative innovation, disciplinary and interdisciplinary rigour (interdisciplinary innovation is grounded in disciplinary strength), and theoretical and practical significance. Impact is by definition cross-disciplinary and outstanding case studies often incorporate interdisciplinary approaches to address global problems of health, poverty and sustainability. The strongest environment statements are responsive to the IDR that drives changes in research groupings, and to the role of IDR in the evolving funding landscape. These submissions demonstrate high levels of vitality and sustainability by recognising the changing boundaries of disciplinary identities and the evolution of IDR definitions and research, and by allowing these to inform staffing and research strategy.
171. The membership of Main Panel D and its ten sub-panels was intrinsically and intensely interdisciplinary and multidisciplinary, and the members and assessors appointed to the sub-panels were entirely confident in their ability to assess all types of IDR. They were supported in this work by the additional measures put into place in REF 2021. An IDR member was appointed to the main panel and at least one and normally two or three IDR advisers were appointed to each sub-panel. The main panel IDR member was able to communicate with sub-panel IDR advisers throughout the assessment process through regular formal or informal meetings with sub-panels. The IDR Network established for REF 2021 facilitated further communication across the main panels, and the sub-panels within each main panel. The main panel IDR member was a member of the Interdisciplinary Research Advisory Panel (IDAP) (, established to advise the REF team, REF panel chairs and the UK funding bodies on the approach to support the submission and assessment of interdisciplinary research in REF 2021, which ensured that feedback from Main Panel D and its sub-panels reached the REF team.
172. Most IDR was assessed within the Main Panel D sub-panels with a relatively small proportion involving the joint assessment or cross-referral of work that fell outside the remit of Main Panel D and/or its sub-panels. Throughout the assessment process, IDR was assessed on equal terms with other types of output. HEIs were inconsistent in their use of the process of flagging IDR outputs, but this has had no effect on the fair and equitable scoring of IDR outputs

Statement from the Main Panel D International Members

173. We, the international members of Main Panel D, are pleased to confirm the degree to which the REF process, as implemented by Main Panel D and its constituent sub-panels, has been robust, fair, and comprehensive. We confirm that its outcomes align with international standards of research excellence. As international members, we attended the meetings of Main Panel D, and many of the sub-panel meetings within the groups of sub-panels with which we were associated. This allowed us to review and confirm consistency of approach across the sub-panels, and to provide advice to sub-panels on matters of cross-panel significance. We also played central roles in the overall calibration process, taking part in initial calibration exercises, and then reviewing a range of submissions to ensure that standards were applied consistently both within sub-panels and across sub-panels.
174. We applaud the careful preparation, drafting, and clarification that went into the initial meetings of Main Panel D, which established a very sound basis from which all subsequent discussions could proceed. We were impressed by the thoughtfulness and diligence of the sub-panel chairs and all members of the sub-panels whose work we had the opportunity to observe. This care for subjects, fields, individuals, and units that we saw in the panels' practices was also very apparent in conversations that we had with individual panel members. We were especially struck by the efficiency, good humour, and flexibility with which panels shifted to a virtual format, despite all the challenges involved. It was extremely clear that strenuous efforts were made at all times to ensure the transparency of the process at every level. Lists of potential conflicts of interest were maintained scrupulously at main panel and sub-panel levels and any potential conflict of interest was dealt with by the panel member concerned absenting themselves from the relevant discussion. It was important and welcome to have a reminder of the bias mitigation and intention plan at the start of each Main Panel D and sub-panel meeting, and to see these rigorously adhered to throughout the process. Equality, diversity and inclusion were regularly and fully discussed at all levels: we would, however, welcome more Black and Asian members on Main Panel D. Overall, the panels adopted clear, rational systems that ensured fairness and consistency.
175. REF 2021 was unusual – we hope unique – because it overlapped with the Covid-19 pandemic. This affected not only the assessment operations, but the conditions under which some of the work was produced. Some research projects could not be realised to original/anticipated completion; planned performances could not take place; exhibitions and installations were not mounted, and interaction with the public was curtailed, if it could occur at all. The sub-panels demonstrated considerable understanding and flexibility, responding appropriately to accounts that outlined the impact that Covid-19 had had on planned submissions, and on the broad environment in which submissions were prepared.
176. We all agreed, without hesitation, that the assessment had been carried out fairly and that it adhered to the published criteria and working methods. The judgments reached were in alignment with international standards of research quality, and widely accepted measures of international standing in arts and humanities. These include assessment not just of the research supporting submitted materials, but of their reach and engagement with international publics and with international organizations; international collaborations and visits; international exposure through various media, exhibitions, performances, installations, and buildings; and international impact of many different kinds. We were impressed by the professionalism and seriousness with

which the main panel and sub-panels addressed the challenges of assessing impact in the arts and humanities, and by their diligence, intelligence and willingness to be open to different perspectives. The extraordinary range of impacts on an extremely wide range of publics brings home the value of the humanities to a very wide range of people – one that reaches far beyond academia.

177. We reiterate: both Main Panel D and its sub-panels conducted their tasks with the utmost consistency and rigour, and we have every confidence in the results reached, and in the fair and comprehensive practices of assessment that lie behind them.



Sub-panel 25: Area Studies

1. All sub-panel members discussed and collectively agreed this report, and it should be read alongside the Main Panel D (MPD) overview report which contains a description of main and sub-panel working methods and discusses matters of common interest.

Summary of submissions

2. Sub-panel (SP) 25 (Area Studies) covers the study of all regions of the world, across any period of time (ancient, medieval and modern) however defined, and the communities associated with them. Regions may be delineated in various ways: in terms of national territories, by traditional geographical designations (e.g. African Studies, American and Anglophone Studies (including Canada and the United States); Asian Studies covering Central Asian, North East Asian Studies (including China and Japan), South Asian and South East Asian Studies; Latin American and Caribbean Studies; Australian, New Zealand and Pacific Studies; European Studies (including Russian, East European Studies and British Studies); Middle Eastern Studies (including Jewish and Islamic Studies); by ecological (e.g. Circumpolar Studies), geopolitical (e.g. Post-Soviet Studies) or institutional (e.g. European Union Studies) criteria; or in terms of themes, processes or networks (e.g. Diaspora Studies, Post-Colonial Studies, Gender Studies, Intercultural Studies etc.). The sub-panel received 23 submissions, including five which had not submitted to REF 2014. One higher education institution (HEI) made a multiple submission. Two submissions were made by institutions in Scotland, the others were from England. Submissions ranged in size from 7 to 88.05 FTE.
3. The sub-panel comprised academics from the arts and humanities and the social sciences as well as a number of user and impact assessors. In its entirety the sub-panel was comprised of 15 females and 12 males; the sub-panel chair was female, and the deputy chair male. A wide range of disciplines were represented amongst panel members, which ensured that Area Studies could be assessed from many perspectives. Sub-panel members had a broad range of disciplinary and interdisciplinary expertise and a high level of foreign language competency.

Table 1: Summary of Submissions

	Number of submissions	Cat A FTE staff	Head-count staff	Early Career Researchers	Research Outputs	Double-weighting requests	Impact case studies	Staff FTE per Impact Case Study
REF 2021	23	579.82	616	102	1432	189	65	8.92
REF 2014	23	483	503	98	1727	31	71	6.8
% Difference	0	20%	22.4%	4%	-17%	600.6%	-9.1%	31.1

4. In establishing its working methods Sub-panel 25 adhered to the assessment principles and framework adopted across Main Panel D (see paragraphs 23 – 34 of Main Panel D report) and participated in the calibration exercises conducted within the sub-panel and the main panel. We were most grateful to Main Panel D panellists (international, interdisciplinary and user members) who took part in all aspects of our assessment, assisting us with calibration and process throughout. Sub-panel 25 meetings were led by the sub-panel chair and the deputy sub-panel chair; several sub-panel members provided leadership of smaller groups during impact and environment assessment.
5. An innovation in sub-panel procedures in 2021 was training on unconscious bias for all members and the use of a Fairness in REF Intention Plan which evolved over the assessment period. The function of the plan was to engage the sub-panel in self-reflection regarding bias, and unconscious bias, and to provide mitigation of bias in the conduct of the exercise. Potential biases discussed included: categories and seniority of staff; protected characteristics; HEI, unit, or individual reputation; type of output, language, scale or category of institution, etc. It is important to note that Sub-panel 25 did not have access to information about individual staff circumstances or protected characteristics of submitted staff, when carrying out their assessment.
6. The sub-panel received and discussed data from equality analyses concerning any relationship between protected characteristics and output scores. As discussed in the Main Panel D report, the preliminary data across the main panel were reassuring in some areas but also raised issues for further analysis across the REF as a whole
7. In REF 2021 the sub-panel noticed that the number of submitted outputs had fallen by 17 percentage points compared to 2014. This reflected the procedural changes between REF 2014 (when 4 outputs per FTE were normally required) and REF 2021 (when 2.5 outputs per FTE were normally required) (see Main Panel D report, paragraph 14). Outputs submitted per staff headcount fell from 3.43 in 2014 to 2.47 in 2021. A decrease in the number of submissions in certain sub-fields within Area Studies was observed, including European Studies; as well as an increase in other sub-fields, such as urban, and regional studies. Migration, diaspora and disaster studies, as well as British Sign Language were identified as emerging fields of research within Area Studies.

8. The average research income per annum for Sub-panel 25 (2013-20) was £11,484,395 (an increase of 25.4 percentage points from £9,158,030 in 2014 (n.b. figures were not inflation-adjusted)). The average research income per staff FTE was £19,807 in 2021 (an increase of 4.4 percentage points from £18,960 in 2014).
9. As most submitted Area Studies units were middling in size (average 25.21 FTE) and very close to the Main Panel D average submission size of 25.82 FTE, the weighting of sub-profiles per FTE did not have any significant effect on profiles (for an explanation of weighting see Main Panel D Report paragraph 21).
10. A total of 957.6 doctoral students completed their degrees in the assessment period (an increase of 36.6 percentage points from 700.75 in 2014). The mean number of doctoral completions was 1.65 per FTE in 2021, up by 13.7 percentage points, from 1.45 per FTE in 2014.

Outputs

Table 2: UOA average outputs sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
41.5	41.5	15.3	1.6	0.1

This table shows the average output sub-profile, weighted by FTE, for Sub-panel 25

11. The great majority of the 1,432 submitted outputs were authored books, edited books, book chapters, or journal articles. The sub-panel recognises that outputs of all kinds and published in a range of outlets are important to the dissemination of high-quality research in Area Studies and found evidence of original, rigorous and significant world-leading research across all output types. The sub-panel wishes to emphasise that it adopted an equitable approach to different forms of outputs, applied the criteria to all outputs in the same way, and was meticulous in ensuring that no attention was paid to where outputs were published or to the outlets in which they were published. There were 19 outputs submitted in languages other than English.

Table 3: Output Types Assessed

A – Authored book	20.97%
B – Edited book	2.58%
C – Chapter in book	14.52%
D – Journal article	60.08%
E – Conference contribution	0.32%
N– Research report for external body	0.56%
R – Scholarly edition	0.73%
T – Other	0.08%
V – Translation	0.16%

12. The number of double-weighted output requests submitted to the Area Studies sub-panel increased from 31 in 2014 to 189 in 2021. This was an increase of over 600 per cent. The vast majority of double-weighting requests were accepted by the sub-panel. Some institutions decided not to make a request for double-weighting (see Main Panel Report paragraphs 68 - 70) even when it would have been appropriate according to the published criteria. Research outputs where double-weighting was requested and accepted were quite often, although not always, judged to be of high quality. This was the case across the different types of outputs.
13. The sub-panel welcomed the balance between humanities and social science outputs in its submissions. It recorded a relative increase in the number of social science outputs submitted as well as the number of outputs using quantitative methodologies compared to 2014.
14. Submissions to the sub-panel came from a wide variety of disciplines, approaches and methods, and used a range of theoretical frameworks appropriate to Area Studies. In many cases, outputs applied theories that crossed the arts and humanities/social sciences boundary and, on occasion, included problem-based research. The sub-panel was pleased to find much evidence of methodological innovation in the Area Studies outputs submitted to REF 2021.
15. The panel again saw a strong stream of submissions in linguistics. Research in linguistics spanned a range of languages – including spoken and signed language and a wide range of non-European languages – and different approaches, including work in descriptive, theoretical and comparative-historical linguistics as well as applied and sociolinguistics, discourse studies and translation studies.
16. The deployment of language skills was one of the distinctive elements of research submitted to Sub-panel 25. The sub-panel was pleased to recognise and reward research, both monodisciplinary and interdisciplinary, that involved the use of foreign language expertise.
17. The sub-panel noted a small increase in the number of outputs that were co-produced with colleagues from the global south and warmly welcomed this development.
18. High-quality outputs proffered deep knowledge of a particular area or place using archival or ethnographic research and interviews, often in demanding research environments and/or in languages other than English. Some impressive work was embedded within a single discipline while other outstanding contributions incorporated interdisciplinary or comparative research, sometimes challenging entrenched disciplinary norms. Much work explored global problems of poverty, health, sustainability, quality of life, migration, insecurity, human rights and social injustice, at times with a local emphasis. In addition, the sub-panel was pleased to receive a number of research outputs that grappled with ethical dilemmas in cutting edge emerging fields such as the changing character of warfare, security and interrogation, the ethnomorality of migrant care, issues in the safeguarding of children, matters relating to women and violence, slavery and aid, and legitimate deaths. That a large number of outputs within the submitting unit addressed such globally important themes is testament to the commitment of researchers in Area Studies to making the world a better place.
19. Outstanding outputs related not only to the history, societies, politics, economies, languages, literatures and cultures of the regions covered by the sub-panel but also to the relationships between them. They covered inter alia little-known histories of people, post-conflict and post-disaster settings, gender relations, colonialism and post-colonialism, religion and heritage.

20. The 'Panel criteria and working methods' (REF 2019/02) document addressed the matter of the submission of outputs with significant material in common. Where issues of overlap were identified, the sub-panel used its professional judgment to ensure that the outputs in question were assessed to take account of the common material only once. Where there was not sufficient distinct material presented an unclassified grade was awarded.
21. Each output was allocated on the basis of sub-panel members' expertise to assess the research. Where necessary, in the assessment of individual outputs, additional expertise was deployed either through discussion with a wider group of sub-panel members, the service of specialist advisers, cross-referral or joint assessment with a member from another sub-panel. This was a collaborative process, and each submission was assessed by a range of sub-panel members who collectively contributed to a robust assessment of every submission (see Main Panel D Report paragraph 29).
22. The sub-panel cross-referred outputs to other sub-panels, in particular, to Sub-panel 31 (Theology and Religious Studies). Cross-referrals into Sub-panel 25 were received from 12 sub-panels including from Main Panel D, Sub-panel 26 (Modern Languages and Linguistics), Sub-panel 31 (Theology and Religious Studies), Sub-panel 29 (Classics), and Sub-panel 28 (History). There were also cross referrals from Main Panel B, Sub-panel 12 (Engineering), and from Main Panel C, Sub-panel 17 (Business and Management Studies), Sub-panel 18 (Law), and Sub-panel 23 (Education). The large number of cross-referrals into Sub-panel 25 is testament to the wide range of Area Studies research being carried out in UK higher education.

Table 4: Cross-referrals

	Into SP25		Out of SP25		Difference	
Within Main Panel D	111	7.8%	8	0.6%	103	7.2%
Outside Main Panel D	29	2.0%	1	0.1%	28	2.0%
Total	140	9.8%	9	0.6%	131	9.2%

Advice to HEIs

- Despite a 600 per cent increase in the number of double-weighted outputs, the sub-panel found outputs which would have warranted being double-weighted but for which double-weighting was not requested.
- REF 2019/02 provided new guidance to HEIs regarding the additional information that units could have provided for the assessment of edited books. The sub-panel found that HEIs did not always use this extra information box effectively to highlight the contribution of the author to the output, which made the task of assessing edited works more difficult.
- Edited collections may play a significant role in leading or contributing to development of a research field. The sub-panel welcomed information on focal contributions from submitting units.

- The interdisciplinary research (IDR) flag was not used consistently by HEIs. Some applied it, while others did not, despite submitting many interdisciplinary outputs. Interdisciplinary outputs were treated equitably. In this context, the sub-panel believes that it would be helpful if HEIs were given stronger guidance on the use of the IDR flag in the future, which would enable institutions to receive fuller, and more useful, feedback on their interdisciplinary research
- The sub-panel is aware of a widely held misapprehension among some HEIs that REF sub-panels score, or are likely to score, outputs in certain highly rated journals higher than outputs published in less well-known or prestigious journals. This is emphatically not the case. The sub-panel applied the criteria - originality, significance and rigour - to all outputs in exactly the same way, without any consideration being given to the outlets in which they were published.

Missed Opportunities

- A number of HEIs did not use the panel guidance when requesting double-weighting. Instead, they used the double-weighting request box to make a claim about the excellence of the output and/or how well it had been received by reviewers and/or how long it took to produce the output, rather than demonstrate the scale and scope of the output. It would have been helpful if HEIs had framed the case for double-weighting using the criteria, rather than simply referring, for example, to the time taken to produce the output.
- Submitting units could help panellists by completing additional output information where the output builds on previously published work. In some cases, virtually no additional information was provided, despite the fact that there was significant overlap with previous or other work.

Interdisciplinary Research

23. For the purposes of REF, IDR is understood to achieve outcomes (including new approaches) that could not be achieved within the framework of a single discipline. Interdisciplinary research features significant interaction between two or more disciplines and/or moves beyond established disciplinary foundations in applying or integrating research approaches from other disciplines. The sub-panel was pleased to appoint two panellists in REF 2021 as IDR advisers to assist the chair and deputy chair in ensuring IDR material was appropriately allocated. These members also attended cross-panel IDR discussions, led discussions on the assessment of IDR at sub-panel meetings and monitored IDR assessment.
24. Para 265 of the 'Guidance on submissions' (REF 2019/01) stated that the IDR flag was required, **where applicable**. An initial analysis of HEIs' uses of the IDR tag indicated that around half of the HEIs submitted to Sub-panel 25 had used it, while others had not flagged any items at all. Therefore, the interpretation of data based on the flagging of IDR proved unreliable. 19 per cent of outputs submitted to Sub-panel 25 were flagged by HEIs as IDR, whereas sub-panel members considered that over 40 per cent of outputs were interdisciplinary. The sub-panel concluded from this that some institutions remained reticent about using the IDR flag although clearly a proportion of

their outputs fell into that category. Further information about procedures in relation to interdisciplinary research in REF 2021 and the work of the Interdisciplinary Research Advisory Panel can be found in the main panel report, paragraphs 88 – 89 and 170 – 172.

Impact

General Remarks

25. Sub-panel 25 received 23 submissions including 65 impact case studies (this represented a reduction from 71 case studies in 2014 because of a change in regulations- see Main Panel D report paragraph 14) with just over 60 per cent of the units submitting two case studies. The weighted impact profile for the sub-panel (see Main Panel D report Table 10) was slightly higher than the Main Panel D average of 46.4per cent 4*. The range and quality of the impact case studies submitted to the sub-panel were outstanding, providing compelling evidence of the contributions made by Area Studies research to revealing, understanding and addressing problems at multiple levels across myriad societies and communities in the UK and internationally.

Table 5: UOA average impact sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
48.7	39.3	12	0	0

This table shows the average impact sub-profile, weighted by FTE, for Sub-panel 25

26. The sub-panel, informed by calibration undertaken by Main Panel D, carried out its own standardisation exercises for panellists and research users. Conflicts of interests were managed in the customary manner ensuring members were excluded from discussion of any institution where they had disqualifying interests; furthermore, Main Panel D user members assisted us in our impact deliberations. During assessment of impact the panel took advice from three expert research users, appointed for their knowledge inter alia of legislatures, policy, supra national organisations and governance, development, evaluation, education, cultural activity, information curation and management. Impact case studies were assessed by clusters of sub-panel members working with one research user; impact assessors and the entire panel reviewed results ensuring the robustness of the process.

27. Submissions to the Area Studies panel displayed a broad range of interests associated with the field outlined in REF 2019/02. Approximately two thirds of submitted work examined impact through international case studies. The sub-panel welcomed evidence of collaborative work and co-production of impact projects with colleagues from regions of the global south. It also appreciated case studies concentrated on aspects of life in the United Kingdom (UK). The extensive range of activities and interests reflected in the case studies were indicative of the broad range of impacts laid out by Main Panel D. As in 2014, there was ample evidence of reach and significance of impact from research in the humanities and social sciences, including in heritage, faith and cultural institutions, law, policy, non-governmental organisations (NGOs) and the media. In 2021 however, collaboration moved into new fields, for example, working with data science, allied health and emergency medicine, diaspora studies, deaf studies and education. Once again, the multidisciplinary, interdisciplinary and cross-disciplinary approaches and methodologies commonly practiced in Area Studies proffered deep engagement with

the world beyond the UK, for example, in helping establish international standards in emergency medical team deployment or in changing policy design of cash transfer programmes in the UK and internationally. Many of the Area Studies impact case studies were rooted in comparative research, for example providing insights into aspects of life in the UK within the context of the wider world and emphasising interconnectedness. Within the UK important aspects of life were revealed, in England, for example, influencing public policy and law on caste discrimination, or what can be learnt from forced child marriage internationally; in Scotland, examining community engagement and interaction with landowners; in Wales, shaping debates on participation and diversity in Parliament; and in Northern Ireland, examining community placemaking through heritage. Other impact case studies addressed important and ethically challenging issues including racial legacies in Africa, indigenous histories, endangered cultures, religion, bioethics and end of life care; or dealt with persistent and sensitive issues like corruption and security. The sub-panel observed that interdisciplinary research lends itself especially well to impact and that some of the strongest impact case studies were based on interdisciplinary underpinning research.

Impact Case Study Submissions

28. The sub-panel was impressed by submissions where the institution had clearly worked out strategies enabling units to achieve outstanding impact. Strong submissions not only had well-focused strategies for sustained intervals of impactful research over the assessment period but also thought carefully about how to implement them. Carefully crafted policies, over time, supported units to effect impressive reach and significance in their work. This produced remarkable case studies that built strong relationships, enriched people's lives and promoted change for diverse beneficiaries. Less strong case studies tended to show reduced evidence of a consistent strategy for development of impact from the underpinning research, and often appeared to lack continuous support for achieving it.
29. The very best impact case studies ensured that the underpinning research was aligned with the claims for impact and that the evidence presented supported these claims. Several of the studies ably demonstrated the creativity of Area Studies researchers in finding ways to conduct work in difficult times, or places, and in demanding situations. The sub-panel welcomed examples which presented established and sustained collaborations between researchers and beneficiaries, communities or audiences around the globe. They acknowledged too increasing collaboration with colleagues in, and from, the global south. Convincing case studies presented evidence of innovation in co-production of knowledge with users, demonstrating the advantages to researchers of working with users (and vice versa). Other case studies offered examples where researchers presented evidence to national or international bodies, sometimes on several occasions, demonstrating growing, established, and/or prolonged engagement with research users.
30. Organisations seeking Area Studies expertise came from various backgrounds including UK, or foreign, governments, NGOs and international non-governmental organisations (INGOs), museums, and companies across numerous business sectors. In many cases impact case studies provided persuasive quantitative data and benchmarks, where this was possible, and convincing qualitative data when providing evidence of feedback from stakeholders. Noticeable in REF 2021 was the emergence of new methods of information

gathering, or engagement, including for example, data analytics and social media, along with traditional approaches such as questionnaires and surveys. Nonetheless, the sub-panel noted it remained the case that impact may sometimes be serendipitous rather than pre-planned and that both types continue to be equally valuable.

Case Studies

31. There was a marked improvement in confidence and quality levels reflecting the common engagement of Area Studies researchers in national and international research with reach and significance. Generally, the standard of case studies submitted to Area Studies was extremely high, as might be expected in this field with real-world applications. Overall, the case studies illustrated the power of Area Studies research to bring about societal good and to improve lives, from the local to the international; and to enable better economic, social, political and cultural outcomes for a wide range of groups, including the most powerless. Conspicuously, within this sub-panel, impact often had the capacity to improve the quality of lives of vulnerable or marginalised peoples.
32. Commonly, impact empowered excluded communities and promoted their agency, including their assertion of human rights, using research to support claims for social justice. Others worked hard to assist communities to better understand one another, producing enhanced communication between locales, regions, continents, ideologies or religions. The submission illustrated that Area Studies scholars occupy seats at many tables ranging from large supranational organisations to small local community or cultural spaces, museums, galleries and archives. Their collective impact ranges from the politically sensitive, behind closed doors briefings, to widely available contributions for television, radio and print media, social media or blogs across continents. The variety of engagement and knowledge exchange recounted illustrates the importance of Area Studies research in meeting real-world challenges, and in accompanying improvements in the quality of life for many around the globe. The sub-panel found that the interdisciplinary and multidisciplinary nature of much Area Studies research lent itself to the successful creation of impact across continents and provided the basis for outstanding case studies.
33. Collectively, the best-case studies demonstrated that Area Studies impact is often generated from deep and long-standing personal expertise and engagement with stakeholders. Outstanding submissions displayed impact arising from interactions between researchers and users, often over long periods of time, highlighting that impact is a two-way process, sometimes initiated at the request of user groups. In 2021, such approaches facilitated many impact case studies related to public policy, law and services, or social welfare. Other case studies addressed matters of creativity, culture and society, reflecting the panel's wish to encourage submissions from the arts and humanities, the social sciences and beyond. In REF 2021, Sub-panel 25 called for "ground-breaking or novel approaches", seeking to reward innovation and excellence in formats including applied, practice-based, and pedagogical research. A distinct impact sub-set could be seen concerning enhanced understanding, learning and participation; as well as allied to impacts on health or wellbeing of peoples. As in 2014, there remained case studies interested in practitioners, professional services, performance, and ethics, along with those focusing on commerce and economy across the world. Submissions

which fixated on the esteem of the researcher and the status of the individual researcher as authority often proved less convincing. This was particularly the case when they failed to document tangible change. Panellists were also less impressed with impact case studies which, rather than making limited and specific claims to impact, and evidencing those well, involved extraneous information asserting several types of impact across many places. The sub-panel, once again, found that well-focused impact case studies did not 'over-claim'.

34. The sub-panel was impressed, however, by the body of underpinning research for submitted case studies. Excellent examples limited themselves to the six key references requested and did not further subdivide categories. The panel noted that HEIs did not always provide the evidence of quality required by the REF 2019/02.
35. Overwhelmingly, case studies presented forceful and absorbing examples of reach and significance locally and globally. Some illustrated the importance of foreign languages as an aspect of their area studies expertise; using language within the cultural environment to engage communities and build cross-cultural understanding.
36. Together they demonstrated:
 - Impacts on policy making, democracy, law and services in the UK and overseas, e.g., providing historical, post Brexit, place-based, context, problematising decisions debated by parliamentarians, parties, diplomats and/or reached by governments, local authorities, civil servants, NGOs, and other bodies nationally and internationally.
 - Impacts creativity, cultural literacy and society, historical legacies, decolonisation, arts, heritage, storytelling, public discourse and dialogue; community engagement, understanding of cultures, gender, young people, ethnicities and faiths, learning and participation in curricula and curatorial practice; the public, people visiting, or working in, cultural institutions; and between, and within, social groups.
 - Impacts on social welfare, by enabling or empowering indigenous, minority or marginalised communities to assert their own voice, agency and rights; by opposing corruption, promoting community development, community relations; and by mitigating impacts of disasters, climate change and environmental risks.
 - Impacts on social justice and human rights.
 - Impact on practitioners, the delivery of professional services, procurement, enhanced performance or ethical practice, by providing expert advocacy or testimony e.g., for legal cases involving asylum, refugees and migration.
 - Impacts on health and wellbeing of peoples and animals through tackling discrimination, improving participation and consideration of wider issues e.g., bioethics and end of life care.
 - Impacts upon commerce and the economy, improving economic prospects, e.g., through innovation or pensions policies, microcredit, finance and cash transfer or income support in developed and emerging economies.
37. The sub-panel notes that it remains difficult to make comparisons between impact profiles in REF 2014 and 2021. Profiles previously contained an impact template, excluded in 2021, meaning that comparisons between the data points cannot effectively be made. Nonetheless, we observe generally an increase in 4* grades, and a reduction in all other grade categories since 2014. This reflects both improved understanding of research impact and the greater planning, resourcing and recording of such work in many institutions.

38. The sub-panel took account of the significant disruption to impact activities and HEI plans at the end of the exercise presented in many Covid 19 statements. The sub-panel was sympathetic to the challenges for researchers in this unprecedented period, rewarding what had been achieved, rather than penalising what had not proved possible.

Advice to HEIs

- Outstanding case studies were well written, providing convincing evidence of the ways in which research led to transformative impact and to societal or individual change. Moreover, strong case studies often made effective use of testimonial evidence through direct quotation while highlighting equality, diversity and inclusion issues influenced by the work. The sub-panel noted additionally that case studies which were concise and had a clear narrative, even when they did not use all available space, often made strong impact.
- Less robust cases found it difficult to present a clear line of sight between the underpinning research, the intervention and the claims for impactful change. These case studies may have been submitted prematurely; or claimed impact for events not taking place within the specified assessment period or included “predicted” future impact.

Missed Opportunities

- Detracting from the central narrative by including diffuse claims about impact achieved over a range of different areas.
- Not connecting every impact case study into the unit’s larger research culture.
- Not making full use of testimonials by direct quotation within the narrative.
- Providing unclear evidence, or lack of detail for the impact being claimed e.g., not including, when possible, quantitative evidence, and benchmarks, alongside qualitative evidence.
- Placing evidence of impact in the incorrect section of the template.
- Not relating the impact claimed to the underpinning research and not providing evidence that the underpinning research was of more than 2* quality.
- Not getting the division of lists and narratives within sections 2 and 3 correct.
- Not differentiating between dissemination, public engagement and impact.
- Not providing context, or comparators, for evidence provided from social media.
- Not limiting the evidence in relation to the underpinning research to six items.

Environment

Table 6: UOA average environment sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
46.7	46.1	7	0.2	0

This table shows the average environment sub-profile, weighted by FTE, for Sub-panel 25

General Remarks

39. As in all aspects of the sub-panel's deliberations, proceedings were observed by international members from Main Panel D. The sub-panel split into sub-groups to consider the environment templates. In accordance with the assessment criteria, the sub-panel considered each component of environment separately. In its discussions the sub-panel was provided with the standard data analyses which helped inform, but did not determine, its deliberations. Sub-panel discussions ensured each institution was considered in detail, and conflicted panellists left when appropriate.
40. Overall, Area Studies submissions demonstrated an abundance of vitality across units of various sizes and configurations throughout the UK. 4* results for research environment in Sub-panel 25 improved by 9 percentage points from 37.7 per cent in 2014, to 46.7 per cent; although this was a little below the average for Main Panel D research environment at 47.8 per cent. The sub-panel paid close attention to sustainability, considering it crucial to the long-term success of the field. Sub-panel 25 sought evidence of a clear strategy and how it had been implemented (including, where relevant, any problems of implementation that had emerged during the REF period), of unit building over time, succession planning, effective management of change, and maintenance during the REF period and beyond (in some cases despite inevitable staff changes). Recognising that Area Studies units within UK universities have traditionally been relatively small, we sought evidence of institutional strategies which supported teams of researchers to undertake successful research and impact interventions across the assessment period.
41. The sub-panel acknowledges that REF 2021 presented unique challenges for institutions, submitting units and the exercise. These included unpredictable lockdowns, unfamiliar (remote) working methods, the use of new technologies, illness, and unplanned absences or time off work for domestic and caring responsibilities. The sub-panel was well aware that unplanned extra responsibilities were likely not evenly spread amongst submitting unit members. They welcomed clear evidence that some HEIs made sustained efforts to support staff across the census period, and notably during the pandemic. Sub-panel 25 recognised that environment statements often revealed the direct consequences of Covid 19, with numerous disruptions, and both research and impact activities delayed or cancelled.
42. Nonetheless the environment statement remains highly prized by sub-panel members, offering a crucial snapshot of the "state of the field". During assessment the institutional statement (REF5a) was considered together with unit statements (REF5b) thereby assisting panellists to achieve a better understanding of the wider research environment within which colleagues work (see paragraph 148, Main Panel D report).

i. Unit context and structure, research and impact strategy

43. In the case of units that had submitted to REF 2014, the sub-panel was grateful for submissions which explained the broader context of their research and impact by

referring to their REF 2014 plans and changes since. This facilitated an enhanced understanding of the journey of the submitting unit, particularly when units had been reshaped, sometimes radically, since the last assessment. The panel was pleased to receive cogent explanations about why, and how such changes had taken place, thereby informing research and impact strategies. The sub-panel assessed on an equal basis submissions which did, or did not, map onto departments or other administrative structures within HEIs. In the case of units submitting for the first time to Area Studies, the sub-panel was grateful for an explanation of the rationale for the submission and a clear statement of the unit's strategy.

44. The most successful submissions provided clear and convincing statements of the submitting unit's research and impact strategies, aligned with a coherent explanation of motivations and objectives. The panel found that these units presented a clear vision of vitality and collective direction, that this was well integrated into institutional and/or faculty ambitions and offered evidence of institutional support. The best submissions presented careful information on unit structure, aims and objectives, demonstrating self-reflection on how research and impact were achieved. These statements determined strategic ambition, evidenced structural processes leading to progress throughout the REF period and revealed the breadth of the unit's activities. Once again, the sub-panel welcomed information on how the unit's research was structured within, or across, the institution, the operation of research clusters or groups, support for interdisciplinary work, and wider synergies within and without the unit. The sub-panel particularly welcomed where submitting units made it clear how they facilitated the achievement of impact arising from research, and how the selected case studies related to their approach to achieving impact.
45. In the context of Covid 19 some institutions took the opportunity to include an annex explaining how strategy had been affected. The panel found these helpful, particularly when they described efforts to mitigate the effects of the pandemic and protect staff. Such information reflected the growing and central importance of equality, diversity and inclusion (EDI) considerations in building flourishing research environments.
46. This section of the environment template was particularly significant as Main Panel D had chosen to give it a higher weighting (see Main Panel D report paragraph 147). The sub-panel appreciated well-defined statements describing staffing strategies with empirical data on the current situation and, where appropriate, progress from 2014. Strong submissions provided evidence of equality, diversity and inclusion policies supporting early career researchers, part-time, and other categories of staff. In particular, the sub-panel applauded submissions which demonstrated that the unit had thought about applying EDI policies to all categories of staff, for example, in applying for research leave or other benefits. Sub-panel 25 noticed that the best submissions also confirmed application of EDI policies to leadership roles across the submitting unit. They included too concrete evidence of mentoring, probation, appraisal, training and support, and EDI accreditation within the unit, for example, the use of charter marks.
47. The sub-panel noted that not all submissions articulated convincing statements on every element of equality, diversity and inclusion. For example, some submissions outlined policies on gender but did not include reference to all the protected characteristics, for example, race or disability. Outstanding statements provided evidence of policies applied across all EDI categories, acknowledging intersectionality and building equitable, successful research cultures and practice. Such human resource and staff development strategies provided support for staff at all career stages through recruitment, appraisal,

mentoring, and application of concordats. These exceptional units provided support for staff, enabling them to produce research and impact of excellent quality and rewarded them accordingly. They also enabled early career researcher involvement, supported by policies promoting research integrity, the operation of appropriate legal and professional standards/protocols, and the effective management of research data. Such units pursued progress towards increasing open access in research, encouraged augmented co-production of knowledge with research users and communities at home and abroad, and provided opportunities for staff secondment from and to sectors beyond the academy.

Postgraduate Research Students

48. UK Area Studies continues to attract many graduate and post-graduate students from home and abroad. Over this REF period a total of 957.6 Area Studies doctoral degrees were awarded, an average of 136.8 per year. The sub-panel appreciated clear information on the mechanisms put in place by HEIs to encourage successful doctoral recruitment (including those from under-represented groups), progress and completions. There was a plethora of evidence of considerable and outstanding research support, including studentships from funding bodies, other financial support, monitoring and support mechanisms, mentoring and high-level skills development for future career success. The sub-panel noted that encouragement for research students to disseminate results of their work was only one way to integrate students into an inclusive unit research culture. Most importantly, the panel sought evidence that research students had been nurtured by the institution and fully integrated into the activities and life of the unit. The sub-panel sometimes needed to search for information on the wider institutional setting within which research students study, searching for details on methods training and, where appropriate, language teaching.

Equality and diversity

49. The sub-panel was pleased to see strong evidence of Area Studies units' commitment to equality and diversity in recruitment, encouragement of staff with responsibility for research, and for research students. There were compelling examples of strategies, activities and collaborations which supported equality and diversity in submitting HEIs enabling staff and students, drawn from a wide cross section of society, to successfully engage in research. The sub-panel noted improvements since 2014 particularly in relation to gender. Institutions submitted a plethora of policies to aid greater equality in gender-related matters including: role holding, flexible or remote working, more equal career pathways for part-time and fixed-term staff (including parental or caring leave), more equitable arrangements for conference or research visits (for those with caring responsibilities, ill health etc.), improved access to: internal research funds, increased mentoring, support policies for grant applications, research-related promotion or reward, sabbaticals, and high level skills training. The journey towards impartial representation within research-related roles, at least in relation to gender, was improved, especially at senior and leadership levels. The panel noted with pleasure the benefit to all staff of strategies promoting more equitable approaches to supporting research, for example, access to parental or ill health leave, or tangible support on return to work.

50. Sub-panel 25 considers improved equality, diversity and inclusion (EDI) practice fundamental to our field and at the heart of our research. However, the sub-panel noted significant inconsistencies within this section including in some cases omission of data on staff with the full range of protected characteristics. The sub-panel therefore appreciated units which provided clarity on persistent inequalities and details of

research support on race, ethnicity, disability or LGBTQ+ issues. The sub-panel also noted a tendency to rely on the institutional level statement (REF 5a) for general aspirations concerning EDI, rather than properly addressing the matter in REF 5b. Consequently, Sub-panel 25 sometimes found it difficult to perceive which EDI policies were applied within a submitting unit, for example, in support of research staff after return from long-term sick leave, or caring responsibilities, or for those living with chronic illness.

iii. Income, infrastructure and facilities

51. The sub-panel was impressed by the growth in research income for Area Studies within a competitive funding environment. Average annual income per submitting unit increased by 17.1 per cent, from £9,522,800 in 2014, to £11,484,403 in 2021 (n.b. figures not adjusted for inflation). The panel observed a diverse portfolio of funding from international, national and local sources. There was strong evidence of success in support from prestigious sources including UKRI, Leverhulme, British Academy, GCRF, the European Union, governments and charities. The sub-panel welcomed creative strategies for support from non-HESA funds. The average income from all sources generated per FTE staff member increased by 0.5 per cent, from £19,715.84 in 2014, to £19,807 in 2021. While levels of external and internal support differed across HEIs, many units reported mechanisms to secure and enhance research income, including the award of income overheads to the research team, passing on QR funds to submitting units for support of grant applications or workloads etc., and the submission of ECRs with senior staff in grant applications.
52. Sub-panel 25 was also impressed by the array of infrastructure and facilities well used and supported by submitting units. Outstanding collaborations took place with museums and galleries, libraries, archives, special collections, NGOs and local community resources, often facilitated by new technologies and online resources. Some collaborations emanated from within the submitting institutions while others came from without (e.g., with public/private libraries or cultural institutions outside the UK). These collaborations and resources offered opportunities for research, or impact, privileged access to materials and artefacts, valued collaboration with research users, and entrées to new audiences. The sub-panel welcomed the vital support that these institutions provided to Area Studies, often through digital resources, and was pleased when HEIs or others explained their investment in such resource and how it had enhanced the research environment. The sub-panel remarked that such collaborations sometimes offered increased opportunities for doctoral studies, openings for sophisticated skills training, outstanding post-doctoral experience, and pathways to future employment in the UK and internationally. The sub-panel also welcomed the improved range of information provided in REF 2021 on resources and infrastructure (e.g., library resources, databases) beyond income.

iv. Collaboration and contribution to the research base, economy and society

53. The sub-panel applauded the evidence of the extent of national and international collaboration seen in innumerable contributions to global Area Studies in environment templates. The variety of collaboration and partnership arrangements was astounding and contributed positively to improving the submitting unit's research environment. Examples ranged from digitised special literary collections for Gulf, Kurdish and Palestine Studies to research fellowship schemes and academic exchanges (through targeted research networks, e.g., on Social Cohesion in Southeast Europe), the creation

of academic and activist co-produced networks for environmental justice e.g., in Latin America, or co-production of knowledge with NGOs through participatory filmmaking with communities in Africa. The sheer scale, depth and breadth of public good done by UK Area Studies research was astonishing, often addressing difficult issues like domestic violence, or multiple protracted, entrenched, social problems, like modern slavery or corruption. The best submissions explained and provided evidence of how collaborations and partnerships had enhanced the research environment by leading to positive outcomes for researchers and collaborators, e.g., in terms of research outputs, joint research funding applications or impact.

54. The sub-panel observed evidence of increasing collaborations between researchers, users and curatorial staff in the UK and abroad including at museums, archives, libraries, public/private collections, governments, parliaments, executive agencies, think tanks, NGOs and charities. Economic benefits were evident in some collaborations. Policy advice, citizen advice or expert testimony also provided many benefits, for instance by helping UK government adapt to Brexit, increasing access, participation and inclusion for deaf communities, and helping to raise the minimum wage and promote pensions reform abroad. Submissions which provided a narrative explanation of how research clusters or groups worked with diverse communities and publics, and at the same time helped shed light on how staff developed relationships with research users and beneficiaries were much appreciated. The sub-panel also acknowledged the importance of strong ethics in the conduct of research and fieldwork and appreciated examples of unit and researcher self-reflection on conduct within their submission.
55. Finally, collaborations and contributions to the discipline stood out with extraordinary evidence of engagement with subject associations, learned societies, Research Councils and funding bodies. Also evident were myriad contributions to journal or book series editorships, peer reviewing, external examining, conference organising and contributions. Strong submissions evidenced collaborations beyond the short-term to mutually beneficial co-production of research or impact with partner organisations, communities, groups and individuals.

Advice to HEIs

- The panel noted that outstanding submissions capitalised on the opportunity REF 2021 provided to acknowledge and encourage collaborative work by teams of researchers. The best submissions offered vignettes of outstanding research and impact interventions including demonstrable evidence of the publics or research users who benefitted. Stronger submissions capitalised on many sources of funding, including traditional sources and less traditional non-HESA funds.
- Less impressive research and impact strategies struggled to offer much in the way of overarching vision or priorities for their unit, proffering apparently unrelated objectives and activities. Often there was an unclear articulation of strategy with the other sections of the template, or the link between the unit's and the institution's strategy was not discernible.
- The sub-panel noted that the strength of Area Studies is particularly reflected in the impact and outputs profiles. The environment profiles may indicate missed opportunities for institutions to maximise the benefits which bringing together researchers working across disciplines can offer.

Missed Opportunities

- Not explaining the journey of the submitting unit since REF 2014.
- Not using examples of benefits from university or faculty initiatives, or structures, including international collaborations to explain the unit's context and activities.
- Not making good use of the institutional statement.
- Not placing information in the correct section of the template.
- Not making sufficient use of narrative to present a cogent overview of the work of, or interrelation of, research clusters or groups within the submitting unit.
- Not providing evidence for claims made in the narrative.
- Defaulting to unconnected lists of activities.
- Over-reliance on esteem factors for a few individuals.
- Not providing sufficient information or evidence of specific, local, research support for staff with protected characteristics, returning from leave, with caring responsibilities or with chronic illness etc in the equality, diversity and inclusion section.

Overview

56. Area Studies boundary descriptors encouraged submissions from the arts and humanities, the social sciences, and beyond. The sub-panel, created in 2014 to bring together scholars from diverse disciplines and geographies, relished being a "UOA without borders." The growth in use of digital communications in recent years has encouraged greater co-production of research and impact. This increased openness and transparency has supported our intentions to challenge older and entrenched disciplinary traditions, to be amenable to new ways of thinking and working, to be cognisant of subaltern voices and keenly aware of polyvocality. The breadth of our field facilitates the study of regions, sub-regions, and their cultures and societies. Methodological range, aligned with a positive approach to comparative investigation, supports single, multi, cross- and interdisciplinary research. This open-minded approach to methodology, and place, encourages submissions addressing the macro, meso and micro lens within Area Studies, all the while, encouraging critical disciplinary silo crossing. Submitting units responded to this call to methodological innovation by crossing disciplinary boundaries in their research production: and, as noted above, the sub-panel considered well over 40 per cent of submitted outputs to be the product of interdisciplinary research.
57. Another indication of the breadth of Area Studies research expertise could be seen in the number of cross referrals into Sub-panel 25 from twelve sub-panels ranging from Art to Engineering (and from Main Panels B, C and D). Such referrals indicated an appreciation of Area Studies' non-judgemental procedural approaches and desire for curiosity-driven methodological innovation. In 2021, Sub-panel 25 received a number of less traditional forms of outputs including related data sets, systematic reviews, translations, research reports for external bodies, scholarly editions and volunteered graphic information. Similarly, outputs addressed novel research directions including: diaspora studies, deaf studies, war studies, refugee studies; migration, disaster and humanitarian studies, as well as new materials on aspects of life in the British Isles. These innovations built upon the interests and themes outlined in our unit descriptor

(paragraph 129, REF 2019/02). Consequently, panellists read a captivating spread of subjects. A random sample included: work on the Qur'an, Buddhism, Japanese screen printing, Chinese higher education, Russian gangs, biomedical research ethics, Black power, disaster recovery, Indian foreign policy, Brexit and the emotions, Scottish, Welsh and Irish heritage or governance, Africa's borderlands, Latin American cinema, indigenous histories, killer robots, domestic violence, human rights; and as always the core of cultures, languages, linguistics, literatures, history, politics, economics and identities of multiple societies and regions.

58. The sheer scope of our reading indicates what the sub-panel had already noted, an appreciation of the change in nature and content of units submitted in 2021. This indicated an imaginative and welcome institutional investment in Area Studies, but also, the dynamic and evolving nature of the field, itself worthy of greater attention. Sub-panel 25 observed an extraordinary flourishing of high-quality Area Studies research and impact across institutions of varying sizes and cultures in this exercise. Moreover, it welcomed the prolonged engagement with research users in the UK and other parts of the world which bodes well for future exercises. A glance at submissions indicates the diversity of our submitting units over topic, form and content, reflecting the politics, cultures, economies, languages, history and societies of the Americas, Asia, Africa, Europe and beyond. Also, and significantly, Sub-panel 25 was gratified to see a confident revitalisation of theory in the UK on the future of Area Studies internationally, which included research on the explanatory reach of New Area Studies and Critical Area Studies etc. The sub-panel was also delighted with the development, performance and maturation of expert units submitted previously, as well as with recently established units considering new territories, processes or themes. The panel noted too the significant improvement in performance of many institutions which entered for the first time in 2014. With submissions ranging from 7 to 88.05 FTE the sub-panel is buoyed by the innovation and creativity demonstrated by the sector, the clear growth and investment by a number of institutions in the field, plus the significance placed upon our common values and shared concerns by Area Studies researchers.
59. It goes without saying that following the Stern review, "Building on Success and Learning from Experience: An Independent Review of the Research Excellence Framework" (IND/16/9), REF 2021 is considerably changed from earlier iterations. Emphasis on inclusion of all staff with a significant responsibility for research contributed to an increase of category A staff submitted by 20.05 per cent (from 483 FTE in 2014, to 579.82 FTE in 2021). The actual number of staff submitted to Area Studies rose from 503 in 2014, to 616 in 2021. The more recent requirement for 2.5 outputs per staff FTE allowed institutions greater choice in selecting outputs. An enhancement was seen in impact scores (an increase of 14 percentage points in Sub-panel 25 4* to 48.7 per cent in 2021, compared to a mean Main Panel D score of 46.4 per cent) as proficiency improved within HEIs in developing policies to progress case studies. Both large and small units displayed high-quality work in Area Studies during this census period. While sub-panellists acknowledged continued pressure on smaller submitting units in delivering the minimum of two impact case studies (and, in presenting the wide range of elements required within the environment template) they also observed the challenge of an enlarged range of environment criteria within the environment template. Nonetheless, submitting units of every size and disposition presented clear evidence of vitality and sustainability (4* research environment scores increased by 9 percentage points to 46.7 per cent in 2021). The sub-panel observed varying results from the three different components of REF assessment. Thus, while some units scored well on environment,

this did not ensure that they would also excel on impact and outputs, or vice versa. Many combinations of results were seen from units of different shapes and sizes and with different histories. Whatever the outcome, each element of the result was scored according to the criteria articulated in REF 2019/02, thereby building a profile, and reflecting a sector, which differs widely across the country in both form and structure.

60. It remains true, as in 2014, that much research in Area Studies was submitted to other sub-panels. Area Studies remains the home for abundant research on the Middle East, Asia, Africa, Europe and the Americas, covering the cultures, languages, faiths, politics, societies and economies of these regions; but we note once again disappointment at the paucity of work on Oceania. Many institutions have taken us at our word, entering submissions on ecological, geopolitical, diasporic, post-colonial, gender or intercultural studies. And, while on this occasion only one institution made a multiple submission to the sub-panel, we encourage HEIs to consider this option in future. As in previous REFs, Sub-panel 25 continues to welcome units of every size, shape and configuration and from any type of higher education institution. Combined with impressive outputs, impact case studies with extraordinary reach and significance, and with solid research environments, Area Studies units across the country have performed extremely well. Indeed, every HEI which submitted to Sub-panel 25 scored some element of 4* within their results, whether in outputs, impact or environment.
61. REF 2021 demonstrated that UK Area Studies continues to flourish, reflecting the deep, cultural and linguistic expertise of its researchers vital in a fast-moving, technologically driven, increasingly unpredictable, post-pandemic world. The average Area Studies submission to REF 2021 was 25.21 FTE placing us close to the mean for Main Panel D of 25.82 FTE. Submissions exhibited extensive knowledge of complex economic, political and social conditions, including nuanced assessments of quality of life around the world. They reflected deep knowledge of intractable problems and difficulties, often gleaned from long-term relationships with researchers and communities within, and without, the UK. The collective expertise emanating from UK Area Studies scholars provides essential and reliable information, insight and analysis to inform policy makers, cultural institutions, governments, societies, communities and the media on current and future global challenges. In an increasingly unstable world, with multiple, political, social, historical, economic, cultural and environmental concerns, Area Studies has built much needed better understanding between regions and peoples. Significant ongoing changes to the UK's international post-Brexit world demonstrates an imperative to protect national Area Studies expertise, resources, research, income, and language capacity into the future. Sustaining the next generation of scholars and students in Area Studies and, at once, protecting high-quality research, impact, field-work, and informed cultural awareness into the 21st century, is a matter of fundamental concern to the academy as well as to the country.



Sub-panel 26: Modern Languages and Linguistics

1. All sub-panel members discussed and collectively agreed this report, and it should be read alongside the Main Panel D (MPD) overview report which contains a description of main and sub-panel working methods and discusses matters of common interest.

Summary of submissions

2. Sub-panel (SP) 26 (Modern Languages and Linguistics) covered research on the languages, literatures, cultures and societies of all regions, countries and communities where Celtic, Germanic, Romance or Slavonic languages or other languages of Europe and Latin America are, or were, used. This included areas where European languages have interacted with other cultures and languages. The UOA also included all areas of general, historical, theoretical, descriptive and applied linguistics, phonetics, and translation and interpreting studies, regardless of the methodology used or the language to which the studies are applied. The sub-panel took a broad view of what constitutes modern language studies. This included, but was certainly not limited to: literature and thought; cultural studies; theatre studies; film and media studies; visual cultures; language studies; translation and interpreting studies; political, social and historical studies; editorial scholarship, bibliography, textual criticism and theory and history of the book; philosophy and critical theory; world literature and comparative literature; literature in relation to the other arts; and applied, practice-based and pedagogical research, including translation and creative writing. The sub-panel welcomed the submission of interdisciplinary research, including work on language and literature in relation to science, medicine and technology, digital humanities, or creative technologies, and ensured that such work was assessed with appropriate expertise. The sub-panel received some work on languages, literatures, cultures and societies, both ancient and modern, that fell wholly or partially outside its members' expertise. There was accordingly a degree of overlap with Sub-panel 25 (Area Studies). The two sub-panels worked together closely and as necessary, before and during the assessment period.
3. The sub-panel received 47 submissions. 3 higher education institutions (HEIs) made multiple submissions. 7 submissions were made by institutions in Scotland, 5 by institutions in Wales, 2 by institutions in Northern Ireland, and the remainder were from England. Submissions ranged in size from 6 to 115.35 FTE.
4. The sub-panel comprised academics with a variety of expertise, ensuring that Modern Languages, Linguistics and Celtic Studies could be assessed from a variety of perspectives. Sub-panel members had a broad range of interdisciplinary experience and a high level of language competency.
5. The sub-panel was assisted in its deliberations by six specialist impact assessors and four output assessors. Input was provided by specialist advisers when the sub-panel lacked expertise in the languages in which outputs were submitted. Assessment was supported by one sub-panel secretary and one sub-panel adviser.
6. The sub-panel confirms that it adhered scrupulously in every aspect of the assessment process to the published criteria. In establishing its working methods, Sub-panel 26 followed the assessment principles and framework adopted across Main Panel D (see

paragraphs 23 – 34 of the Main Panel D report) and participated in the calibration exercises conducted within the sub-panel and the main panel. A selection of Main Panel D members participated in all aspects of our assessment including calibration. In seeking to avoid unconscious bias, the sub-panel was reassured by the development, regular discussion and active implementation of its Fairness in REF Intention plan, which informed the assessment of all areas of submissions. The function of the plan was to engage the sub-panel in a process of self-reflection in considering bias, and unconscious bias, in the conduct of evaluation.

7. Conflicts of interests were managed in a consistent manner, ensuring the members were excluded from discussion of aspects of submissions pertaining to any institutions with which they declared an interest.
8. The average annual research income per submission for Sub-panel 26 (2013-20) was £24,729.83. The average research income per submitted staff FTE across this period was £15,317.
9. A total of 3019.62 doctoral students completed their degrees in the assessment period, with the mean number of completions as 1.87 per FTE.
10. The sub-panel welcomed the evidence with which it was presented of the strength and vibrancy of research in Modern Languages, Linguistics and Celtic Studies across the UK. It noted the significant, often transformational contributions that units of all types and sizes are making to knowledge, culture, well-being, and economic prosperity locally, regionally, nationally, and internationally through their research and its impacts. This achievement is all the more impressive given the challenges faced by some submitting units and the disciplines they represent more broadly. The health of the disciplines covered by the sub-panel during the review period is evidenced through increased levels of external research funding, rising postgraduate recruitment, increased proportions of world-leading and internationally excellent outputs, and outstanding impact case studies submitted for assessment. It is important to note, however, that changes to submission rules prevent direct comparison between a number of aspects of REF 2014 and REF 2021.

Outputs

Table 1: SP26 output sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
35.8%	42.7%	20.2%	1.1%	0.2%

This table shows the average output sub-profile, weighted by FTE, for Sub-panel 26

11. Outputs were assessed without reference to place or medium of publication or the point at which they were produced and made available in the REF cycle. Outputs of the highest quality levels were found amongst all types, across all sub-fields and time periods and in research produced in a broad range of languages. World-leading work was found across different kinds of institutions, in both large and small submissions. The sub-panel found no evidence of a meaningful correlation between the quality of outputs and any proxies for quality, such as rankings of journals or publishers or other metrics, and did not take any such proxies into account in their assessment. When identifying assessors for outputs, a number of aspects of their expertise were taken into account, such as their expertise in relation to language, sub-discipline, time period and/or methodology. As with assessment of other areas of the submission, the sub-panel adopted numerous

measures to mitigate the risk of bias, notably removing references to authors' names when discussing outputs.

12. The sub-panel noted and welcomed the diverse formats in which outputs had been submitted. The majority fell into the following categories: monographs, edited volumes, journal articles and book chapters, but these were complemented by a range of other formats including electronic dictionaries, scholarly editions (electronic and print), translation/performance, datasets, portfolios and websites.

Table 2: Output types assessed

	Number of outputs	Percentage of outputs
A – Authored Book	794	20.55
B – Edited Book	219	5.67
C – Chapter in Book	717	18.56
D – Journal Article	1989	51.48
E – Conference Contribution	29	0.75
G – Software	1	0.03
H – Website content	10	0.26
J – Composition	6	0.16
M – Exhibition	1	0.03
N – Research report for external body	5	0.13
Q – Digital or visual media	4	0.10
R – Scholarly Edition	51	1.32
S – Research datasets and databases	6	0.16
T – Other	13	0.34
U – Working Paper	3	0.08
V – Translation	16	0.41

13. In no cases did format determine quality and the sub-panel observed a consistent range of scores across most output types, including for edited volumes, critical editions, translations, handbooks and companions, descriptive grammars and corpora. The sub-panel was on occasion challenged by the submission of electronic corpora without any kind of accompanying documentation, and some outputs about corpora were submitted without the corpora themselves. It was at times difficult to assess websites, and in particular the relationship between the description (often minimalistic) and the data set itself. In the areas of literature and culture, some websites added little to accompanying outputs. The sub-panel recommends that additional guidance is required in these areas in future REF exercises.
14. Prior to assessment, the sub-panel conducted a comprehensive calibration exercise, choosing a range of non-conflicted outputs to discuss. All sub-panel members and output assessors took part in this exercise, with the discussion of individual outputs led by subject specialists. Outputs selected for calibration encompassed the range of disciplinary areas covered by the sub-panel and also included diverse formats.

Calibration of outputs and regular review of scoring patterns ensured a shared understanding of the assessment criteria across all subject areas represented by the sub-panel and parity of scoring. This exercise was undertaken in parallel with calibration exercises undertaken across Main Panel D and across all four main panels.

15. The sub-panel welcomed the submission of outputs written in a broad range of languages and considers this multilingual activity to be a distinctive element of the broader national and international contribution of the particular academic expertise it encompasses. The language of publication had no impact on assessment.
16. The sub-panel recognised the different ways in which originality, significance and rigour may manifest themselves in different global and cultural traditions and ensured that this variation informed calibration and assessment.
17. There was evidence across submissions of overlap/duplication, including but not limited to cases where the same or very similar research questions informed electronic and print outputs deriving from a single research project. There were also a number of examples of previously published chapters and articles being integrated into monographs without any apparent rewriting of content and without incorporating significant new material. In such cases, greater transparency and more judicious use of the comment field by HEIs to explain how far any work published earlier was revised to incorporate new material would assist the sub-panel in its assessment. In such cases, the sub-panel followed the procedure set out in the 'Guidance on submissions', and assessed each output taking account of the common material only once. Where the sub-panel judged that they did not contain sufficiently distinct material, an unclassified score was given to the 'missing' output.
18. Although there was some variation across subject areas, the sub-panel observed increasing evidence of collaborative research (including co-authored outputs and outcomes from funded projects; and partnerships with practitioners, communities and industry). There was also evidence among submitted outputs of increasingly innovative collaborations. Co-authorship takes a number of different forms, ranging from fully integrated writing to the production of single-authored chapters in co-produced books or sections in co-authored articles where the individual contribution is clear. For edited volumes, the contribution of the attributed researcher was not always entirely clear. The sub-panel received some creative work (notably film or literary works including fiction and poetry). In the strongest cases, the research dimension was clear to assessors and the project had often been conceived as research from the start.
19. In some sub-disciplines assessed by the sub-panel, the monograph or other substantial outputs resulting from a major project proved to be formats that were often assessed by the sub-panel as being of a high quality. There were high quality grammars and corpora, which are time-consuming to create and descriptive in nature, and capable of receiving high scores as they often constitute significant and original work. It is important that such major projects continue to be supported within institutions and that institutions use appropriate options such as double-weighting that aim to recognise the contribution to research of outputs of significant scale and scope.
20. Requests for double-weighting were submitted for 667 outputs (17.26% of submitted outputs), and of these 98% were accepted. This was a significant change from REF 2014, where there were fewer requests for double-weighting and great variation between institutions regarding its use. The sub-panel judged nevertheless that there were still a number of cases where the double-weighting of outputs would have benefited the

institution if it had been requested. There were few requests for double-weighting of articles although some cases would have merited this. The approach to requests for double-weighting with the inclusion of a reserve output appears to have worked well in principle. Requests for double-weighting related to a range of output types. Each case was evaluated in relation to the published criteria.

21. Though the sub-panel accepted the vast majority of nominations for double-weighting, it notes that the 100-word statement supporting these requests was not consistently used well in that some cases did not refer to the characteristics of double-weighting identified in the 'Panel criteria and working methods'. On occasion, the information provided did not address the submitting member of staff's research contribution to the output but focused on technical detail and minor editorial tasks. It was noted that comment fields were generally not employed helpfully. For a number of outputs, the case was not made for the research imperatives of the work, often with a reliance on assertions of significance and/or reception data.
22. Where outputs were assessed as 'unclassified', this was because the date the output was first made publicly available fell outside the assessment period; or it was due to substantial overlap with another output submitted to REF 2021 or with research published outside of the REF assessment period. In rare cases, the output failed to meet the published definition of research.
23. In terms of attention to issues of Equality, Diversity and Inclusion, the sub-panel found limited evidence of the self-positioning of researchers in outputs, although there was greater awareness demonstrated in relation to gender than any other protected characteristic. There was clear sensitivity in relation to the cultural context in which researchers are operating and this seems to be a strength of the subject areas represented by the sub-panel. Questions directly related to Equality, Diversity and Inclusion were reported in outputs in a range of subject areas in Sub-panel 26. Methodologies are increasingly inclusive, a development that is evident across the range of areas with which researchers engage more broadly. The sub-panel found more evidence of co-production in impact case studies than in outputs, despite the trends around co-authorship noted above. Inclusive citation is common practice across a number but not all of the areas represented by the sub-panel.

Cross-referral and joint assessment of outputs

24. Given the broad range of expertise represented among sub-panel members and output assessors, Sub-panel 26 was able to accept virtually all the inward cross-referrals and requests for joint assessment from a range of other sub-panels. 142 outputs were cross-referred outward for advice, which is slightly lower than the number in 2014. The tables below show cross-referrals into and out of Sub-panel 26, and also instances of joint assessment with other sub-panels (used to assess IDR work where discussions between sub-panellists were beneficial). (See paragraphs 48 – 49 of the Main Panel Working Methods which describe the two processes). Cross-referral requests by institutions were evaluated on a case-by-case basis, with the outcome determined according to available expertise. In some case, institutions had not requested cross-referral or joint assessment of outputs, but this was necessary as a result of the lack of relevant linguistic knowledge among sub-panel members or conflicts of interest. As the table below makes clear, Sub-panel 26 worked closely with Sub-panel 25 throughout the assessment phase.

Table 3: Cross-referrals and joint assessments into and out of Sub-panel 26

	Cross-referred out of SP26	Cross-referred into SP26	Joint Assessment requested by SP26	Joint Assessment requested by other sub-panel
Panels outside MPD	18	36	3	3
Panels within Main Panel D	110	72	11	12
<i>Sub-panel 25 (also included in line above)</i>	68	1	3	1

Interdisciplinary research

25. The membership of Sub-panel 26 was more interdisciplinary, and more multi-disciplinary, than in REF 2014, and thus fully equipped to undertake the assessment of interdisciplinary research (IDR). Accordingly, sub-panel members were entirely comfortable and confident in their ability to assess IDR work as submitted to the sub-panel. The sub-panel executive consulted with Main Panel D on issues relating to the assessment of interdisciplinary research outputs and material at the boundary of the UOA, and with the two sub-panel 26 members designated as IDR advisers. The latter in turn were able to report back on relevant discussions in the meetings of IDR members from across the sub-panels. This productive dialogue took place throughout the process – crucially and most significantly when undertaking the initial allocation of reading – to ensure parity of treatment of such material and to identify and benefit from specific interdisciplinary expertise within the sub-panel. It was noted that some IDR in Linguistics will have been submitted to other sub-panels, notably English, Area Studies, Psychology, Psychiatry and Neuroscience, and Computer Science and Informatics, with the latter also receiving a portion of IDR work in Modern Languages.
26. There was no discernible difference in scoring patterns between IDR research (whether flagged by institutions as interdisciplinary or unflagged) and other types of research. Overall, submitting institutions made very sparse and inconsistent use of the IDR flag.
27. Modern Languages, Linguistics and Celtic Studies are in many ways, intrinsically, interdisciplines: thematically, methodologically, conceptually and collaboratively. There was evidence of an increase in IDR in the present REF cycle. The sub-panel noted that overall IDR in Modern Languages and Linguistics is adventurous, and it is ambitious.
28. There has been a significant expansion of IDR in Modern Languages conducted within broader cultural studies paradigms, as well as a growth in work across music, popular culture, film studies, and performance studies. The sub-panel noted, as a newer trend, deep engagement with all forms of visual culture, and digital media and cultures. IDR in this area ranges thematically across a spectrum of fields, for example, architecture, dance, education, history, political sciences, urban spaces, worlds of work, migration, the law, particularly human rights, social class, gender, the body, health and well-being, community, cultural geographies, -- all in transnational, transcultural, transhistorical, and translinguistic contexts.

29. By its very nature, research in Linguistics is interdisciplinary, working in fusion with other disciplines across education, psychology, medicine and clinical sciences, pure and applied sciences, and social sciences, as well as humanities. Its reach is deep across all the domains covered by the four main REF panels, its activity vibrant, and its research of consistently high quality. IDR in Linguistics research is undertaken both by individuals and in collaboration with scholars in different disciplinary domains. In terms of new trends and developments for IDR in Linguistics, the sub-panel noted evidence of beneficial interactions with the latest quantitative methods developed by research in Mathematics and 'Big Data'. The connections with disciplines such as neurolinguistics, psychology and cognitive science, engineering and education, were also noted as an important development, widening the horizons of second-language acquisition research. Also evident in IDR outputs is some growth in co-authorship, as well as the promotion of researcher skills by learned societies, e.g., The British Academy, as well as the ESRC. The sub-panel also noted the increased use of Corpus and other Linguistics tools in other disciplines.
30. IDR in Modern Languages, Linguistics and Celtic Studies transcends disciplinary boundaries and demonstrates innovation in areas of critical thought, theory, and methodologies both qualitative and quantitative across a range of domains: e.g., from environmental humanities to neurosciences, from intermedial studies to Medical Humanities and Mathematics, from Philosophy and Human Geography to Earth Sciences and Social Sciences. While such 'long-distance' IDR was less prevalent overall there was strong evidence that it is on the increase. The sub-panel noted emerging trends in outputs which deployed sophisticated neuro-cognitive theoretical approaches, for example in Early Modern research, as well as research that interacted with Natural and Physical Sciences.
31. In addition to the outputs submitted, and as detailed in the relevant sections of this report, the vitality and the sustainability of IDR across the fields of the sub-panel were manifest in the environment and impact sections of submissions.

Discipline-specific comments

32. As in REF 2014, the sub-panel structure allowed members to identify a number of positive trends across the sub-fields represented. There is evidence, for instance, of strength in methodological and theoretical diversity in all disciplines, and this feeds in many cases into significant interdisciplinary and comparative work. All language areas continue to show excellent chronological coverage with respect to linguistic, literary and cultural studies.
33. Among submitted outputs, there is increasing evidence of comparative work spanning language areas. This was already marked in Linguistics in 2014, but a significant number of outputs in the areas of World Literature and transnational studies mean that there is now evidence of sharing of methodology and theoretical approaches between other sub-fields.
34. While the sub-panel structure has allowed better assessment of Modern Languages, Linguistics and Celtic Studies as a whole, it has also made sub-disciplines less visible, and it is more difficult to perceive trends within, for instance, individual language areas. However, the work of sub-panel 26 has identified some characteristics and developments within Modern Languages, Linguistics and Celtic studies, although these observations are accompanied by the caveats that research in these fields was submitted to a broader range of sub-panels and that the evidence on which they are based is inevitably highly selective.

Celtic Studies

35. Research in Celtic Studies submitted to the sub-panel presents a vibrant and innovative discipline covering an impressively diverse range of areas. The Celtic outputs in the submission covered the full chronological range, from the deep prehistory of the Celtic languages and their speakers to contemporary sociolinguistics discussing the future of the languages. There was a strong medieval input, but a significant proportion of modern studies as well. Alongside the full range of linguistic and literary approaches, in a strongly interdisciplinary field, Celtic contributions intersected with, and contributed to a broad range of areas including archaeology, history, human geography, ethnology, music, art history, translation studies, and creative writing. The bulk of the outputs were concerned with Welsh, Irish or Scottish Gaelic language, literature or culture; there was a (very) small amount of material relating to Breton and Manx.
36. The sub-panel welcomed the fact that there was evidence in the submissions of a significant proportion of academic writing in the modern Celtic languages, with a considerable number of outputs in Welsh, somewhat fewer in both Scottish Gaelic and Irish.
37. A notable aspect was the considerable number of book-length outputs submitted (in a field traditionally dominated by articles and book chapters), including scholarly editions, anthologies, grammar handbooks, novels, poetry collections, onomastic surveys, and historical, literary and sociolinguistic studies. Other outputs spanned most formats, including articles, chapters, reports and datasets. We note also the presence of digital resources of different kinds, as well as the presence of material published from the outset in open access format.
38. The bulk of the Celtic Studies outputs came from submissions which were composite with other sub-disciplines, usually Modern Languages and/or Linguistics, with fewer Celtic-only units than REF 2014. This of course reflects wider structures in the HEIs, but it does mean that it is difficult completely to assess the state of the disciplinary field. There were also, it should be noted, a number of Celtic outputs (e.g., in Linguistics) which derived from HEIs that do not have dedicated Celtic-related departments or sub-units. The field continues to make a dynamic contribution to the maintenance and development of cultural heritage and to developing the lives of minority language speakers, including new speakers.

Linguistics

39. Research in Linguistics submitted to the sub-panel presents a vibrant and vigorous discipline covering an impressively diverse range of areas in applied and theoretical linguistics and phonetics, and translation and interpreting studies. Evidence of world-leading research was found in all of areas of linguistics submitted, specifically in the following broad sub-fields: applied, practice-based and pedagogical research, Classical, Celtic, Germanic, Romance and Slavonic philology, clinical linguistics, cognitive linguistics, computational linguistics, conversation analysis, corpus linguistics, discourse, first and second language acquisition, forensic linguistics and phonetics, historical linguistics, history of linguistics, language documentation, language evolution, language engineering, language planning, language teaching and learning, assessment and testing, morphology, multilingualism, neurolinguistics, phonetics, phonology, pragmatics, psycholinguistics, semantics, sign language studies, sociolinguistics, stylistics, syntax, typological linguistics, translation and interpreting studies, and translation practice. In a number of cases – and as expected – outputs in Linguistics showed strong overlap with

Modern Languages, as well as with Area Studies, English, and Education, amongst others, and assessment drew on expertise within the sub-panel and the relevant REF panels.

40. Excellence was observed in linguistics research across a wide range of theoretical and applied approaches, from work in well-established theoretical paradigms using well-tested methodologies, to studies enabling new synergies between theory and application. Linguistics research used a wide range of existing and novel methods from the humanities, social, physical and natural sciences, with increased sophistication in statistical and computational techniques, as well as in qualitative, interpretative and critical approaches. Scaling up linguistics research through the analysis of substantial 'big data' studies was also evident, as was a clear commitment to Open Access in the increasing availability of supplementary materials (data, code) for linguistics publications.
41. The language base for submitted linguistics research was extremely broad, extending across and beyond the Sub-panel 26 remit, including: Austronesian languages, African languages, Arabic and Middle Eastern languages, Celtic languages, East Asian languages, French and Francophone, German, Dutch and Scandinavian, Greek, Hebrew, Italian, Iberian and Latin American languages, Russian, Slavonic, and East European languages, and Sign Languages. There was also a greater amount of research documenting smaller, under-represented, and endangered languages, and an increased amount of strong theoretical linguistic research underpinned by fieldwork on under-studied languages.
42. Linguistics research of the highest originality, significance and rigour was reported in outputs of differing types, from a relatively small number of websites, corpora, databases, descriptive grammars, translations, and editions, to the larger proportions of book chapters/books and journal articles. Excellence was also found in work produced by different configurations of authors, from individual scholars to collaborative, co-authored teams. The sub-panel noted that since REF 2014, there was an increasing trend for English to be the main medium of outputs submitted for linguistics, despite the quality of an output not being related to its language of publication. A more inclusive approach to the selection of outputs with respect to language medium is a point for future consideration.

Modern Languages

43. The vitality of Modern Languages was evident in the quality of outputs covering a geographically diverse range of fields, with work addressing the whole chronological span from pre-medieval to contemporary. Languages covered included those outlined in the UOA descriptor, namely Celtic, Germanic, Romance or Slavonic or other languages of Europe and Latin America, but extended also to encompass other areas including but not limited to Arabic, Chinese, Greek, Hebrew and Japanese. Research into languages, cultures and societies is conducted in a global frame, with work on national contexts increasingly complemented by attention to transnational processes and entanglements. Modern Languages functions as a strongly multi- and interdisciplinary field that actively embraces the full range of aspects of the UOA descriptor including history, politics, sociology, philosophy and linguistics as well as the study of cultural media and artefacts. Literary studies still constitute a significant number of outputs, with evidence of continuing research on canonical authors and on questions of genre. There is also continued evidence of a movement towards studying literature in broader perspectives, in relation to other disciplines and also including approaches that are comparative, intermedial and transhistorical.

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44. World-leading research was identified in all areas of Modern Languages, and the work submitted demonstrated continuing vitality and diversity in relation to a range of approaches and methodologies as well as across all periods. Alongside a commitment to contemporaneity in literary and cultural studies, we noted a commitment to chronological depth. For example, excellent, original work in medieval and early modern studies has set broader agendas beyond these specific periods that are transhistorical, interdisciplinary, and global. Nineteenth-century studies continues to be a major field of research. The sub-panel noted a particular concentration of work on the 20th and 21st centuries, with a significant number of outputs in the fields of gender and sexuality, and colonial and postcolonial literature. The sub-panel received outstanding outputs in a number of cross-cutting areas, including visual cultures, intellectual history, the history of emotions, and the history of the book. There was a notable number of studies of single authors, particularly published by non-UK presses. We were impressed by the variety of critical editions, digital outputs, creative writing and translations, and were pleased to see this work being supported and, in many cases, prioritized by submitting units. It was also notable that many double-weighted items (often single-authored major monographs, but also including other larger scale ambitious projects) were scored highly. This kind of sustained, high-quality research remains central to the sustainability and international influence of Modern Languages as a field. There was relatively little evidence of research co-produced with non-academic colleagues.
45. Innovative work was noted in international politics, cultural geography and history, and analysis of news media. Film and screen studies is also a field that continues to thrive. There is important work emerging also on digital media from cultures across a wide geographical and linguistic range. There was evidence of deep engagement, often from an intermedial perspective, with all forms of visual culture across all periods, with comics and the graphic novel coming increasingly to the fore in modern and/or contemporary contexts in the outputs assessed. There was evidence of increasing quantities of research into music, sound studies and performance studies across a range of periods and in a variety of cultural contexts. The sub-panel observed continued growth in memory studies, often within cultural studies paradigms, with some new work intersecting in creative ways with postcolonial studies. There was also significant work on the history of science and science/psychology and literature.
46. In terms of translation-as-research, the sub-panel noted the variety of languages and textual genres evident in the outputs that we received. It is clear that institutions are increasingly providing support for scholars working on translations and that this research activity is seen as being of equal value and quality. Some translations were tagged under the typology by which institutions identified outputs as 'books' and there were cases where translations also functioned as scholarly editions. These classifications made no material difference to the way outputs were assessed. The sub-panel noted that the strongest outputs in this category exhibited a deep insight into the source material, while drawing on and reflecting specialist knowledge of its historical, political, social and cultural contexts. Research was often, as a result, reflected in the critical apparatus associated with a translated text. Where research was inherent in the translation process itself, submissions did not always fully explain this research content in comments provided.
47. Modern Languages units have continued to work increasingly across language areas. Outputs submitted demonstrated the emergence of new ideas and approaches in world literatures and translation studies, as well as in intensified encounters between

disciplines. This was part of a growth of interest in non-hegemonic cultures, within and beyond Europe, incorporating an increased geographical and linguistic range and drawing out new and provocative intersections with traditional areas. Other growing fields included environmental humanities (including interdisciplinary work with, for instance, geology), and in relation to this also animal/post-human studies.

48. The sub-panel noted an intensification of non-applied theoretical work, particularly in early modern and medieval studies, but also across the broader range. There is increasing evidence, for instance, of engagement with fields such as the cognitive sciences, with some excellent examples of work that deployed sophisticated neuro-cognitive theoretical approaches. The sub-panel noted more broadly an increased awareness of the 'real world' consequences of research and far more direct connections between research and social and political engagement.

Impact

49. As in REF 2014, the impact of research in Modern Languages, Linguistics and Celtic Studies submitted to Sub-panel 26 provides compelling evidence of exceptional significance of work in these areas and of reach that is both broad and deep. In REF 2021, impact case studies demonstrated even greater diversity and creativity than had been the case in 2014. The sub-panel was highly impressed by the uniqueness of many of the case studies they assessed and often moved by their content. These demonstrated local, regional, national, international and often transnational reach, and also enhanced the lives of a broad range of beneficiaries.
50. The sub-panel noted in submissions a more professional approach to impact. A number of HEIs have learnt considerably from REF 2014, across all areas represented by the sub-panel. There was also evidence in environment templates that a number of academic researchers are devoting a significant time to impact activities. Impact seems to be much more directly and deeply embedded in academic work, on occasion even as academic work in its own right. It is also better supported and recognised by HEIs through, for example, strategies that recognise impact responsibilities, targeted leave for impact activities and enhanced administrative support.
51. Sub-panel 26 received a total of 161 impact case studies. The average number of impact case studies was 3.4 per submission. The table below shows the weighted impact sub-profile for Sub-panel 26:

Table 4: weighted impact sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
48.2	33.2	16.4	1.4	0.8

52. Sub-panel 26 included 7 user members with a wide range of experience and a rich variety of expertise in areas including broadcasting and the media, publishing, performing arts, language policy and planning, education policy and practice, and library and information science. One user member was jointly appointed to Sub-panels 25 and 26, further consolidating shared working practices at the intersection of the sub-panels' remits. User members attended all meetings where impact was discussed and contributed to all aspects of the impact assessment. The sub-panel at the criteria-setting phase also included a member with broad experience as a user of research. The expert advice provided by user members allowed invaluable input to the effective assessment of impact and to its broader understanding by the sub-panel. User members were fully integrated into the sub-panel's working methods, with their experience and expertise from beyond academia complementing the academic profile of other members. This permitted highly productive dialogue and debate around the assessment of impact.

Procedure for assessing impact (including Covid-19)

53. The sub-panel, informed by calibration undertaken at Main Panel D level, carried out its own calibration exercises for panellists and the appointed research user members. Additional oversight of this process was provided by a user and an international assessor from Main Panel D and by a series of cross-sub-panel moderations. During the impact assessment phase, the sub-panel took advice from the expert research users. Impact case studies were assessed by clusters of sub-panel members and one research user. The user members confirmed the fairness and robustness of the overall process.
54. Robust assessment of impact was enabled by the robust calibration exercises described above and the application of comprehensive published criteria. The appendix in the Panel criteria and working methods detailing various types of impact was also useful for assessors seeking to treat all types of impact equally.
55. As in assessing other aspects of submissions, the sub-panel actively implemented its Intention Plan in the assessment of impact, and considered this approach to this area to reflect best practice in sectors outside academia.
56. Given the range of fields of research encompassed by the UOA descriptor for Sub-panel 26, the assessment of impact was fully informed by the different approaches and expectations evident across disciplinary fields. Excellence in terms of reach or significance was defined and contextualized where appropriate according to the norms of individual fields and areas.
57. In several instances, the COVID-19 pandemic impeded the ability to generate impact, with the postponement or cancellation of performances, activities and other events. The sub-panel took careful consideration of the submitted COVID statements in the assessment of the impact case studies, noting what had been achieved rather than penalising perceived absences of activity. Several impact case studies already provided evidence of innovative responses to mitigate the situation created by the pandemic.

Types of impact submitted, including evidence of emerging areas

58. Types of impact assessed by the sub-panel demonstrated a diverse range of effects on, changes or benefits to the economy, society, culture, public policy or services, health, the environment or quality of life. Impact case studies provided evidence of the ways in which the user experience has improved in a variety of sectors, including enhanced involvement in shaping and implementing policy and practice. Research has significantly influenced CPD and training standards, and has in a number of cases shaped relevant legislation, policy or practice. The sub-panel noted evidence of improved provision or access to services. In the area of creativity, culture and society, for example, collaboration with professionals has resulted in enhancements to (cultural) heritage preservation and interpretation, including museum and gallery exhibitions. Some case studies show the contribution of research to the co-production of new cultural artefacts, including games, software development, and TV programmes. Research in the areas represented by the sub-panel has generated new ways of thinking that influence creative practice, its artistic quality or its audience reach; it has inspired and supported new forms of artistic, literary, linguistic, social, and other expression. Collaboration with public arts venues, artists and programming professionals has produced new forms of artistic expression. The sub-panel also noted that research-led engagement with marginalized, under-engaged and/or diverse audiences has led to increased cultural participation, resulting in the broader enhancement of quality of life. Researchers have contributed to processes of commemoration, memorialization and reconciliation in national and international contexts.
59. Impact case studies demonstrated various influential contributions to campaigns for social, economic, political and/or legal change through engagement with local communities, minority populations and civil society groups. There is also clear evidence of a contribution to innovation and entrepreneurial activity through the design and delivery of new products or services, with some case studies increasing economic prosperity via the creative sector including publishing, music, theatre, museums and galleries, film and television, and computer games. Public or political debate has been shaped or informed by research associated with the sub-panel, and policy decisions or changes to legislation, regulations or guidelines have been informed by research evidence. In some cases, professional standards, methods, guidelines or training have been influenced by research. Educational or pedagogical practices and methods have changed across sectors and there has been broad enhancement of cultural understanding of issues and phenomena, shaping or informing public attitudes and values. In general, research associated with the sub-panel has challenged conventional wisdom, stimulating debate among stakeholders.
60. In terms of areas of impact, these included: the health and well-being of people; creativity, culture and society; social welfare; commerce and the economy; public policy, law and services; practitioners and delivery of professional services, enhanced performance or ethical practice; the environment; and understanding, learning and participation. There was a preponderance of impact case studies in the areas of culture and society, creativity, education, policy, and public understanding. The sub-panel was impressed by the range and diversity of impact presented and found evidence of excellence in all of the areas submitted. It welcomed also the broad range of beneficiaries in evidence across case studies assessed, highlighting the reach and significance of research within the UOA descriptor.
61. The cluster of impact case studies in the area of health and well-being demonstrated impact in clinical settings, for example in the fields of mental health, health education, and speech and language therapy as well as a range of other areas. There were a

number of impact case studies that involved technology, supporting the development of software for dictionaries and language teaching, and hardware for clinical use. Heritage also remains a sector in which Sub-panel 26 continues to detect outstanding impact, with numerous cases linking to clear economic benefits. We also saw innovation in the areas of social justice, language and communication, collaboration with industry and creative sectors (such as digital, legal and translation-related). There was a relative paucity of impact case studies in higher education returned to the sub-panel, even though the guidance made their eligibility clear.

62. The sub-panel noted emerging evidence of co-creation and a commitment to equality, diversity and inclusion. We expect that these aspects will be further developed in any subsequent exercise. The sub-panel observed that a few case studies chose to refer actively to the impact strategy of partner organisations themselves and that there is clear potential to strengthen impact if case studies engage clearly with partner organisations' own priorities in this area.
63. A number of impact case studies related to public engagement, either as the main impact described or as one facet of a wider range of impacts. The sub-panel noted that there were examples of outstanding impact in this domain. The strongest case studies based on public engagement demonstrated both reach and significance, and the sub-panel took both into account when assessing the impacts.

Diverse pathways to impact

64. It was pleasing to see strong impact case studies not just on a national and international level, but also on a local and regional level; indeed, case studies ranged from the local to the global (with the local often situated in countries beyond the UK), and evidence of excellence was found at every level. In many cases, more local impact allowed intensive engagement with stakeholders, and there was compelling evidence of active engagement with difficult-to-reach communities. There was particularly strong impact in the areas of language policy across multiple sectors and also in relation to lesser taught and researched languages, with clear evidence, for example, of contributions to the revitalization of endangered and minoritized languages.
65. Data demonstrated that every size of unit could show high quality outcomes and in particular some smaller units provided compelling evidence of outstanding impact. Some impact with considerable reach and significance emerged from projects with major external funding, while other outstanding impact emerged from QR-funded research.
66. The sub-panel noted that the relationship between research and impact can be indirect or non-linear. Impact can emerge as an end product, but can also be demonstrated during the research process. It may be foreseen or unforeseen. All types of impact are equally valuable, and evidence of outstanding reach and significance was found across these categories.
67. The sub-panel was concerned about the number of case studies required for smaller units, namely two case studies for all submissions up to 19.99 FTEs, with the concomitant risk of the over-proportionate weighting of single impact case studies in smaller units. In some cases, these requirements placed a particular burden on individuals or small submitting units, although outstanding and very considerable impacts were found in case studies submitted by small, as well as large, units and by individuals as well as teams.

Feedback on the quality of submissions

68. The sub-panel was impressed by those submissions where the institution had carefully developed and delivered strategies that helped units to achieve outstanding impact. The focus of the sub-panel was on what impact case studies achieved and not how professionally they were written. The strongest case studies did not overclaim impact, nor make bold, sweeping statements, but often were more modest in the language they used. They tended to contextualise claims, to make it easier for the reader to evaluate the impact outlined, in particular with quantitative data. The best case studies provided clear evidence of and familiarity with the underpinning research and the impact to which it led. They provided a coherent narrative arc that integrated stages and components of the impact and linked to the underpinning research, used precise language relating to reach and significance, and took care to identify their audiences/beneficiaries.
69. Impact case studies are stronger when there is a compelling sense of the beneficiaries of the impact, with clear details and evidence provided of the transformations claimed. Such impact case studies reflected an attention to the careful measurement of impact in the early stages of project development, and privileged transformation achieved over potential impact.
70. Also, in these stronger cases, partnerships were often key as these can lead to the development and delivery of research and impact in collaboration with users and beneficiaries. Evidence of sustained, deep engagement in the context of carefully nurtured longer-term partnerships often went hand in hand with stronger impact case studies. Some of these evidenced co-created research and non-linear ways of thinking about collaboration and underpinning research, with attention paid to the ethical dimensions of such ways of working. The sub-panel also noted the importance of impact case studies with hard-to-access beneficiaries, evidence that reach is not only quantitative but also qualitative.
71. The sub-panel welcomed a range of types of evidence, both qualitative and quantitative, and understood each form of data in its own terms rather than hierarchically. We noted, however, that impact case studies containing quantitative data need to provide clear context so that relative reach and significance can be assessed. On occasion, this type of evidence was presented without any benchmarking or comparative data, which made it more difficult to evaluate reach and significance. There was also some concern within the sub-panel that quotations from testimonials alone did not always provide the robust evidence required to assess the impact claimed. The strongest evidence from testimonials focused on what participants learned or how their understanding was transformed, not just on broadly positive aspects of their experience.
72. In weaker case studies, the explicit link between impact and the underpinning research was at times more tenuous. In some cases, the accumulation of diverse aspects of impact, without a coherent narrative, was detrimental to the overall assessment, but in others it was possible for those who developed impact case studies to link different aspects together in a coherent, portfolio approach. Some impact case studies were too broad, making it difficult to evidence reach and significance. Generalisations, or lack of specificity, for example when describing engagement with organisations or impacts, also made it difficult for the sub-panel to have confidence in the validity of the claims.
73. The impact case studies assessed by the sub-panel revealed the centrality of Modern Languages, Linguistics and Celtic Studies research to addressing a remarkable variety of contemporary social challenges and areas of urgent public concern. It is clear that work in these areas is making an outstanding difference in a broad range of contexts.

Environment

Table 5: weighted environment sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
46.9	42.2	10.5	0.4	0

This table shows the average environment sub-profile, weighted by FTE, for Sub-panel 26

74. The submissions to Sub-panel 26 provided clear evidence of research environments in Modern Languages, Linguistics and Celtic Studies that display high levels of both vitality and sustainability. Excellent research environments were evident in submissions from units of a range of different shapes and sizes, and there was no straightforward correlation between a unit's scale or staff profile and quality judgments about its research environment. In making assessments, the standard data analyses provided for the environment helped inform, but did not determine, the sub-panel's assessment of a submission's environment.
75. The sub-panel ensured that external knowledge about HEIs, including in relation to developments at HEIs following the census date, did not impact on assessment of material provided in the environment template. A rigorous calibration exercise within the sub-panel, informed by a broader main panel process, allowed members to challenge each other's preconceptions about research environments. The sub-panel's Fairness in REF Intention Plan also reminded members to avoid being influenced by contextual understanding that might be partial or anecdotal.
76. All institutions took the opportunity to include an annex explaining how the HEI's strategy had been affected by COVID-19. The sub-panel found many of these helpful, particularly when HEIs described measures adopted to mitigate the impact of the pandemic on research and impact activities and to protect their staff. It was also helpful for the sub-panel to consider where appropriate the institutional statement (REF5a) beside the unit statement (REF5b) as in the strongest cases it often allowed members to gain a more informed understanding of the wider research environments within which units including Modern Languages, Linguistics and Celtic Studies were situated. In its assessment, the sub-panel focussed primarily on the evidence provided through REF5b but drew on detail from REF5a where appropriate, for instance where cross-referral was explicitly invited in the REF5b text, without actually scoring REF5a templates. In a small number of cases the institutional statement provided informative context that had been omitted from REF5b. Institutions need, however, to capture in REF5a the full range of their disciplines as often only STEM subjects were foregrounded. The sub-panel noted that Modern Languages, Linguistics and Celtic Studies were rarely mentioned in REF5a and that this was the case regarding the research environment in arts and humanities subjects more generally. Internationalization of research and impact was also rarely mentioned in REF5a statements although this is an area in which the disciplines represented by the sub-panel make a significant and often unique contribution.

i. Unit context and structure, research and impact strategy

77. Modern Languages, Linguistics and Celtic Studies continue to be disciplinary fields characterized by high levels of vitality and sustainability, with the majority of those who contribute to them working in environments that support world-leading or internationally excellent research and outstanding or very considerable impact. Many

units submitted have faced challenges in the REF period but continue to thrive as a result of a commitment to their subject areas, an openness to innovation and a willingness to embrace new opportunities, including in relation to interdisciplinarity. Excellence was discovered in units of very different sizes and types and in all parts of the UK. There was clear evidence of strong strategic thinking and forward planning in the discipline. A strong sense of unit identity came across in the best examples of Section 1 of the template.

78. Not all institutions were successful in presenting a coherent strategy for the unit's vitality and sustainability. In some cases, this section contained unsubstantiated positive assertions and failed to assess the efficacy of plans submitted to REF 2014. On occasion, strategic elements were also lost in the descriptive detail provided. In other cases, a clearer articulation of how structure has supported strategy was needed. Several recently restructured units were good at describing strategy, although in others a statement of restructuring replaced a clear statement of future plans. That said, the sub-panel appreciated when a unit was able to acknowledge difficulties in the REF period and then show how strategic decisions and leadership had responded to these. In the stronger templates, this also provided a good opportunity to show how units had concretely put EDI principles into practice. The sub-panel acknowledges that uncertainty about disciplinary or unit future can be a factor here but noted that it was helpful to anticipate strategy post-REF 2021, however challenging this might be.
79. REF 2021 suggests that there was a much more diverse array of impact submitted than in 2014. A well-developed impact strategy often meant a more targeted approach to work in this area and this led regularly to positive results. It also recognised the role of the individual and not only research groups in leading impact and public engagement. Although some units conflated impact with knowledge exchange, public engagement and outreach, the sub-panel noted that well-integrated impact strategies found ways to pay serious attention to knowledge exchange.
80. Modern Languages, Linguistics and Celtic Studies are inherently interdisciplinary fields; consequently, evidence of IDR was seen in this section across most statements. The sub-panel noted that there are several ways of understanding IDR in the areas it assessed (e.g., as inherent to specific fields but as evidence also of working across fields represented by the sub-panel and beyond). Both types were equally valued in the assessment of strategies. It was noted that institutional structures can enable all kinds of IDR, but the invitation to draw these connections was not always taken up. The strongest statements moved beyond the fact that IDR was taking place to integrate it where appropriate into an IDR strategy.
81. There is growing evidence of pioneering activity in Modern Languages, Linguistics and Celtic Studies around Open Access, but in some templates, this element was ignored or neglected. The sub-panel noted some very generic statements in this area although some drew also on the institution-level statement to understand the broader context. The same was true of research integrity, which the sub-panel expected to see as an element of section 1 but which often did not feature there.

ii. People

82. Some of the most successful environment statements that the sub-panel assessed provided clear evidence of active and cohesive communities of researchers including those at all levels of the academic life cycle, from PGRs to senior colleagues. In these cases, units often benefited from support systems for fostering research excellence,

for instance through research-leave policies, provision of funds for piloting research projects or impact activities, and robust support systems at local or institutional level. The sub-panel noted the importance of mentoring for all staff across the academic life cycle, though some institutions provided little evidence of such support being available for those who were no longer ECRs.

83. The data shows excellent growth in research degrees awarded over the period across submissions to the sub-panel (an increase of 119.50 FTE between 2013/14 and 2018/19, which equates to an overall increase of 32.76%). While nearly all areas of Main Panel D show an increase in PGR awards over this period, Sub-panel 26 shows the highest level of growth. Excellent PGR training and support reflected, in the strongest statements, the commitment of the unit to building broader disciplinary communities. The sub-panel observed, however, that some submissions paid little attention to support provided to PGRs in terms of skills development and preparation for their future career beyond the academic profession.
84. The strongest templates provided clear evidence of the integration of equality, diversity, and inclusion in all aspects of the research environment. Many institutions provided evidence of excellent support systems in place for ECRs and for staff who had taken career breaks or were working part time. The sub-panel noted a marked improvement in the development of policies relating to active support of EDI. Several environment statements failed, however, to look beyond issues of gender to address other protected characteristics and the intersections between them. The strongest statements provided precise detail on their approach to EDI and often adduced hard data regarding aspects such as sabbatical leaves granted, internal support funding, time allocation for grant writing, and promotion patterns. Not all institutions responded to the request for information on how EDI had been factored in when it came to the HEI's selection processes for outputs and impact work for REF 2021.

iii. Income, infrastructure and facilities

85. The fields covered by the sub-panel attract research income from both UKRI and a diverse range of other sources and there was also evidence in many cases of strong institutional support to enable grant capture. Overall, the fields covered by the sub-panel have captured impressive and rising income relative to REF 2014 (see comparative Main Panel D figures above) and have responded positively to the steer from UKRI and other funders to develop collaborative forms of research within and across HEIs as well as with a range of external partners. While it is challenging to quantify the increase in funding with precision given the different lengths of the REF cycles, the sub-panel noted that the annual average income per FTE for this REF period for the UOA as a whole (£24,729) compared favourably to the annual average income for the UOA as a whole for REF 2014 (£20,620), albeit these figures are not inflation adjusted. The disciplinary communities represented by the sub-panel have also actively embraced opportunities such as the GCRF.
86. The strongest submissions made a clear link between income and the excellent research and other outcomes achieved (collaborations, impact, other types of outputs). The sub-panel observed that comparatively modest amounts of resources can have a significant impact on the quality of research and many **submissions** included evidence of successful and creative use of income generated from multiple sources. These included international funders, not recognised by HESA, a feature that was particularly marked among submissions to Sub-panel 26. In some cases, non-HESA funding played an important role in supporting the vitality and sustainability of the research environment.

Stronger submissions also provided clear evidence of sources of internal income, including for the support of research centres, impact incentivization, research support for each member of staff, and start-up support for ECRs. The sub-panel considered closely how such funding had been deployed strategically to support vitality and sustainability.

87. As in REF 2014, there was no consistent correlation between the size of the submitted unit and the amount of research income per FTE. For the current REF cycle, in some institutions, the research income fluctuated greatly due to a small number of large grants and/or FEC and non-FEC income, whereas in others, the amount remained quite steady over the period. Fluctuation has a bigger effect on small submissions and size of unit was also a consideration in assessing these aspects of the environment.
88. Data relating to income formed part of the sub-panel's evaluation but was not the sole driver and was used in a granular way. The sub-panel struck a balance as a result between not relying solely on metrics and benchmarks, but referring to them, in line with the guidance and the evidence presented in the template, when appropriate. It was noted that income informs a bigger picture and that what matters is having a strategic approach to its generation, including embedding this activity across all levels of staff. The sub-panel took account of the future potential for research income to the extent that it informed sustainability and reviewed the role of EDI considerations in income generation and the strategy supporting this.
89. The strongest submissions made a clear link between infrastructure and research and impact. Some institutions had seen substantial investment in infrastructure such as new buildings and IT provision. Submissions suggested that a number of research groups make full use of specialist archives and laboratories housed by their institution. Other submissions focused less on these elements and noted relatively little evidence of substantial investment in infrastructure such as libraries.

iv. Collaboration and contribution to the research base, economy and society

90. The vitality of the fields represented by the sub-panel is evidenced by the substantial contribution colleagues make to their respective disciplinary fields, nationally and internationally. Colleagues continue to play instrumental roles in national and international subject associations, participate in international research networks, organise major international conferences, edit leading journals, and are invited to assess the work of colleagues by funding bodies and institutions across the globe. The sub-panel observed across all submissions evidence of a very broad range of activity revealing a collective commitment to the disciplines and to opportunities for interdisciplinarity between and beyond them.
91. The sub-panel was impressed by the broad range of collaborations that units and individuals have fostered with commercial, creative, cultural, governmental and third sector organisations. New developments in partnerships also included a growing involvement in the areas of advocacy and activism, and often provided compelling evidence of engagement with local communities. This broad range of activity reflects essential contributions to the research base locally, nationally, and internationally. The sub-panel noted engagement in less commonly researched areas, which contribute to the diversity, innovation and often interdisciplinary engagement of the fields it represents. Such work also supported the preservation and continued developments of areas of specialism often crucial to national need, especially in relation to expertise in a broad range of languages as well as across a variety of methods. Subject fields represented by the sub-panel are inherently international and given the focus on

languages which are historically not spoken or used natively in the UK, this activity is crucial in raising the profile of UK expertise for those wider audiences. At the same time, the work on less commonly taught or researched languages and language varieties, including endangered languages, was judged to be hugely valuable and in some cases unique. The sub-panel also noted compelling evidence of support for research on native and minority languages in the UK, including BSL. We observed across the submissions, through focus on a diverse range of languages and linguistic areas, invaluable contributions to the understanding of human culture and human cognition, globally and in under-represented communities. This included provision of solutions to scientific validation and reverification through inclusion of human language in all its varieties.

92. The strongest submissions provided a coherent narrative that linked activity and achievements to strategic aims. The advice to create a narrative in this section was generally well implemented. This was helpful in giving a picture of the unit's contribution and especially of its broader strategic dimensions. The sub-panel noted increasing evidence of co-produced research and impact across Modern Languages, Linguistics and Celtic Studies. Stronger submissions were also able to demonstrate how collaborations, particularly those with international dimensions, went beyond 'networking' to co-produce research and impact outcomes.
93. The strongest submissions included details of partnerships and contributions to the discipline distributed across a range of researchers, from ECRs to senior staff, and demonstrated a broadly distributed contribution to the discipline. The success of mentoring strategies for ECRs was often evident in this section.
94. The sub-panel noted that contributions to editorship and leadership in learned societies are significant given the diversity of the disciplinary fields represented by the sub-panel. Members noted considerable time investment in such activities, which are often not directly rewarded or acknowledged in workload models but contribute significantly to the sustainability of the discipline.
95. The strongest submissions provided the sub-panel with clear evidence of citizenship and leadership, including work with non-HEI audiences, users of research and other beneficiaries. This section also provided an opportunity to detail activity such as KE or writing for broader audiences that might not be reflected in outputs or impact case studies.
96. Researchers submitted to the sub-panel in the areas of Modern Languages, Linguistics and Celtic Studies have used their specific skills and research interests across the REF period to place their various disciplines and institutions at the forefront of global excellence in research. They are also clearly invested personally in a wide variety of innovative or often non-academic activities, suggesting many submissions rest on a healthy pool of individuals who are inspirational, committed members of their respective research communities.



Sub-panel 27: English Language and Literature

1. All sub-panel members discussed and collectively agreed this report, and it should be read alongside the Main Panel D (MPD) overview report which contains a description of main and sub-panel working methods and discusses matters of common interest.

Summary of submissions

2. There were 92 submissions made to UOA27 (English Language and Literature). This is a small increase on REF 2014, when 89 submissions were made to UOA29 (English Language and Literature). Of these 92 submissions, 77 were in England (74 in 2014), two in Northern Ireland (two in 2014), eight in Scotland (eight in 2014) and five in Wales (five in 2014).

Table 1: Summary of Submissions

	Number of submissions	Cat A FTE staff	Head-count staff	Early Career Researchers	Research Outputs	Double-weighting requests	Impact case studies	Staff FTE per Impact Case Study
REF 2021	92	2,671.31	2,903	6,519	1,572	2.44	279	9.57
REF 2014	89	1,971.00	2,155	6,933	506	3.52	283	7.00
% Difference	3.4%	35.5%	34.7%	-5.97%	210.7%	-30.0	-1.4%	36.7%

3. The number of researchers submitted to this UOA shows an increase of 34.7%. 2,903 researchers were returned, including 367 (12.63%) who met the definition of Early Career Researcher (ECR) through the 2019-20 HESA staff record. (In 2014 2,155 researchers were submitted, of which 466 (21.6%) were ECRs). Changes to how information about ECR status was collected mean that no conclusions can be drawn from the reduction in the number of ECRs recorded as submitted in REF 2021 as compared to REF 2014.
4. The total HESA-recorded income for 2013-2020 submitted in this UOA was £135,692,613 (almost double the £68,163,095 submitted in 2014). Given that the census period was seven years for REF 2021 and only five years for REF 2014, an increase in income is to be expected in the overall figure, however the average annual income in REF 2021 of £19,384,659 nevertheless represents a 27.2% increase on the average annual income for REF 2014 (£14,121,600), noting that figures have not been inflation-adjusted.
5. The total number of doctoral degrees awarded within this assessment period was 4,549.14 (2,660 in 2014) giving an average number of students completing per submitted staff FTE as 1.57 (1.35 in 2014). The average annual number of doctoral degrees awarded has increased to 650 in REF 2021 from 532 in REF 2014.

Working Methods

6. The sub-panel was aided in its deliberations by six specialist impact assessors, two output assessors, and two specialist assessors, and crucially supported by one sub-panel secretary and one sub-panel adviser.
7. The sub-panel confirms that the approach and methods set out in the published criteria were scrupulously followed in every aspect of the assessment process.
8. In establishing its working methods, the sub-panel adhered to the assessment principles and framework adopted across Main Panel D (see paragraphs 23 – 34 in the Main Panel section of this report) and participated in two calibration exercises: the first conducted within the sub-panel; the second across the main panel (see paragraphs 40 – 47 in the main panel report). This was followed by extensive moderation of emerging scores and profiles, both within the sub-panel, aided by specialist impact and output assessors, and with the advice of international and interdisciplinary research advisers from Main Panel D. Due regard was paid to conflicts of interest throughout.
9. All judgements were informed by use of an agreed Fairness in REF Intention Plan, developed to reduce the chances of prior assumptions or unconscious biases informing judgements, which was reviewed at the start of every meeting.
10. The table below shows the average profiles, weighted by FTE, for each element of the assessment for UOA 27.

Table 2: UOA average profiles

	% 4*	% 3*	% 2*	% 1*	% Unclassified
Overall	48	39	12	1	0.0
Output	45.9	39.6	14.0	0.5	0.0
Impact	48.9	38.3	11.9	0.9	0.0
Environment	53.2	37.7	8.6	0.5	0.0

11. The sub-panel noted and welcomed the evidence presented of the strength and diversity of English Studies across the UK, and of the major, often transformational contributions that units of all types and sizes are making to knowledge, culture, well-being, and economic prosperity locally, regionally, nationally, and internationally through their research and its impacts. The achievement is the more impressive given the challenges faced by some submitting units. The robust health of the discipline collectively during the review period is evidenced through increased levels of external research funding, rising postgraduate recruitment, and the increased proportions of world-leading and internationally excellent outputs and outstanding impact case studies submitted for assessment.

Outputs

12. The table below shows the average output sub-profile, weighted by FTE, for UOA 27.

Table 3: UOA average outputs sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
45.9	39.6	14.0	0.5	0.0

13. The total number of outputs assessed by the sub-panel was 6,519. This compares with a total of 6,933 outputs in REF 2014. These figures reflect the procedural changes between REF 2014 (where 4 outputs were standardly required per submitted FTE) and REF 2021 (where the requirement was for 2.5 outputs per submitted FTE).
14. The sub-panel assessed the quality of outputs irrespective of the form, mode, or place of publication or dissemination, and adhered to the working methods described in the published documentation (see paragraph 23 in the Main Panel section of this report). Journal ranking, citation indices, and the perceived reputations of publishers played no part in the sub-panel's assessment of submitted materials.
15. Overall, the sub-panel was greatly impressed by the diversity and quality of the outputs submitted for assessment. The vast majority of the work submitted is of world leading or internationally excellent quality. In terms of originality, rigour, and significance, the range, diversity, and quality of these outputs speak highly of the health and wealth of the research undertaken within the discipline.

Disciplinary developments

16. Research in English literature submitted to REF 2021 is extremely diverse in terms of focus and methodology, to the point where no single approach or paradigm is currently dominant. Work graded at the highest levels is also produced by both single authors and pairs or by groups of authors working together.

Interdisciplinary research and disciplinary trends

17. Much of the research evidenced is intensely interdisciplinary in nature, often strikingly so (although the IDR flag was often used sparingly or inconsistently by submitting units). Such work forges collaborations and shares methodologies and/or insights with disciplines from across the spectrum of REF Main Panels, from the natural sciences and computer science to business and management studies. Notable areas of growth and strength since REF 2014 are to be found in work along the literary-historical borders that investigate regional, national, and global histories, cultures, and identities; work on the interfaces between words and music; between literature, art, visual culture, design, film, and media studies; literature, politics, and law; linguistics and healthcare; linguistics and computing; and in ecocritically-engaged work that combines the insights of literary, linguistic, and creative research with biological and environmental studies, geography, archaeology, and anthropology. Other inherently inter- and multidisciplinary fields represented in the submission combine literary studies approaches with foci on migration, minority cultures, and histories; engage with questions of narrative and/or memory; with disability studies, medical and health humanities; or explore

in interdisciplinary ways cultural understandings of place and heritage. Linguistics researchers are also working productively with collaborators and partners in education, psychology, and computer science, and their methodologies are being fruitfully applied to fields including law, medicine, literary studies, and environmental studies.

18. In terms of longstanding areas of disciplinary strength, the sub-panel notes and welcomes the continuing excellence of research across all periods of literary history and the history of the language from the early medieval (including Old English, Old Norse, and related languages) to the very contemporary. Some units choose to focus their research on selected periods, while others include researchers working across a wide chronological and methodological range. Both approaches are producing work of the highest quality. Textual editing and the production of ground-breaking scholarly editions also remain a notable strength of many individual submissions, and of the return as a whole.
19. Other areas of continuing or emerging excellence include work in the digital humanities, literary biography, and life writing more broadly; in the study of Anglophone literature in English, Irish, Scottish, Welsh, and in global contexts (including American, European, and postcolonial literatures and cultural histories); textual criticism; archival and manuscript studies; histories of the book, of reading and of rhetoric; the sociology of texts, multilingual research and translation studies; women's writing, gender and sexuality studies; critical race studies; and the study of literature and culture within the framework of the history of ideas.
20. The sub-panel welcomed the variety and volume of creative writing and creative practice submitted from institutions of differing size and character. The best of this work is outstanding in terms of its originality, rigour, and significance, extending the traditional boundaries of research in the discipline of English in absorbing and often exhilarating ways. A further notable feature of REF 2021 is the increased volume, range, and richness of work submitted that combines the insights and methods of both critical and creative research (e.g. creative non-fiction or critical-creative work), and work aimed at wider readerships and audiences which nonetheless embodies excellent original research. A significant proportion of all of these forms of research submitted for assessment was judged to be of world-leading quality.
21. In English language, the sub-panel was impressed by the quality of research across the range of HEIs. The submitted outputs cover a very wide range of specialities in theoretical and applied linguistics. Work in formal linguistics includes phonology, morpho-syntax, and semantics. There are also strengths in many areas of pragmatics, sociolinguistics (including language variation, language and gender, and language and identities), discourse analysis, historical linguistics, and cognitive linguistics. Areas of applied linguistics include forensic linguistics, stylistics, translation and interpretation, and language teaching, learning, testing and assessment. The research draws on contemporary and historical materials and exploits a range of innovative approaches to the creation of new datasets and linguistic resources. The rigour demonstrated is of diverse kinds, including argumentation, experiment design, sophistication of quantitative techniques, detail of qualitative description, and triangulation via the combination of different methods. Notable developments include the continuing increase in the use of corpus-based methods and the adoption of a variety of psycholinguistic experimental approaches, often as part of a broad palette of methodologies; another is the predominance of collaborative work, often in multi-disciplinary teams.

22. The sub-panel welcomed the submission of non-standard outputs in the fields of English Literature, Language, and Linguistics, such as databases and websites, and appreciated the presentation of linguistics research in particular in a variety of forms in cases where these forms demonstrate originality, rigour, and significance.

Output Types assessed

Table 4: Output types assessed by the sub-panel

	% of outputs assessed
A - Authored book	40.59%
B - Edited book	8.13%
C - Chapter in book	15.99%
D - Journal article	29.94%
E - Conference contribution	0.08%
H - Website content	0.36%
I - Performance	0.73%
J - Composition	0.02%
N - Research report for external body	0.04%
Q - Digital or visual media	0.16%
R - Scholarly edition	2.32%
S - Research data sets and databases	0.04%
T - Other	1.31%
U - Working paper	0.10%
V - Translation	0.18%

23. Research of world-leading and internationally excellent quality is found across all output types, both longer and shorter form, although longer-form outputs (monographs, scholarly editions, novels, collections of verse and shorter fiction, plays, performances, edited books, and web resources) that allow research contributions to be rigorously pursued and their significance to be amply demonstrated are proportionally among the strongest work submitted.
24. It was standard practice for each output to be allocated to panellists, with due regard to their areas of academic expertise, avoiding conflicts of interest, and in line with main panel working methods outlined in paragraphs 28 - 30 of the main panel report.
25. Authored books (including creative and creative-critical writing), scholarly editions (sometimes identified by institutions within the category of authored books) and edited collections together formed 50.17 per cent of the outputs assessed (and a still higher percentage when taking account of requests for double-weighting). Substantial outputs of this kind are of central importance to the dissemination of high-quality research in English, and the sub-panel welcomed the range, ambition, and achievement of the

outputs it received within these categories. Also of central importance, and often of world-leading quality, are shorter outputs, in the form (for instance) of journal articles (which comprised 29.94 per cent of outputs), or essays in edited collections (21.43 per cent of outputs). Journal articles are particularly important in the dissemination of research in Linguistics.

26. Units did not always signal overlap between work submitted (as where a monograph or creative work contained material also published in a related article, book, or book chapter also submitted to REF 2021). Where such overlap was observed, the sub-panel sought to respond to it in the least damaging way for the submission as a whole, with material in common taken account of only once.

Double-weighting

Table 5: Double-weighting requests

Total number of outputs submitted	Outputs with request for double-weighting	Outputs with approved double-weighting requests
6,503	1,572 (24.2% of outputs)	1,559 (99.2% of requests)

27. Institutions were permitted to request double-weighting for outputs that fulfilled the relevant criteria, submitting a 'reserve' output in case the claim for double-weighting was not accepted. This option was used over three times more frequently in REF 2021 than in REF 2014, often very effectively, and the sub-panel judged almost all of the submitted requests for double-weighting to be justified. In a number of cases, however, double-weighting was not requested for outputs where this would clearly have been appropriate. In some cases, the option was used either inconsistently or very sparingly, and this had an appreciable effect on the outputs sub-profile of the units concerned.
28. Research outputs where double-weighting was requested and approved were in general, though not always, judged to be of high quality. This was the case across the range of different types of outputs for which double-weighting was requested (e.g. scholarly editions, monographs, creative writing, or critical-creative outputs).

Cross-referrals and joint assessment

29. The sub-panel received 97 cross-referred outputs, the majority of these coming from sub-panels within Main Panel D. The sub-panel requested advice on 74 outputs, and almost all of these were also cross-referred within Main Panel D. The table below details the cross-referrals into and out of Sub-panel 27.

Table 6: Cross-referrals (page 92).

Table 6: Cross-referrals

Cross-referrals out to other sub-panels			Cross-referrals in from other sub-panels		
Within MPD	Outside MPD	Total out	From within MPD	From outside MPD	Total in
72	2	74	79	18	97

30. The sub-panel undertook joint assessment of 25 outputs, predominantly with sub-panels within Main Panel D. The table below summarises the outputs jointly assessed by Sub-panel 27 with sub-panels within Main Panel D, and between Sub-panel 27 and sub-panels in the other three main panels.

Table 7: Joint assessment

Outputs jointly assessed with other sub-panels		
Within MPD	Outside MPD	Total
24	1	25

31. The sub-panel gave advice on 122 outputs submitted to other sub-panels. These included outputs cross-referred from, or jointly assessed with, Sub-panels 26 (Modern Languages and Linguistics), 28 (History), 29 (Classics), 30 (Philosophy), 32 (Art and Design: History, Practice and Theory), 33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies), and 34 (Communications, Culture and Media Studies, Library and Information Management) within Main Panel D; 4 (Psychology, Psychiatry and Neuroscience) in Main Panel A, and 15 (Archaeology), 17 (Business and Management Studies), 22 (Anthropology and Development Studies), and 23 (Education) in Main Panel C.

32. The sub-panel received advice on 74 outputs from members of other sub-panels. These included outputs cross-referred to or jointly assessed with Sub-panels 25 (Area Studies), 26 (Modern Languages and Linguistics), 28 (History), 29 (Classics), 30 (Philosophy), 31 (Theology and Religious Studies), 32 (Art and Design: History, Practice and Theory), 33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies), and 34 (Communication, Cultural and Media Studies, Library and Information Management) within Main Panel D, and 23 (Education) within Main Panel C.

Impact

33. The table below shows the average impact sub-profile, weighted by FTE, for Sub-panel 27.

Table 8: UOA average impact sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
48.9	38.3	11.9	0.9	0.0

Overall

34. There is evidence of outstanding, very considerable, and/or considerable impacts in all the submissions, with an impressive diversity of impact types evidenced (including social, political, cultural, educational, civic, and economic) and beneficiaries (from local education and health bodies and community groups to national cultural and educational institutions and international enterprises and organisations). Collectively, the case studies submitted demonstrate striking evidence of the discipline's capacity to respond to challenges and, in partnership with organisations of numerous kinds, translate academic excellence into transformative societal benefit, locally, regionally, nationally, and globally.

Covid-19

35. Case studies negotiated the difficult challenges presented by Covid-19 in a variety of ways, and the sub-panel responded to the challenges faced with sympathy and understanding. 42 impact case studies (15%) were accompanied by a Covid-19 statement. The most obvious cases of Covid-19 disruption related to events and performances which either could not be held or had to be limited in scope owing to restrictions during 2020. In these cases, the sub-panel assessed what had been achieved rather than penalising what had not.

36. In assessing the submissions, the sub-panel drew on the expertise of one user member and six non-academic specialists with backgrounds in fields ranging from publishing, archives, libraries, and broadcasting to national and regional arts and cultural bodies. Each played a full part in the process of assessment, formally confirming their confidence in its robustness and fairness as the work was concluded. The assessment of impact was conducted according to the published description of the main panel's working methods (see paragraphs 52 – 55 of the main panel section of this report).

The range of types of impacts submitted

37. As in REF 2014, the range and quality of the impact case studies submitted to Sub-panel 27 (Sub-panel 29 in REF 2014) are demonstrably outstanding, providing compelling evidence of deep, longstanding work producing profound, transformative, and enduring benefits for local, national, and international collaborations with publishers, the creative and cultural industries, and heritage organisations, but also with commercial enterprises, governmental and public bodies, and organisations well beyond the traditional arts and humanities sector.

38. Many case studies evidence work that is interdisciplinary and genuinely collaborative, bringing together researchers from many fields in the co-production of knowledge and interventions alongside practitioners, a variety of organisations, producers, and a range of diverse groups and publics.

39. The case studies submitted showcase the significant beneficial impacts from research in English literature, language, and creative practice for, inter alia:

40. **Civil society:** research is challenging disadvantage across sectors and geographies, bringing tangible benefits to vulnerable and fractured communities, locally, nationally, and internationally – in some cases directly ensuring the avoidance of harm to individuals and groups, addressing regional inequalities of opportunity, and contributing to the local sense of belonging, community reconciliation, and greater social inclusion.

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41. **Creativity and cultural life:** research is contributing to and helping to shape cultural practice through the co-creation of new texts, installations, and performances, and promoting public and media understanding of notions of (and pride in) place, identity, and history. Collaboration with the media involves organisations both large and small, regional, national, and international, leading to the co-production of television and radio content, podcasts, blogs, and other media forms that enhance learning and understanding and celebrate diverse cultures. Public participation is also being achieved through performances, festivals, exhibitions, and cultural and commemorative events. Such research is often working towards an informed decolonising of history and heritage, literature and the arts; developing creative practice; shaping commemorative practices and publishing policy; creating social applications to improve literacy and reader experience; and enhancing the accessibility and preservation of archives and collections. Several case studies make clear the importance of story-telling and the power of individual and collective testimony in different settings, including industry; and/or demonstrate the power of stories to enact social change and contribute to community reconciliation and cohesion.
 42. **Economic prosperity:** research is supporting commercial innovation and entrepreneurial activity, including the creation of viable businesses and growth in micro-enterprises; promoting leadership roles for women in business; improving professional services; promoting innovation in the development and use of digital technologies; transforming publishing practices; working directly with media organisations, theatres, film-makers, and publishers to commission and publish new work across the spectrum of broadcast, online, live, and material forms of output; and deepening understanding of the economic benefits of literary, linguistic, and cultural heritage in all nations and regions of the UK.
 43. **Education:** research is supporting the educational needs and confidence of young people at all levels of learning from primary schools to further and higher education; enhancing child and adult literacy by shaping new curricula and/or creating new forms of pedagogy, assessment, and/or methodologies, and providing materials for teachers and learners through the creation of online resources, stimuli, and MOOCs; improving public and professional understanding of finance; enabling a deeper understanding of the economic benefits of literary and cultural activity to a region; developing environmental education; supporting climate science, and deepening the public understanding of climate change; changing behaviours – e.g. of the tourism industry – in the vulnerable regions and ecosystems in the world.
 44. **Health and well-being:** research is transforming the experience and practice of care in healthcare settings; working with scientists and healthcare practitioners to help shape medical interventions and/or education and medical practice; sustaining mental and physical health and wellbeing for adults and children through consultancy, advocacy, and the creation of events and fora; improving understanding of the cultural contexts, causes, and implications of health and wellbeing; promoting improvements in animal welfare; and creating and/or working with reading and writing groups and publishers to give a voice to otherwise isolated or silenced individuals and groups, including those with disabilities, those in care homes or other institutions, prisoners, and ex-offenders.
 45. **Policy making:** researchers are working with, and/or providing advice to government, NGOs, agencies, and other bodies (at local, regional, and national levels and internationally) to inform and influence cultural, social, health, and educational policy; enable greater access to the UK's cultural resources and knowledge; make the case for

improved regulatory frameworks (e.g. of AI or OA publishing); change attitudes to town-planning and life in an urban environment, promote the place of the literary imagination in design; enhance advocacy on climate change, and bring benefits to the economy, tourism, the heritage sector, and to learners at all levels.

46. **Social Justice:** research is promoting social advocacy and social justice; enabling disadvantaged and marginalised communities to tell their stories or engage afresh with their contested histories; supporting organisations that work with racial, ethnic, and linguistic minorities, vulnerable women's and LGBTQ+ groups, migrant and indigenous communities, or those dealing with and resolving post-conflict trauma across the world, and in diasporic communities in the UK.

Feedback on the quality of submissions

47. The strongest case studies are focused, innovative, and have a clear and well-evidenced narrative, backed up with concrete data, demonstrating the changes and/or benefits achieved. Weaker ones struggle to focus effectively on a clear set of impacts and beneficiaries, to demonstrate clear links between the underpinning research and the impacts being claimed, or to distinguish between impact itself and engagement or dissemination activities. Several such case studies draw on the research of a disparate group of researchers, claiming multiple strands of different activity and impacts. In these cases, the claims made for impact(s) are occasionally disproportionate to the number of researchers whose research is claimed to be underpinning them, or, where multiple impacts are claimed, these are sometimes disparate and uneven in quality, with the narrative unable to give sufficient attention to the stronger impacts. Judicious selection of impacts would have mitigated these issues.

Ethical and Equality, Diversity and Inclusivity considerations:

48. Some practices (e.g. the use of volunteers and crowd-sourcing) had ethical and EDI issues not addressed by the submitted case studies. Concerns arose about claims for 'hard-to-reach' or non-traditional audiences and beneficiaries, including groups with protected characteristics, when the nature of these groups, and the means by which they were included were not described. The sub-panel would encourage a more robust attention to this in future case studies.

Institutional support

49. Institutional support for impact work and for the preparation of case studies varies across the sector. Case studies demonstrating evidence of stronger internal support for researchers often (but not always) resulted in more impressive and sustainable impacts, supported by robust evidence.

Environment

50. The table below shows the average environment sub-profile, weighted by FTE, for Sub-panel 27.

Table 9: UOA average environment sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
53.2	37.7	8.6	0.5	0.0

51. The assessment of environment templates was conducted according to the published description of the main panel's working methods (see paragraphs 56 – 58 of the Main Panel section of this report). The sub-panel, advised and moderated by members of Main Panel D, read and assessed each unit's environment statement (REF5b) in the context of the relevant institutional statement (REF5a), without scoring the latter. Where necessary, it read across the sections of REF5b to locate material for each of the four categories of assessment, rather than penalising units which placed relevant evidence in unexpected places. All judgements were informed by use of the agreed Intention Plan, developed to reduce the chances of prior assumptions or unconscious biases informing judgements. The standard data analyses informed, but did not determine, the outcomes of the sub-panel's deliberations.

52. The sub-panel found evidence of innovative and supportive practice and of vital and sustainable research communities in units of all types and sizes across all the nations and regions of the UK.

53. While the sub-panel recognises the challenges of open access for long-format publication, particularly in relation to creative writing and work on visual culture or other copyrighted material, units of all types and sizes are also clearly committed to making the outcomes of their collective research accessible through Open Access, and helping to shape the national discussion of Open Access policy.

i. Unit context and structure, research and impact strategy

54. The strongest environment templates provide clear and specific accounts of both future strategy and specific achievements since REF 2014, and of the ways in which research is encouraged and supported at both institutional and departmental level, all of this backed up with detailed empirical data. Less convincing templates tend to be vaguer, relying on assertion unsupported by detailed examples, and list disparate activities, past achievements, or aspirations rather than describing coherently focused and sustainable strategies.

55. In terms of Impact strategies, stronger submissions go beyond describing the projects that are submitted as impact case studies to provide evidence of a broader framework for supporting impactful research across the unit.

56. Where a unit has been reconfigured or has undergone restructuring since REF 2014, the sub-panel looked for clear evidence of the resulting benefit(s) and consequences for the unit. It also looked for, and rewarded, evidence of long-term planning, community building, of collegial practices and careful succession planning, and was impressed by the evidence of robustly collegial responses to the unique pressures created by Covid-19 and the current environment.

ii. People

57. The level of support provided for ECRs is one of the features that frequently distinguishes the best submissions, along with clear and enabling support mechanisms (such as fair, transparent and inclusive processes in place for research leave) for all categories of researcher at all career stages. Attention to EDI issues, such as policies for staff with protected characteristics, provision for parental leave, caring responsibilities, etc., is also a much stronger feature of many submissions in REF 2021 than in REF 2014, the strongest of which support their accounts with reference to empirical data such as Athena Swan and/or Stonewall awards etc, and extend their concern beyond questions of gender to support researchers with all protected characteristics.
58. The development of postgraduate researchers is evidently a priority across the discipline, with nurturing and effective support in place, even in departments with few postgraduate students, and the sub-panel identified the range and quality of postgraduate work in English among the notable strengths of the discipline. In many instances, involvement in doctoral training partnerships enables units to share resources and develop postgraduate communities with the support of neighbours. The support mechanisms described, including opportunities for teaching, mentoring for career development beyond the PhD, etc. are often impressively thorough, and frequently innovative.

iii. Income, Infrastructure and Facilities

59. Levels of external income and internal support vary across the submission. Many units describe extensive and effective mechanisms to secure and enhance levels of research income, including the devolution of a proportion of overheads to the grant-holding unit or team concerned; the strategic devolution of QR funding to unit level to support external grant applications; supporting application writing via workload credit; and the incorporation of ECRs with more senior staff in project applications.
60. The sub-panel noted the diverse sources of research funding across the discipline, including several UKRI funding councils, the Leverhulme Trust, the Wellcome Trust, the British Academy, European Union funding, and increasing amounts of commercial, governmental, charitable, and non-HESA forms of funding. The sub-panel was very impressed by the overall increase in external research income, despite the increasingly competitive national and international funding environments, and was especially impressed where the unit is able to describe what is being enabled by the resulting increased income. Financial environments are most vital and sustainable where units can demonstrate that income generation goes beyond a small number of highly successful senior staff to include researchers at all career stages.
61. Despite the challenges faced in some institutions, the research infrastructure for English is evidently robust, and in many cases improving. The strongest submissions are able to evidence significant additional investment in bespoke facilities and buildings, library provision, the acquisition and development of archives and special collections, computing facilities, and a significant investment in, and expansion of, online resources, as well as in some cases the use of shared resources with partner organisations such as museums, archives, and galleries.

iv. Collaboration and contribution to the research base, economy and society

62. Impressive descriptions of collaborations and contributions to the discipline are a prominent feature of all submissions. English researchers continue to support the

bedrock of the discipline, and of the wider arts and humanities landscape, through contributions to subject associations, learned societies, the research councils and other funding bodies; journal and book series editorships; by leading national and international projects and research collaborations, hosting major conferences, and through peer reviewing and external examining. The strongest submissions are able to demonstrate collaborations that go beyond simple networking or involvement in a single, short-term project to form mutually beneficial and the durable co-production of research and/or impact with partner organisations, groups, and individuals.

63. Equally striking are the range of collaborations that units and individuals have fostered with a broad range of commercial, creative, cultural, governmental, and third sector organisations, locally, regionally, at the level of national and UK government, and globally. In many instances across the sector, English Language and Literature researchers, and their wider institutions, are playing pivotal roles in their civic or regional communities. The fact that such contributions are made in many units by researchers at all career stages is a particularly strong indication of both the vitality and the sustainability of the discipline, and of the scope and scale of its interdisciplinary collaborations within and beyond individual institutions.



Sub-panel 28: History

1. All sub-panel members discussed and collectively agreed this report, and it should be read alongside the Main Panel D (MPD) overview report which contains a description of main and sub-panel working methods and discusses matters of common interest.
2. The sub-panel developed and applied an Intention Plan to address and mitigate against unconscious biases and ensure fair assessment of all submissions, each of which comprised outputs, impact case studies and an environment statement.
3. In establishing its working methods, the sub-panel adhered to the assessment principles and framework set out in the REF Panel criteria and working methods (REF 2019/02). The sub-panel participated in the calibration and moderation exercises that were conducted by Main Panel D and all sub-panel work was informed and supported by Main Panel D and its advisers.

Summary of submissions

4. Sub-panel 28 received 81 submissions from Higher Education Institutions (HEIs), two fewer than in REF 2014, and 2,360.81 FTE staff, an increase of 32.2% on 2014. 66 of the submissions came from HEIs in England, nine from Scotland, four from Wales and two from Northern Ireland. There were new submissions from two HEIs and one HEI submitted two separate units this time, rather than one in 2014. Five HEIs that submitted units in 2014 did not submit to 2021.
5. A total of 5,766 outputs (including reserve items) were submitted and, of these, 4,418 outputs were assessed. This difference (1,321 outputs) reflects the sub-panel's acceptance of the great majority of double-weighting requests, which obviated the need for most reserve items to be assessed (Tables 1 and 2). The number of submitted outputs constitutes a reduction from 2014, a product of the changed criteria for submission (as addressed in the Main Panel report). The sub-panel assessed 248 impact case studies.

Table 1: Summary of Submissions

	Number of submissions	Cat. A staff - FTE	Cat A staff - Headcount	Research Outputs (submitted)	Double weighted outputs accepted	Outputs submitted per FTE	Impact case studies submitted
REF 2021	81	2,360	2,472	5,766	1,341	2.44	248
REF 2014	83	1,786	1,885	6,458	804	3.61	267

Table 2: Sub-panel 28 average weighted profiles

	% 4*	% 3*	% 2*	% 1*	% Unclassified
Overall	43	37	18	2	0
Output	40.5	37.8	20.4	1.2	0.1
Impact	45.3	34.5	16.4	3.7	0.1
Environment	48.0	40.9	10.2	0.9	0

This table shows shows the average profile for each element, weighted by FTE, for Sub-panel 28

6. It is important to note that changes to the submission rules preclude direct comparisons between many aspects of REF 2021 and REF 2014. Nevertheless, the sub-panel judged the overall quality of submissions in 2021 to be higher in many respects than in 2014. Taken as a whole, these data demonstrate that History is a strong and vibrant discipline across the UK university sector, with world-leading research and outstanding impact present in nearly every submission.

Outputs

Table 3: UOA average sub-profile for outputs

% 4*	% 3*	% 2*	% 1*	% Unclassified
40.5	37.8	20.4	1.2	0.1

This table shows the average output sub-profile, weighted by FTE, for Sub-panel 28

7. Outputs submitted to sub-panel 28 were allocated to sub-panel members and seven output assessors, who were recruited to extend the sub-panel's expertise. Allocation was based on the expert knowledge of individual panel members and output assessors, taking into account conflicts of interest. The sub-panel was supported in its assessment and moderation of outputs by an international member of Main Panel D, as well as moderation exercises within Main Panel D.
8. Outputs of world-leading quality were produced by scholars at every career stage, from early career researchers through to those now retired. They were authored by those writing in English and those writing in other languages. A total of 122 outputs were submitted in languages other than English, a figure that represents 2.1% of all outputs submitted.
9. World-leading research was evident in almost all of the submissions to Sub-panel 28 in all chronological periods and in all areas of the subject. The sub-panel read much that was outstanding in its originality, rigour and significance. This included many outputs that were already or would become recognised as primary and essential points of reference, many that were already or would be of profound influence, many that were instrumental in developing new thinking, new practices, new paradigms, new policies or reaching new audiences, many that represented major expansions of the range or depth of research and its application, and many that were outstandingly innovative and/or creative. The outputs read by the sub-panel showed that UK research in History as a whole continues to be world-leading.

10. High-quality research was visible in all forms of output. Monographs and other single- or multi-authored books, edited collections, journal articles, book chapters, scholarly editions of texts, websites, working papers, and publications in other media were all capable of world-leading or international excellence.
11. Authored books (34%), journal articles (45%) and book chapters (15%) constituted 94% of all assessed outputs, although this understates the numbers of scholarly editions, which were sometimes categorised by submitting units as monographs or edited books. The percentage of books and journal articles has increased substantially since 2014, while the percentage of book chapters has decreased. The number of websites, databases and working papers has decreased (from an already small numerical base) since 2014. These differences between REF 2014 and REF 2021 are likely to be due to changes to the submission rules rather than to changes in disciplinary practice.

Table 4: Output types

Output type	Number of outputs assessed*
A – Authored book	1,487
B – Edited book	207
C – Chapter in book	665
D – Journal article	1,991
E – Conference contribution	5
H – Website content	5
M – Exhibition	1
N – Research report for external body	2
O – Confidential report for external body	1
R – Scholarly edition	37
S – Research data sets and databases	6
T – Other	4
U – Working paper	7

* Double weighted outputs counted as one output

12. All forms of publication were treated equally in the assessment of outputs. The sub-panel did not rank journals in any way. In keeping with REF 2021's explicit guidance for assessment, the quality of the content, not the type of output, dictated the quality grades awarded. Monographs and scholarly editions were the types of output that tended, overall, to produce the highest percentage of the highest grade. Nevertheless, other types of output – including edited books, book chapters, journal articles, and databases – were all able to achieve the highest grade. While the focus and cohesion of edited books (including journal special issues) varied considerably, the best of them were world-leading and succeeded in mapping a new research agenda within an original analytical framework that was evident not only in the introduction but also in individual contributions.
13. **Overlap.** Some of the outputs submitted included significant material in common with other outputs that were submitted either to REF 2021 or in previous REF cycles in a different form or language. The sub-panel acknowledged that developing an argument over an extended period through multiple versions – for example, first in articles and book chapters and then in monograph form – is often an integral practice

within the discipline, especially in the production of longer-form outputs. In accordance with the REF 'Panel criteria and working methods' (REF 2019/02) and the 'Guidance on Submissions' (REF 2019/01), in cases of overlap the sub-panel assessed the common material only once. For example, a book chapter or article that overlapped with part of a monograph was assessed first, and the monograph was then assessed with the material from the shorter output omitted. The sub-panel noted that in some cases outputs did not acknowledge that material submitted to REF 2021 had been published previously, rendering the identification of overlap more difficult for the sub-panel.

14. **Double-weighting.** The sub-panel was pleased to note that institutions had appropriately requested double-weighting more often than in 2014. Double-weighting requests were made for a wide range of output types. 95.12% of assessed outputs for which double-weighting was requested were authored books. Of all authored books submitted, 86.55% had double-weighting requests attached to them. This accurately reflects the importance of monographs and other books in History as a discipline. Double-weighting is a crucial element in the fair assessment for such works, allowing assessors to recognise the extended scale or intellectual scope of the research. Requests for double-weighting were considered separately from the originality, significance and rigour (and thus the quality) of the output. The sub-panel accepted 99.1% of double-weighting requests (Table 5).

Table 5: Double-weighting requests

	Research Outputs submitted	DW requests	DW requests approved
REF 2021	5,766	1,353 (23.6% of outputs)	1,341 (99.1% of requests)
REF 2014	6,458	804 (12.5% of outputs)	797 (99.1% of requests)

15. Overall, double-weighted monographs in particular tended to be graded more often (but not always) as world-leading or internationally excellent. A few submitting units did not request double-weighting for some of their submitted outputs, despite the submission of outputs that would have passed the threshold. This failure to request double-weighting was often an opportunity missed, especially since reserve items provided a safety net. In a very small number of cases, double-weighting requests were not accepted and the reserve item was assessed instead. The sub-panel noted that there were a few double-weighting requests for articles, which were eligible under the REF rules but were generally less likely to meet the criteria for acceptance as double-weighted outputs. Some submitting units sought to justify requests to double-weight articles by reference to esteem indicators (for example, prizes won), rather than by appropriate reference to the scope of the research.
16. **Cross-referral and joint assessment.** Where the output concerned was more appropriately assessed outside Sub-panel 28, whether the unit had requested it or not – 258 outputs in all – it was either cross-referred to or jointly assessed with another sub-panel. All Ancient History outputs were automatically cross-referred to Sub-panel 29 (Classics). Items were also cross-referred to Sub-panel 13 (Architecture, Built Environment and Planning), Sub-panel 15 (Archaeology), Sub-panel 16 (Economics and Econometrics), Sub-panel 19 (Politics and International Studies), Sub-panel 21 (Sociology), Sub-panel 25 (Area Studies), Sub-panel 26 (Modern Languages and Linguistics), Sub-panel 27 (English Language and Literature), Sub-panel 30 (Philosophy),

Sub-panel 31 (Theology and Religious Studies), Sub-panel 32 (Art and Design: History, Practice and Theory), Sub-panel 33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies).

17. 112 outputs were cross-referred into Sub-panel 28 by the sub-panels assessing Clinical Medicine (Sub-panel 1), Public Health, Health Services and Primary Care (Sub-panel 2), Agriculture, Food and Veterinary Sciences (Sub-panel 6), Physics (Sub-panel 9), Mathematical Sciences (Sub-panel 10), Business and Management Studies (Sub-panel 17), Politics and International Studies (Sub-panel 19), Social Work and Social Policy (Sub-panel 20), Sociology (Sub-panel 21), Modern Languages and Linguistics (Sub-panel 26), English Language and Literature (Sub-panel 27), Classics (Sub-panel 29), Philosophy (Sub-panel 30), Art and Design: History, Practice and Theory (Sub-panel 32), Music, Drama, Dance, Performing Arts, Film and Screen Studies (Sub-panel 33), Communication, Cultural and Media Studies, Library and Information Management (Sub-panel 34).
18. The flow of cross-referrals into and out of Sub-panel 28 signals the fact that historical research informs and is informed by scholarship across the 4 main panels rather than the discipline of History alone.

Table 6: Cross-referrals (and joint assessment)

	Number of outputs cross-referred into sub-panel*	Number of outputs cross-referred out of sub-panel*
Within Main Panel D	75	211
Outside Main Panel D	37	47
Total	112	258

*This data is based on assessed outputs with double-weighted outputs counting as only one output.

19. The outputs submitted demonstrated areas of world-leading quality across a wide variety of subjects, periods, and topics, in terms of rigour, originality and significance. Research of outstanding quality, which was often ground-breaking leading to significant paradigm shifts, was evident in established fields of historical scholarship that included (but were not confined to): British social history, across all devolved administrations; European history; cross-regional studies of trade, knowledge exchange, and consumption; histories of gender and sexuality; imperial, colonial and post-colonial history; the intellectual history of ideas; manuscript and textual studies and the history of the book; palaeography; the history of religion in all periods; material and visual culture; art history; ambitious use of quantitative data in economic history; military history and histories of conflict and violence; the history of science, technology and medicine; and research that extended beyond Europe and North America to include, for example, Asian, African, and Latin American history. Outputs that explored topics using comparative, international, transnational or global perspectives often scored highly. For example, some of the best national or regional histories in all periods were alert to comparisons with, as well as alternative historiographies in, the wider world, setting their topics within broader developments and debates. Approaches to political history influenced by present day political questions were also prominent, and at their best attained world-leading quality levels.
20. The sub-panel noted some emerging areas of historical scholarship that, at their best, also demonstrated world-leading rigour, originality and significance. Emergent fields

included, but were not confined to: environmental and ecological history, often engaging with disciplines across the sciences and social sciences; the history of emotions; Indigenous histories; the history of material and visual culture, using innovative sources and sometimes leading to impact case studies; digital history using databases and digital sources; and the use of co-creation to generate public histories reaching wide audiences and often linked to impact activities.

21. It was noted that high-quality research in some areas requires a good command of languages, whether European or non-European, which was not always apparent. In some areas, multi-lingual research was evident, but in others there was a lack of engagement with literature – archival, primary and secondary – in languages other than English, resulting in top-down Anglo-centric studies of politics and empire for example. There were exceptions to this. Areas where UK historians did engage with foreign-language sources included – but were not limited to – ethno-historical research in the Indian sub-continent, Africa, and Latin America. Medieval history and European history were also notable for their close engagement with primary and secondary sources in languages other than English.
22. The sub-panel agreed that the strength of international approaches did not mean that regional, local and micro-historical studies were necessarily of lower quality in terms of rigour, originality and significance. Indeed, the sub-panel noted the revival and extension of micro-history, moving it into new terrains, including non-Western cultures and connected and trans-imperial histories. Some outstanding work in this area of scholarship was published in journal articles.
24. **Interdisciplinarity.** History is an intrinsically interdisciplinary subject, and the sub-panel read and assessed a substantial amount of work that incorporated methods and insights from other disciplines or that could equally well have been submitted to other sub-panels, including Area Studies. The range of quality shown in interdisciplinary research was the same as in outputs that were situated more clearly within the discipline. Links between History and a very wide range of disciplines were observed, from medicine through social sciences to other arts and humanities disciplines. Some of the most innovative historical research was open to a range of genres of evidence and alert to different forms of knowledge and methodologies, from written texts through oral history to material and visual sources and film. Some outputs demonstrated a self-conscious methodological placement of the author in the frame of analysis, sometimes locating their own or their family history as part of their positionality regarding their topic of inquiry and/or being careful to position their own subjectivity as shaping what they can and do ask. This approach often demonstrated interdisciplinary elements, drawing for example from literary studies or anthropology.
24. The sub-panel could not systematically link outputs to career stage. However, the sub-panel was pleased to observe the generally high standard of research evident in material deriving from doctoral work. This was often highly innovative and constitutes an important indicator of the vitality and sustainability of the discipline.

Impact

25. Sub-panel 28 received a total of 248 impact case studies. The average number of impact case studies was 3.1 per submission, with a range from 2 to 10 case studies per submitting unit. One impact case study was cross-referred for advice from another sub-panel.

Table 7: Sub-panel 28 average impact sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
45.3	34.5	16.4	3.7	0.1

This table shows the average impact sub-profile, weighted by FTE, for Sub-panel 28

26. The sub-panel included two user members, each of whom participated fully in the assessment of impact. The sub-panel was also assisted by seven impact assessors with a wide variety of experiences and expertise in, amongst other areas, education, museum and curatorial practice, heritage, the media, public engagement, and government policy. Impact assessors were involved in the calibration and assessment of all impact case studies, in agreeing final scores and profiles for each submission, in drafting feedback, and in preparing the sub-panel report. The sub-panel wishes to thank its impact assessors, who contributed generously and rigorously to the effective assessment of impact, bringing a wide range of additional expertise to the process and greatly enhancing it as a consequence.
27. The sub-panel was impressed by the range and diversity of impact and noted the expansion of impact activities in health and well-being, international policy, and economic development, as well as participatory or co-created research and work with communities that researchers often fail adequately to reach. The data above demonstrate that outstanding or very considerable impact was evident in a large proportion of case studies submitted to Sub-panel 28. Read in conjunction with discussions of impact strategies in unit-level environment statements (REF 5b), the data highlight not only the exceptional strength and vitality of the impact of historical research at local, national and international levels, but also the overall quality of institutional support for impact across the discipline in all areas of the UK.
28. Outstanding impact was evident in case studies submitted by units of all types and sizes. Some case studies submitted by smaller units provided compelling evidence of outstanding impact. This often reflected unit-level and/or institutional strategic priorities and longstanding, productive engagement with local, regional or national communities. The sub-panel was, however, concerned that the number of impact case studies required for smaller submissions placed particular burdens on very small submitting units, which often have fewer institutional resources available to support impact. The number of FTE per case study ranged from 1.75 FTE to 17.3 FTE, creating very significant disparities in available staff and research resources for impact case studies undertaken by smaller units of assessment.
29. All types of activity demonstrated well-evidenced impact of historical research, in terms of both reach and significance. There were nine broad areas of endeavour (outlined in more detail below) that constituted the bulk of the submissions: heritage, including work with museums and archives; public commemoration; public understanding of the past; well-being, health and social welfare; contributions to policy; political discourse; slavery and post-slavery; education and learning; and justice. Many studies straddled these broad categories. No category of impact was advantaged or disadvantaged: impact case studies in all categories were able to achieve the highest grade.
30. The largest single category of impact case study was **heritage and landscape heritage**, including a substantial body of work with **museums and archives**, which made up more than a fifth of the total number of case studies submitted. These case studies showed a considerable variety of activity, whether helping to shape presentations, exhibitions,

interpretation and engagement in historic places, museums and art galleries, developing policies for material culture, increasing tourism, or developing social cohesion and local engagement through heritage. Many case studies attested to the success with which such collaborations helped to shape heritage professionals' thinking and practice, leading to mutually enriching relationships over time. In some cases, these activities had outstanding economic impact on partners, regions and publics.

31. Historians were equally engaged in leading or contributing to **public commemoration**, notably in relation to the centenaries of the First World War. There was an often outstanding blend of fact, interpretation and emotion in these contributions. Other significant events in British history were also commemorated, usually linked to an anniversary. There was a small but highly effective body of work in Holocaust studies and memory.
32. A broad category of public **understanding of the past** showed historians making world-leading contributions in the public history arena, often finding ingenious ways to broaden and deepen understanding of past events and their present-day significance. The subject matter varied considerably, but these studies were all dedicated to raising awareness and understanding, notably within other cultures or through the effect of other cultures on British society. Compared with REF 2014, there were notably fewer case studies concerned with media whether broadcasting or publishing, but in some instances research impacted directly or indirectly on the commissioning and production of television and film projects.
33. **Well-being, health and social welfare** represented a considerable volume of impact activity, especially using historical research to inform and shape both policy and engagement. There were outstanding examples in shaping understandings and policies in relation to mental well-being, social injustice and inequalities, gender and sexuality, and professional and public understandings of health and illness. Some case studies involved working with and impacting on individuals and communities that are often marginalised or poorly integrated into civil society and health-care services.
34. **Contributions to policy**, in local, national and international contexts and working with a variety of governmental and non-governmental organisations constituted a fourth broad category. These included many outstanding examples in a range of subject areas, including – but not limited to – border conflict, land and housing policy, institutional reform, humanitarian policies, climate change, welfare, and poverty. There was a notable cluster of impact case studies contributing to public enquiries to co-produce policy-related knowledge and impact, addressing issues such as historic sexual abuse, which as in many other areas demonstrated the power of increasing understanding through the past.
35. Often allied to this policy area were impact case studies focusing on **political discourse**, with some outstanding work on debates about terrorism and political extremism, and on Brexit and relations with the European Union. Women's suffrage also figured strongly within this category, allied to commemoration and anniversary celebrations. There was a small but vital subset of studies concerned with constitutional issues and reform.
36. There was a continuing body of outstanding impact activity in the area of **slavery and post-slavery** (including but not limited to the transatlantic slave trade and its legacies), frequently using historical studies to raise awareness of the past and continuing effects of slavery and addressing the impact of the slave trade on communities both within the UK and elsewhere.
37. A number of impact case studies concentrated specifically on education and learning, whether in formal or informal contexts, although many case studies in other areas of

impact also had in-built educational and learning components. Most case studies were concerned with curriculum development in schools, some in adult education. Few were concerned with tertiary education except in making available new archival sources as searchable databases. Some case studies contributed to professional training through the development of online courses such as MOOCs.

38. **Justice** was an area that attracted an appreciable number of case studies, particularly around civil and human rights, often with international or global dimensions. Research from a wide range of submitting units underpinned impressive impact in collaboration with, for example, the Foreign and Commonwealth Office, International NGOs and the United Nations and its component bodies. Allied to this theme was a body of case studies on reconciliation, principally in the context of Northern Ireland.
39. There was a final category of diverse case studies that constituted about 8% of the total. Drawing on research in local and religious history and other areas of cultural activity, the impact activities of these case studies included the creation of new artworks and performances and at their best made outstanding contributions to society and culture.
40. As these areas of impact show, during the REF period historical research has reached a wide variety of audiences, beneficiaries, and stakeholders, with whom researchers have worked creatively to generate impact. Many case studies, for example, demonstrated effective impact through the co-production of knowledge and activities with non-academic researchers, publics and audiences, further testifying to the ways in which historical scholarship substantially enriches – and is enriched by – such impact. Our impact assessors were impressed in particular by how historical research is often inspirational, serving as a catalyst for changes that bring real differences to people's lives.
41. Many submitted impact case studies were interdisciplinary. Historians have worked across disciplinary boundaries, collaborating with scholars in, for example, English Literature, Archaeology, Heritage Studies, Politics, Criminology, Sociology, Business Studies and Health research, leading to impact with global reach and significance. Impact activities were also underpinned by research in a wide variety of historical fields, ranging for example from ancient to contemporary time periods, from local to global, from urban to rural histories, from transnational studies to micro-histories. Case studies incorporated art, business, film, environmental and architectural histories, for example, and were led by individual scholars or groups of researchers at all career stages. Outstanding impact case studies were submitted from historical research across all periods and places, and impact occurred in local, regional, national, and international contexts.
42. The impact case studies demonstrate that there are varied pathways to impact. Impact can flow directly or indirectly from historical research; it can stem from a single piece of research or from a wider body of historical work; it can be planned as part of a large, challenge-led research project, or emerge in serendipitous fashion during the course of the research; it can be achieved by researchers themselves or research can be taken up by external organisations or groups; it can be underpinned by either the content or the methods of historical research. Public communication and dissemination alone are not evidence of impact and weaker submissions often failed to move from descriptions of dissemination to demonstrate impact. Public engagement, however, was often identified as a component of successful case studies, serving as a significant step on the pathway to effective impact. It is important to note that, in accordance with REF guidelines, all of these pathways can lead to outstanding impact in terms of reach and significance.
43. Strong impact case studies shared some key features. They effectively demonstrated (rather than merely asserting) the link between the underpinning research and the

impact, and they provided evidence of the claims being made with regard to both reach and significance. Strong case studies clearly identified the beneficiaries from the research, providing both qualitative and quantitative evidence of reach and significance to support the narrative. While testimonials were often included to evidence impact – and were particularly effective in doing so when excerpts were included to testify to the significance of the impact – the strongest case studies provided a range of sources to corroborate their claims, including, for example, audience surveys, feedback from focus groups, visitor numbers, viewing figures, professional testimony, reports, media coverage, and commentary. In high-scoring case studies, these sources were used not just to demonstrate dissemination or engagement, but to evidence tangible benefit such as changes in knowledge, understanding, policy, and practice. Many strong case studies involved relationships that had been developed over a long period of time, leading to close and sustained collaboration, the exchange of expertise and experience, and the co-production of impact activities, including exhibitions, performances, and public events. It was possible to achieve a high score with only modest reach in terms of absolute numbers, so long as the degree to which the impact had enabled significant change amongst its potential beneficiaries and audiences was supported by the evidence. Although many excellent impact case studies were supported by external funding, others succeeded in effecting high levels of impact based on the initiative and engagement of individual historians, as well as robust institutional support.

44. In weaker impact case studies, the link between the underpinning research and impact was often less clearly demonstrated. The distinction between dissemination and impact appeared to be better understood than in REF 2014, but in some weak case studies there was insufficient evidence that dissemination of the research had changed or benefited audiences, beneficiaries, communities, individuals, or organisations. For example, while public engagement activities can constitute a key component of, and pathway to, impact, engagement alone does not constitute impact. Evidence of dissemination – such as visitor numbers to an exhibition or viewing figures for a television documentary – needs to be supplemented by clear evidence of changed understandings or behaviour, for example. Rather than developing their strongest claims more systematically with robust evidence, some cases studies tended to list a variety of activities or areas of impact that were only loosely related, often very different in terms of quality, and included extraneous detail to bolster claims to impact. Although there was neither a requirement nor an expectation that each case study would extend over the full five pages allowed – and, indeed, several shorter case studies were judged to be outstanding – the sub-panel nevertheless noted that several of the weaker case studies would have benefited from using the available space to provide greater evidence of their claimed impacts.
45. In some instances, the Covid-19 pandemic adversely affected the ability to generate impact, with the amendment, postponement, or cancellation of activities and events. Covid statements were submitted with 28 of the case studies. The sub-panel duly took account of Covid statements in assessing the impact case studies.

Environment

46. Sub-panel 28 assessed 81 environment statements, submitted by units that varied considerably in size and composition, ranging from 3.5 FTE to 172.8 FTE.
47. Historians work in very different environments. Many submitting units operate for their day-to-day research (and teaching) purposes as discrete History departments or

faculties within Arts, Humanities or Social Science divisions. Others, especially smaller units, operate within wider interdisciplinary units or represent multiple smaller groupings of historians drawn from across their universities. These differences create substantial complexity – and also richness – within the History research environment, in which excellence is manifest in widely varying strategies, structures, and policies.

Table 8: Sub-panel 28 average environment sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
48	40.9	10.2	0.9	0

This table shows the average environment sub-profile, weighted by FTE, for Sub-panel 28

48. As these figures indicate, the majority of historians work in environments that are conducive to producing world-leading or internationally excellent research and enabling outstanding or very considerable impact. In the strongest units, vitality and sustainability are evident in clear strategies for supporting research and impact, sustainable approaches to staff growth, excellent staff support schemes and PGR programmes, effective policies for addressing equality, diversity and inclusion (EDI), the strategic use of internal funding and facilities, and outstanding contributions to the discipline and society. Excellence was found in units of very different sizes and types and across all regions and countries in the UK. This excellence was reflected in (but by no means limited to) an aggregate spend during the REF cycle of just under £248 million, of which £92 million was from UK Research Councils and over £70 million from UK charities' external grant awards. There were 3,824 PGR completions during this REF period.
49. Although the assessment of environment is a familiar component of research assessment, the content of environment statements was more closely specified in REF 2021 than in REF 2014. In addition, in REF 2021 impact strategy was included in the environment statement rather than in a separate impact template. These differences preclude direct comparison between the two exercises.
50. The sub-panel read each unit's environment statement (REF5b) in the context of the wider institutional environment statement (REF5a), without scoring the latter. Submissions varied considerably in terms of the relationship between REF5a and REF5b, with some units' submissions demonstrating considerable synergy with institutional statements (and making reference to them) and others appearing to have been written independently of them. The sub-panel applied a no-detriment principle to unit-level statements that did not refer to REF5a. However, where an effective relationship between the submitting unit and its HEI was manifest in REF5b (regardless of whether this was signalled by an explicit reference to REF5a), this helped to clarify or contextualise statements in the unit submission.
51. The quantitative data on staffing levels, external income and PhD completions informed the sub-panel's assessment of environment. These data were deployed contextually, with due regard taken of the different strategies for achieving excellence that are appropriate in (for example) units of different size, location or focus.
52. The sub-panel assessed environment statements in terms of the vitality and sustainability of submitting units in four categories, corresponding to the template: unit context and structure, research and impact strategy; people (staffing, research students and equality, diversity and inclusion); income, infrastructure and facilities; and collaboration and contribution to the research base, economy and society. Although the new template aided the presentation and consistent assessment of environmental statements considerably, not all material was located in the appropriate section. Where

necessary, the sub-panel read across sections to identify essential material for each of the four categories of assessment. The strongest statements demonstrated clear links between sections, identifying for example how the research and impact strategy was underpinned by strategic use of internal and external income or how the strategy shaped collaborations and contributions to the discipline, economy and society.

53. The absence of word or page limits for each section meant that submitting units took differing approaches to the completion of the template, often customising their submission to highlight their strategic strengths. In practice, this often meant that Section 1 on the unit's research and impact strategy was developed in greater detail than other sections. In some cases, this disproportionate allocation was to the detriment of other sections, especially Section 3 on income and infrastructure. Uneven use of the template in these ways often led to lower scores if elements of certain sections were missing or not fully developed as a result.

i. Unit context and structure, research and impact strategy

54. Submitting units showed a wide range of research and impact strategies. These differences reflected the widely varying organisational contexts and structures within which History research operates, spanning from very small units operating within larger disciplinary or interdisciplinary schools to departments or faculties (or conglomerations of these units) comprising 100 or more staff. Strong submissions provided a clear, well-evidenced research strategy with an action plan or indication of how it would be delivered. Lists of current or planned activities were not seen as strategies. Strong impact strategies went beyond describing how the submitted impact case studies were generated and supported by providing evidence of wider unit and institutional support for collaboration, engagement, and impact. Stronger environment statements provided evidence of clear processes for making research available through open access and for ensuring research integrity, as well as evidence of how institutional practices applied at unit level. Although it was promoted and supported in different ways, interdisciplinary research was a strategic priority in almost all submitting units. The strongest submissions effectively demonstrated, where appropriate, how interdisciplinary research was integrated into the wider research and impact strategy.

ii. People

55. Section 2 of the template on staffing, PGRs and EDI proved challenging for many submitting units, with approaches to EDI often weaker than discussions of doctoral training and support for staff (see discussion below). Staffing strategies that supported – rather than merely monitored – research and researcher development at all levels were especially commended, as were schemes such as study leave, internal funding support and mentoring for staff and postgraduate students that enabled research activity across the full career cycle, including mid-career researchers, to facilitate sustainability. Doctoral training was often world-leading, with strong evidence of History doctorates entering both academic and non-academic workplaces equipped with discipline-based and interdisciplinary skills. Involvement in a regional AHRC consortium allowed some smaller units to share resources with larger units. A number of submitting units lacked access to these collaborative resources, but it was possible for such units to perform well by investing institutional resources in doctoral support. Many institutions made effective use of the AHRC's collaborative doctoral schemes to attract additional funding for doctoral students while enhancing engagement with heritage organisations and their audiences. The environment submissions as a whole provided robust evidence of careful attention to the development of researchers at early stages of their careers, whether doctoral students or postdoctoral researchers.

56. In line with the REF 'Panel criteria and working methods' and the 'Guidance on submissions', the sub-panel expected all submitting units to provide evidence of the unit's policies, achievements and aspirations in relation to promoting and supporting EDI. Ample discipline-specific evidence and guidance for addressing EDI exists in History due to rigorous work by its learned societies. Stronger submissions provided clear evidence that support for EDI was embedded across all elements of the research environment, including staff recruitment, staff development and promotion, and addressed EDI in relation to a broad set of characteristics (or 'protected characteristics' in the language of the 2010 Equality Act, relevant for units in England, Scotland and Wales) with data supported by thoughtful analysis, reflection, and plans for the future. Weaker submissions failed to refer to: how recruitment and staffing strategies encouraged EDI in relation to all protected characteristics, rather than focusing, for example, exclusively on gender; how staff with parental and caring responsibilities were supported; and how staff well-being was promoted. Statements of commitment to EDI were unevenly supported by evidence of concrete actions in this respect. Weaker statements also failed to address EDI in relation to the construction of the REF submission.

iii. Income, infrastructure and facilities

57. External grant income varied substantially between units. Different funding strategies can work for different units. The strongest submissions often demonstrated success in accessing income from a variety of different funders, including UKRI funding councils, the Leverhulme Trust, the Wellcome Trust, the British Academy, and European funders, but it was possible to achieve the highest grades even when relying on a single funder. In many cases, the success of these applications clearly reflected the ability of researchers to access pump-priming funds and expert advice from within their university. Units provided clear quantitative evidence of income, but often provided less indication of how it was used in relation to the unit's research and impact strategy or how it supported staff development across the unit. Weaker submissions were more likely to rely disproportionately on a small number of (typically) senior staff to attract external income.

58. Strong statements went beyond description to explain (with evidence) how income, infrastructure, and facilities supported the development and delivery of excellent research and impact. Submissions were strengthened where they could demonstrate institutional investment that supported university libraries and/or researchers' access to more remote archives, collections, and libraries. Institutional support for cultural organisations that enable historical research, public engagement and impact activities – such as cinemas, arts centres, archives, museums and the like – was recognised as a form of support for infrastructure that benefits historical research and its impact. Weaker submissions often failed to discuss researchers' access to local infrastructure and/or institutional support for such access.

iv. Collaboration and contributions to the research base, economy and society

59. Units of all sizes and types continue to demonstrate impressive contributions to academic and public history through both funded and voluntary contributions to the research base and innovative collaborations with non-academic communities. Some submissions chose to focus on one particular approach (for example, engagement with local partners) rather than attempt to do everything, and this was recognised as an effective strategy for enabling collaboration and contribution to the research base, economy and society.

60. The strongest statements demonstrated: convincing engagement with communities beyond the institution; a balanced commitment to the development of the discipline via editorial work, engagement with history in schools, contributions to learned societies, etc.; and a clear commitment to national and international collaboration. Creative and effective collaboration with a wide range of local communities and beneficiaries – including commercial, cultural, government and third-sector organisations – was evident from units and institutions of all sizes and types. As evidenced by the impact case studies, such collaboration enriches both institutions and communities. National and international collaborations also brought historians into contact with researchers and partners on every continent. It should be noted that listing activities and contributions in general without due attention to vitality or sustainability, and in particular listing esteem indicators, tended to result in lower scores for this section.
61. The sub-panel recognised that the Covid-19 pandemic has impacted heavily on research environments, shifting priorities in relation to research and teaching, restricting the availability of research leave, and impacting on PGR activities. The pandemic also adversely affected the ability of institutions to prepare REF submissions and the sub-panel duly took account of the impact of Covid in assessing environment statements.

Conclusions

62. Elements of world-leading research, outstanding impact, and sustainable research environments were recognised in nearly every submission.
63. The outputs submitted to Sub-panel 28 demonstrate that UK research in History continues to be world-leading. Examples of world-leading and internationally excellent outputs were observable in all submissions, in all established and emerging sub-fields of the discipline, in all chronological periods, in all regions of the world, and in all forms of output.
64. The impact case studies submitted to Sub-panel 28 demonstrate the diversity and vitality of historical research and its capacity to have significant and sustained impacts on social, political, economic, and cultural life. While institutional support for impact activities varies considerably, the quality of the case studies indicates that submitting units are committed to generating nuanced understandings of the past that make outstanding contributions to addressing social challenges and making real differences to people's lives.
65. The environment statements submitted to sub-panel 28 indicate the vitality and sustainability of History across the UK. The majority of historians work in environments that are conducive to producing world-leading or internationally excellent research and enabling outstanding or very considerable impact. Outstanding vitality and sustainability were found in units of very different sizes and types and across all countries in the UK. There is encouraging evidence on interdisciplinary research, developing an open research culture, embedding impact, and EDI, but there remains substantial room and an imperative need for improvement in these areas, especially as the pandemic will have long-term and unequal effects on the ability to do research.
66. History is a vibrant, world-leading discipline across the UK university sector. Despite the impact of Covid-19 and challenging economic circumstances, submitting units have shown considerable resilience and creativity and demonstrated the outstanding contributions that their research has made locally, nationally, and internationally. The diversity of the 81 submitting units demonstrates the extraordinary range of unit sizes and types that shape and enrich the ecosystem of historical research and its impact. Indeed, the diversity of units and approaches to historical research, as well as the variety of outputs and impact, constitutes outstanding strengths of the discipline.



Sub-panel 29: Classics

1. All sub-panel members discussed and collectively agreed this report on matters specific to the discipline of Classics. It should be read alongside the Main Panel D report which contains a description of main and sub-panel working methods and discusses matters of common interest. Sub-panel 29 comprised 13 academic members (8 female, 5 male), 2 impact assessors (both female), and 4 special advisers (all male). Panel members had a broad range of disciplinary and interdisciplinary expertise ensuring that Classics could be assessed from many perspectives.
2. Sub-panel 29 adhered scrupulously to the assessment principles and framework adopted across Main Panel D, including all calibration exercises (see paragraphs 23 – 34 of the Main Panel D report). An innovation in sub-panel procedures in 2021 was the use of a Fairness in REF Intention Plan which was discussed at the start of every meeting and evolved over the assessment period. The function of the plan was to engage the sub-panel in a process of self-reflection in considering bias, and unconscious bias, in the conduct of the evaluation.

Summary of submissions

3. Sub-panel 29 received 17 submissions. It assessed 49 impact case studies and 825 outputs. In addition, 198 outputs were cross-referred to it. Staff submissions ranged from 91 to 12.5 FTE per submitting unit. In total Sub-panel 29's submitting units awarded 793 doctoral degrees, an average of 1.77 per submitted staff FTE. Average annual research income for Sub-panel 29 as a whole was £8,580,749. The average research income per submitted staff FTE across this period was £19,135. FTE per impact case study ranged from 6.25 to 12.95.

Table 1: Summary of Submissions

	No. of submissions	FTE	Submitted Outputs	Double-weighted outputs	Impact Case Studies (ICS)	FTE per ICS
REF 2021	17	448	1,070	246	49	9.1
REF 2014	22	383	1,388	168	59	6.5

4. All the units returned to Sub-panel 29 were from research intensive universities, a high proportion of which are in the Russell Group. In these mainly medium-sized units, almost all staff are well-supported and active researchers. There were no small submissions and relatively little increase over REF 2014 in the proportion of eligible staff submitted (+17%). Smaller groups of classicists have generally been subsumed by their HEIs into units covering multiple disciplines which were submitted to other sub-panels. This has been a trend in Classics for some time but is especially obvious between REF 2014 and REF 2021, with a corresponding decrease in units submitted to Sub-panel 29 and an increase of 15.8% in the number of outputs cross-referred to it by other sub-panels (see para. 5). The sub-panel was pleased to observe the high quality demonstrated by the units submitting to it across all three elements of the assessment.

Table 2: UOA average scoring profiles, weighted by FTE

	% 4*	% 3*	% 2*	% 1*	% Unclassified
Overall	45	39	15	1	0
Outputs	41.8	39	16.6	2.4	0.2
Impact	47.7	41.2	11.1	0	0
Environment	49.8	41	9.2	0	0

Outputs

Table 3: UOA average outputs sub-profile, weighted by FTE

% 4*	% 3*	% 2*	% 1*	% Unclassified
41.8%	39%	16.6%	2.4%	0.2%

This table shows the average output sub-profile, weighted by FTE, for Sub-panel 29

5. This overview report is based on 825 scored outputs that were submitted directly to Sub-panel 29 and the 198 outputs that were cross-referred to it from other sub-panels (see table below). Sub-panel 29 is aware that it did not see the full range of work done in Classics not least because, under the new Stern rules, units have had considerable scope for selection from among the publications submitted staff have produced in this REF cycle. Additionally, much Classics research was submitted to and assessed by other sub-panels with relevant expertise (such as Sub-panel 15 (Archaeology), Sub-panel 28 (History) and Sub-panel 30 (Philosophy)). All the sub-fields of Classics were richly represented by the outputs Sub-panel 29 assessed. It is with great regret, however, that Sub-panel 29 notes the very small number of Modern Greek outputs it received directly or through cross-referral.

Table 4: Cross-referrals in to Sub-panel 29 (page 115).

Table 4: Cross-referrals in to Sub-panel 29

From sub-panel	Number
12 (Engineering)	1
15 (Archaeology)	41
26 (Modern Languages and Linguistics)	14
27 (English Language and Literature)	1
28 (History)	121
30 (Philosophy)	1
31 (Theology and Religious Studies)	11
32 (Art and Design: History, Practice and Theory)	5
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)	3

6. Outputs submitted to Sub-panel 29 were allocated to sub-panel members for assessment based on expertise and taking into account conflicts of interest (for working methods, see paragraphs 23-34 of the Main Panel D report). In addition to the exercises in calibration that took place within and across sub-panels to ensure robustness and consistency, Sub-panel 29 undertook multiple reviews of its output scores (including those of its special advisers). On each occasion, selected outputs were moderated utilising internal sub-panel expertise and that of one of the Main Panel D international members. Scores for outputs referred out to other sub-panels for expert advice or jointly assessed between sub-panels (71 in total) were carefully scrutinised and scoring profiles were cross-checked against those for outputs assessed internally. All 50 requests from HEIs for cross-referral out were accepted. All low-scoring outputs and challenging cases were also discussed in plenary and their scores approved by the sub-panel as a whole (taking account of conflicts of interest as appropriate).

Table 5: Cross-referrals out

From sub-panel	Number
7 (Earth Systems and Environmental Sciences)	1
15 (Archaeology)	43
25 (Area Studies)	8
26 (Modern Languages and Linguistics)	3
27 (English Language and Literature)	7
28 (History)	6
30 (Philosophy)	2
31 (Theology and Religious Studies)	1

7. Submissions to Sub-panel 29 were again dominated by monographs, journal articles, chapters in books, edited collections and scholarly editions (see table below). Other output types included working and conference papers, an exhibition, research data sets and software. There were very few standalone translations, although some editions and commentaries included translations that were considered to have contributed positively towards their significance. The sub-panel assessed the quality of outputs irrespective of the form, mode, or place of publication or dissemination.

Table 6: Scored output types

Output type	Count	Percentage
A – Authored Books	235	28.5%
B – Edited Books	91	11.0%
C – Chapter in Book	212	25.7%
D – Journal Article	228	27.6%
E – Conference Contribution	4	0.5%
G – Software	1	0.1%
M – Exhibition	1	0.1%
R – Scholarly Edition	45	5.5%
S – Research Datasets and Databases	3	0.4%
T – Other	1	0.1%
U – Working Paper	2	0.2%
V – Translation	2	0.2%

8. Lower scoring outputs fell into a number of categories. Many contained only a small amount of material that met the REF criteria for research. These often, but not always, appeared to be addressed to students (such as works of survey or synthesis whether short- or long-form). Other outputs demonstrated considerable or even outstanding rigour but did not appear to articulate, or answer, specific research questions. Others again demonstrated considerable originality (such as the publication of previously unknown or neglected material) but little significance. Edited volumes did not always score as well as they might. Where a submitting editor's chapter did not support a high score by itself, a high score could still be achieved if the introduction provided a detailed explanation of how the volume's concept and choice of chapters contributed to its originality and significance. Some book chapters were clearly enhanced by consideration of the volume's unifying theme; but others were weakened by the need to focus on it (precluding sufficient explanation of the chapter's significance or requiring repetition of material already covered in earlier scholarship and thus diminishing the chapter's originality). Units did not always signal overlap between work submitted (as where a monograph contained material also published in a related article, book, or book chapter submitted to REF 2021, or where an output submitted to this exercise contained material submitted by the same author in the prior REF cycle). Grades were adjusted for those outputs in accordance with the principles set out in the REF 'Guidance on Submissions'. A very small number of outputs were graded as unclassified because they were judged not to meet the REF definition of research.

9. The criteria for approving double-weighting were discussed at the beginning of and throughout the assessment process. Challenging cases were considered by the sub-panel in plenary. 246 requests for double-weighting were made, representing 23% of outputs submitted (almost double the 12% of outputs submitted in REF 2014). The sub-panel accepted 99% of the double-weighting requests made to it. Requests made per submitting unit ranged from 5% to 45%. Double-weighted outputs tended to score well but were also represented in each of the lower scoring bands above U. In the latter cases, the output often met the double-weighting criteria of scale and/or scope, and mostly the criterion of rigour, but failed to demonstrate research that was sufficiently significant or original.
10. Very few statements were submitted that concerned obstacles to publication because of the pandemic; they were all taken into account in Sub-panel 29's assessments.
11. Outputs of world-leading quality were produced by scholars at every career stage (including early career researchers) and by both those writing in English and those writing in other languages. Work of world-leading quality was found in diverse output types, in all sizes of submitting unit and spread widely across the sub-fields of Classics (see paragraphs 12 to 26 below).
12. The submissions in **text editing and papyrology** showed that the 'traditional' skills of deciphering, editing and textual criticism are carried out at a world-leading standard. Alongside editions of canonical works of Greek and Latin literature, several outputs gave the first modern critical editions of texts far beyond the canon, including some preserved only in inscriptions, papyri or other media. Many of these were demonstrated to be of significance for a wide range of Classical disciplines. A significant development is the growing recognition of ethical issues surrounding the handling and publication of ancient material with uncertain provenance.
13. The quality of outputs in **linguistics** was uniformly excellent, many were truly world-leading. In quantity, there was a close balance between books (mainly authored books) and articles/chapters. Among the subjects tackled, the following stand out (1) the languages and scripts of inscriptions; (2) the Sabellian languages; (3) ancient sociolinguistics, either as a subject in itself or as an important subsidiary theme. Several outputs engaged productively with new theoretical and methodological approaches, notably from the field of cognitive linguistics and pragmatics and politeness studies.
14. **Greek literature** demonstrated strong growth in work on pre-Classical texts, especially Hesiod and early lyric, and on Pindar. Lyric and Pindar were still studied in terms of performance but also as literary texts. It was also notable how many studies emphasised the musical aspects of Greek poetry and, more generally, the place of music and dance in Greek culture. Some work effectively compared and contrasted Greek and Roman poetry. Much excellent work on classical Greek literature (especially relating to tragedy, oratory and historiography, and on legal texts) was in commentary form designed for readers with different levels of expertise, and embraced both canonical and non-canonical texts and fragments. Cognitive approaches to Greek literature also proved fertile, as did theories of material and visual culture and reader experience.
15. The field of **ancient Greek history** continues to be vigorous and innovative, showing a remarkable diversity of approaches and methods, with the most outstanding work demonstrating a high level of theoretical sophistication and generating important new insights. Much of this work was on Classical Greek history, occurring across most sub-fields, but with some particularly outstanding work in political, legal and religious history. But new theoretical lines of enquiry were also apparent in work on Hellenistic Greek history, with notably outstanding contributions on Seleucid culture. There continues to

be relatively little focus on the Archaic period (although its historical reception is itself a topic of study); what there is maintains productive intersections with archaeological research. Historiographical work was of high quality, with innovative approaches brought to bear on the interpretation and reception of texts and ideas. Other notable areas included studies of historical individuals, reassessing their roles in their broader social and political background, and comparative studies of Greeks and non-Greeks, offering important insights on methodologies. There were several outstanding diachronic studies, from across different sub-fields, which were particularly impressive in their range and insights.

16. **Latin studies** continue to show a remarkable diversity of approaches and methods. The overall picture is one of an invigorated and expanded field. Much work engaged in a sophisticated way with contemporary theoretical concerns, including post-colonial, disability, queer, gender, performance and spatial theory. Equally there was a welcome expansion of interest into under-studied authors, including pseudonymous texts and the late antique era, where work of the highest quality engaged both with the minutiae of texts and with broader cultural features. Impressive work continues to be produced on the writers of the late republican and Augustan ages, alongside a flowering of valuable research on authors of the Neronian, Flavian and Trajanic eras and their literary cultures. Intertextuality and intratextuality continue to be important concerns, with new developments including an expanded interest in relations with Hellenistic literature, and a concern to accommodate approaches from the cognitive sciences (especially memory studies). It is also pleasing to see Latinists continue to incorporate insights from classical reception, including within commentaries, and to see an expansion of interest in biofiction. Commentaries continue to flourish: the best rethought the elements of their text afresh.
17. Within **Roman history** the balance of outputs was firmly in the imperial period in comparison to the Republic, with virtually no material dealing with early Rome. Late antiquity continued to be a significant area, and there were a number of wide-ranging studies dealing with Roman matters while sweeping across the whole of Antiquity. One striking development was the number of works which dealt with Roman law, from a variety of perspectives. There was also a considerable amount of economic history and work on urbanism, alongside studies of the structures of empire. World-leading quality was evident across the range of outputs, both chronologically and thematically. Some of the most innovative material dealt with fundamental methodological questions, or brought substantial contemporary issues into productive dialogue with broad spans of Roman history.
18. The division of **archaeological and art historical research into Greek and Roman** seems now to have been largely superseded, since submitted work covered the entire Greco-Roman world and regularly moved beyond traditional geographical and chronological boundaries. Landscape archaeology, including studies of urbanism and architecture, was strong. Often the use of drone and satellite imagery, laser scanning, photogrammetry, GIS, 3D reconstruction, and other digital and scientific analytical methodologies has increasingly produced more valuable research insights. The systematic analysis of environmental and geoarchaeological data in classical field projects has also considerably improved. The best material cultural studies were often well theorized and contextualized, increasingly deploying the use of scientific analytical techniques. A few included sophisticated uses of network theory. Research on art mostly focused on setting it within its production and display context, often drawing on

sociological theory, or considered it in relation to literary texts. A small but significant number of outputs attested to a new interest in art theory. Numismatics research increased in prominence, with the best work taking account of archaeological, historical socio-political and economic contexts to address wider historical questions. Post-colonial approaches and social science theory have positively influenced studies of migration, ethnicity, identity, colonialism, imperialism and cross-cultural interaction with non-classical societies.

19. As in REF 2014, outputs on **Greek and Roman philosophy** encompassed periods and texts which extend well beyond the narrower range that dominates in international journals. Research into the history of philosophy conducted in Classics units thus makes an important contribution to the diversity of the field. The strength and depth of research into Imperial Greek philosophy were particularly noteworthy. Some excellent outputs brought together ancient Greek or Roman philosophy on the one hand and contemporary, early modern or 20th-century philosophy on the other, and the work of this kind submitted to Sub-panel 29 stands comparison with outputs submitted to Sub-panel 30 (Philosophy). There was also much valuable work on ancient Greek philosophy in its cultural and historical contexts.
20. There was a good quantity of work on many different aspects of **medicine** and some engagement with **astronomy**. Outputs analysed the principal texts (the Hippocratica and, especially, Galen) and/or situated them in wider social, cultural, and intellectual contexts, including cross-period medical history. Byzantine medicine and connections between medicine and philosophy were fresh and productive areas. Alongside 'learned' medicine, there was notable work on domestic or lay medical practice, shading into history of the body, therapeutic religion, and magic.
21. Much important work now deals squarely with the **interaction between Greece, Rome, and other cultures**, especially in the Mediterranean and Near-East. This is the case not only with regard to the earliest periods, but encompasses both Greece and Rome in their wider cultural contexts and at all stages of their histories (from the Bronze Age to Byzantium). Equally, the study of classical heritage and reception is no longer focused solely on European contexts, but encompasses engagements with Greece and Rome in a wide range of other cultures. There is much interest in moving Classics beyond traditional Eurocentric perspectives.
22. Outputs resulting from the study of **cuneiform cultures** covered the whole period from 3,000 BC to 100 AD and thus also play an important role in expanding the horizons of ancient world studies that, in this country, are mostly focussed on Greece and Rome. They included a number of editions and translations of previously unpublished texts in Sumerian, Akkadian and Proto-Elamite, and several works involved the search for new paradigms of comparison.
23. Studies of **ancient Egyptian** written and visual sources have embraced anthropological and historical approaches with dynamic results, alongside the equally essential philological editions necessary to understanding context and motivation. Impact beyond the immediate disciplinary audience has been powerfully promoted through contributions to multidisciplinary thematic volumes, and through a recurrent focus on multilingual and border spaces.
24. Outputs on **Late Antique and Byzantine Studies** were more numerous than in REF 2014 and covered a broad range of subject matter. Close textual readings that resulted in new understandings of the past, and of the role of past authors, remained strong, as did site-specific and archaeological research. There was a new wave of interest in

the eastern provinces and the interaction between different cultural groupings, and across the fields there were particular strengths in interdisciplinary research and new methodological approaches.

25. It was disappointing to see a further fall in the number of submissions in **Modern Greek**. Nonetheless, there was an interesting and rewarding range of work in a variety of disciplines, as well as research that is clearly interdisciplinary, mainly involving the social sciences, but also film and more broadly cultural studies. Only one submission related to a period earlier than the mid-20th century.
26. The study of **Reception** has grown and matured and is being produced by staff at all career stages across most submitting units. There is now greater diversity in the modes of reception investigated (such as material design from architecture to pottery) and a stronger interest in more inclusive receptions, especially in relation to class, age and sexuality and by voices we might characterise as 'subaltern' (especially African, Irish, and Latin American). In terms of period, attention is being given to receptions from late antiquity right through to the modern (including recent works in literature, drama, film, television, and digital media). Engagement with theory was especially notable in studies of literary and dramatic reception, such as in consideration of concepts of reperformance or affective experiences of antiquity. Some of the strongest interdisciplinary research appeared in themed collections, including dialogue or co-production with creative practitioners. However, the quality of research in this field remains uneven, with some studies too wide-ranging to produce more than a superficial analysis, lacking in rigour and / or articulation of their significance. Some of the most outstanding work included reflection on the ways in which analysis meshed with or advanced understanding of classical reception, the 'receiving' cultures, and / or Classics more broadly.
27. **Interdisciplinary research** in Classics is flourishing and has grown substantially in quantity and quality compared to 2014. Classics is a multidisciplinary field that informs many cross-border conversations within arts and humanities and beyond, yet the IDR flag was used relatively rarely by HEIs. The sub-panel was impressed by the diversity and range of outward facing expertise within Classics and sought to identify outputs as IDR which were genuinely interdisciplinary in novel ways and, thus, to monitor their assessment. Around 25% of outputs submitted to Sub-panel 29 had notable interdisciplinary aspects (not counting the significant number of outputs cross-referred in that the sub-panel identified as IDR). Most IDR items were assessed within the panel, with a minority involving joint assessment or cross-referral. The sub-panel was gratified to find that the scoring profile for outputs identified as IDR by either HEIs or the sub-panel was comparable to that for outputs as a whole. World-leading and internationally excellent interdisciplinary research was identified in all areas of Classics.
28. IDR research in Classics included some well-established areas of strength as well as emerging, innovative combinations. Across most sub-disciplines Classics research is incorporating insights from cognitive psychology, memory studies and materiality/ material cultural theory as well as quantitative approaches more often seen in science and social science. **Archaeological** research exhibits many interdisciplinary connections, including studies that combine approaches from physical, environmental and biological sciences. **Ancient-historical research** is engaging with organisational studies, economics and contemporary risk, network, globalisation and political theory. The rigorous comparative study of **religion** incorporating current anthropological and theological approaches is an area of emerging strength providing novel insights

on, e.g., ancient belief. **Late antiquity** seems to be a particularly vibrant area for interdisciplinary research. Not surprisingly, comparative cross-cultural study was also evident in **reception studies**. As in **Greek and Roman literature**, increasingly rigorous and sophisticated studies connected Classics with visual-culture studies, art, design, performing arts, and digital humanities. Within **literary studies** and **linguistics** the panel saw serious and sophisticated engagement with theory and scholarship in other domains, and in the latter, far more engagement with other ancient languages besides Greek and Latin. Like **reception studies**, Classics research in **philosophy** is contributing to debates in later historical and modern times.

Table 7: Sub-panel 29 average impact sub-profile, weighted by FTE

% 4*	% 3*	% 2*	% 1*	% Unclassified
47.7	41.2	11.1	0	0

This table shows the average impact sub-profile, weighted by FTE, for Sub-panel 29

29. As in REF 2014, the impact of Classics research submitted to Sub-Panel 29 is buoyant and wide-reaching, exhibiting even greater variety and ingenuity than in the last REF. The sub-panel has identified several reasons for the genuine excellence overall of the impact case studies (ICSs) submitted to it. These include: (a) The pervasiveness and fascination of Classics and the classical world in the public imagination, on which impact activity can draw; (b) The discipline's collaborations and partnerships with non-academic institutions (such as museums, heritage sites, art galleries, theatres, and schools) and its enthusiastic promotion by public-facing organisations, both of which extend back far beyond REF 2014; (c) The unusually homogenous character of submitting units. All were contained within HEIs that claim a central place for research and impact in their strategy and provide support for the research and impact activity of staff. It was evident, and encouraging, that many ICSs had received some institutional advice, funding and/or support in collating data and interpreting it; (d) The absence of very small submitting units where there can be considerable pressure to produce the required number of ICSs.
30. The sub-panel was impressed by the breadth of national and international reach of Classics' impact, including in challenging locations. The international impact of Classics research was demonstrated, for example, by: (a) Practices of heritage and museums (e.g., Europe, Middle East, North Africa, North America, Caribbean); (b) Educational materials and events for schools and higher education (e.g., Australasia, Europe, Middle East, Africa, South Asia, North America); (c) Public engagement via traditional and social media, including translations into diverse local languages (for example Farsi, Greek, Dutch, German, Italian); (d) The use of digital technologies to achieve global reach.
31. The sub-panel was also impressed by the diversity of the beneficiaries of Classics' impact and by the degree of its significance for those who collaborated, co-created, co-produced or participated in impact activities (as detailed in paragraphs 6 to 15 below). This included engagement with Classics research by some of the most marginalised or underserved individuals and groups, supporting them to achieve significant improvements in their lives and prospects, especially in relation to education, mental health, identity and well-being.
32. Sub-panel 29 is aware that Classics impact is also being achieved by researchers whose units were submitted for assessment to other sub-panels, such as Archaeology, History, English, Modern Languages, Theology and Philosophy. Our comments below, therefore, refer only to a subset of Classics impact activity.

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33. The assessment of impact Sub-panel 29 included one user in discussions throughout the phase in which the criteria and working methods were established. Two users became panel members for the assessment phase, chosen for their expertise in the museum and heritage sectors and secondary education. All impact case studies were initially assessed by a triad made up of one user and two academic sub-panel members, and then discussed by the full sub-panel which took responsibility for the final classification. Further oversight of this process was provided by a user and an international assessor from Main Panel D and by a series of cross-sub-panel calibrations. In rare instances, the Covid-19 pandemic impeded the ability to generate impact, with the postponement or cancellation of events. The sub-panel took careful consideration of the submitted Covid statements in the assessment of such impact case studies, noting what had been achieved rather than penalising perceived absences of activity.
34. The types of impact assessed by Sub-panel 29 were gratifyingly broad and diverse. In addition to the cultural, educational and public engagement impacts highlighted in REF 2014, new and emerging areas of impact as well as pathways to impact were developed by the units submitting in REF 2021. Among the most distinctive of these were impacts on policy, environmental awareness and conservation, sustainable heritage and tourism, Continuing Professional Development, and health and wellbeing (particularly of disadvantaged or marginalised groups). Classics was also able to demonstrate significant economic benefits, especially in relation to the creative industries, heritage, media and publishing. The range of impacts includes:
35. **Education:** (a) Improving and diversifying individual schools' and teachers' methods of teaching (including via PGCE programmes), and injecting new sources of inspiration and creativity for pupils; (b) Growing the uptake of classical subjects and inclusion of classical content in other subjects at school level with benefits for pupils (including those hard-to-reach); (c) Improving and expanding higher education teaching practice (changes to module design, including in disciplines beyond Classics) with benefits for tertiary-level students; (d) Generating educational outcomes outside of formal educational settings (home learning, lifelong learning, museum education); (e) Engaging in professional development (beyond education, heritage & museums) for creative practitioners, mental health practitioners, the military (UK and USA), and prisoners.
36. **Museums, libraries and archives:** (a) Improving curatorial, exhibition and public engagement approaches and practices working in partnership with museums, film archives, galleries, libraries and heritage professionals and organisations; (b) Enabling capacity building, including accessing increased funding (e.g., resourcing of developing practice and digitization); (c) Supporting and expanding meaningful and active public engagement for museum, archive, library and gallery exhibitions and events with associated benefits for visitors and participants.
37. **Heritage and antiquities:** (a) Enabling and implementing the repatriation and recovery of looted heritage; (b) Stimulating legislation concerning the antiquities trade, the practices of auction houses and the practices of academic publishers in relation to cultural objects that are unprovenanced or where provenance is poorly documented; (c) Improving heritage site interpretation with associated benefits for stimulating sustainable tourism; changing policy concerning and management of archaeological/heritage sites, including protection of sites and prevention of damaging development; increasing visitors and/or generating the participation of new communities of visitors and audiences; (d) Building capacity in heritage management, especially in lower-middle and lower-income countries, and/or in countries where heritage is at risk because

of conflict; (e) Improving understanding of local and/or national cultural heritage, enhancing pride in civic or individual identities and deploying heritage to build positive and inclusive identities; (f) Defusing and countering the appropriation and deployment of ancient and classical heritages by extremist groups to fuel social discord and division; (g) Developing interactive games, with benefits for engaging tourists at, or with, heritage sites.

38. **Environment, conservation and sustainability:** (a) Deploying research on ancient and classical societies to implement appropriate conservation measures in a range of different regions and natural environments internationally; (b) Expanding the use of sustainable materials and sustainable practices.
39. **Creative practice:** (a) Underpinning the creation of new cultural artefacts, such as art works, music, and fashion, thereby enriching creativity; (b) Stimulating TV and film commissioning, leading production and/or direction with benefits for cultural understanding; (c) Advising on theatrical productions and participating in the development of new productions with associated benefits for practitioners and audiences.
40. **Economic benefits:** (a) Enabling partner organisations to capture greater revenue or grant funding, including new funding streams, as a result of collaborative activities underpinned by Classics research (such as with performing arts professionals and community heritage groups); (b) Contributing to income generation and increased revenue for creative industries (e.g., television (including production companies), theatre, the games industry, heritage, museums and galleries, cinemas, trade publishing).
41. **Policy, political and cultural diplomacy:** (a) Influencing the development of policy in a number of areas, including the Department of Culture, Media and Sport and the Department of Levelling Up, Housing and Communities (regarding heritage, including planning; UN sustainable development goals; Cultural Protection Fund); the Department for Education (new curricula, schools and training programmes), the UN (UNESCO, Office for Disaster Risk Reduction; Climate Summit); (b) Reaching world leaders (UN Secretary General, US Foreign Secretary) and governments (UK Foreign Office, British embassies, World Economic Forum).
42. **Individual and collective wellbeing, cultural enrichment and cohesion:** (a) Generating personal and community impacts on well-being and cultural understanding; (b) Improving the empowerment of women in public life, educational opportunities for disadvantaged groups; (c) Addressing contemporary challenges for sexual and/or gender identity, religious and ethnic identities, migrants and refugees; (d) Expanding public understanding of the history and legacies of slavery, and the impacts of these legacies on descendent groups. (e) Some of the testimonials for these impacts were very moving.
43. The case studies submitted to Classics demonstrated a very wide and imaginative range of pathways to impact. These included: (a) Digital developments (software, digitisation initiatives, videogames, digital activity packs, online courses and resources for use through Massolit or MOOCS, social media), accessible publications (e.g., guidebooks, comic books, graphic novels); (b) Exhibitions (including co-curation) in a wide range of settings in and beyond museums, guided film screening; (c) Press and media collaboration; (d) Partnership working (e.g., with Classics for All, ACE, British Council, British Museum, U3A, NSPCC, Public Health England, Welsh Assembly, UNESCO, International Union for the Conservation of Nature); (e) Influence on public bodies and charities (such as Historic England, Natural England, English Heritage, Historic

Environment Scotland); (f) Training and best practice guidance; conferences/workshops/ other events; network and community participation (e.g., establishment of volunteering programmes and special interest groups); (g) Practice-based impact (e.g., working with crafts people, artists, actors and musicians).

44. In the best impact case studies: The findings of the underpinning research were described in detail and were connected sufficiently distinctly and materially to the impact claimed. Where there were varied impacts, they supported each other and contributed to enriching the whole. Substantial evidence was clearly presented to demonstrate real, measurable and beneficial change. Testimonials were often used well to document benefit to individuals or organisations and, in the case of professionals, to confirm broader benefits. Good testimonials focused on what participants learned or how their understanding was developed, not just on the pleasure of their experience. Quantitative data (from questionnaires, feedback surveys, online hits, publication statistics, audience numbers etc.) were used effectively. The nature of any engagement with partners/collaborators (including the co-production of research as well as impact activity) was clearly demonstrated. Sustained and close partnerships might limit reach but often appeared to deepen significance. The design of some impact case studies was such as to produce outstanding significance by intense partnership working which could not therefore have large-scale reach in terms of numbers of partners.
45. Weaker case studies did not fulfil their potential because they: (a) listed some underpinning research that did not appear to have any correspondence with impacts claimed; (b) included too many impacts (either of uneven quality or of very diverse types which did not inform, relate clearly to, or enhance each other). This made it very difficult to assess some impact case studies holistically; (c) overclaimed, based on the evidence and/or the narrative that they themselves provided; (d) lacked adequate supporting evidence or data. In some cases, this may have been because HEI researchers were depending on museums and other institutions/partners for data collected on their behalf that did not supply sufficient or specific enough evidence to judge the significance of the impact.
46. The diversity, significance and reach of the impact of Classics research is benefitting users worldwide as well as shaping the discipline in many positive ways.
47. *Democratising Classics*. Impact activities have expanded the reach of the classical world, widening knowledge of and access to it for many new audiences. Legacies of the classical world have influenced many past and present cultures; our impact activities as a discipline have enabled greater and wider understanding of all aspects of those legacies. As the discipline has itself democratised, so too is it serving as a democratising force more broadly. Research on classical cultures, societies and languages have generated impact that improves opportunities for inclusion, for example, understanding of its languages is being used as a tool for advancing literacy, developing social cohesion, and promoting confidence in public speaking.
48. *Decolonising Classics*. Classics research recognises the cultural connections the discipline has historically accumulated and, more recently, stimulated internationally. The provenance and enormous presence of 'classical' material and heritage in post-colonial and conflict/post-conflict contexts across Europe, Africa and Asia highlight our obligation as a discipline to rethink and realign these connections through our impact. Some of our outstanding impact involves engaging with local stakeholders and their diasporas (notably in the Middle East, Europe, Africa, Asia and the Americas) and co-creating with them activities of benefit to their communities and societies.

49. *Deploying Classics*. The impact we assessed in REF 2021 unequivocally demonstrates that Classicists successfully deploy the impact that they generate from their research to address and combat major, pressing social challenges: inequality and exclusion (including from educational opportunities); poverty; sustainability and resilience (especially in relation to environmental change, conservation and endangered heritage); gender, religious and ethnic identities and discrimination; mental health and wellbeing; slavery, colonialism and their legacies (including theft, looting and illegal trade in antiquities and cultural objects); political extremism (countering the appropriation of our subject by extremists to promote hate and division).

Environment

Table 8: Sub-panel 29 average environment sub-profile, weighted by FTE

% 4*	% 3*	% 2*	% 1*	% Unclassified
49.8	41	9.2	0	0

This table shows the average environment sub-profile, weighted by FTE, for Sub-panel 29

50. All environment templates were read by a triad of assessors who reported back in detail to Sub-panel 29. Comments, scores, and feedback for each template were discussed at length and approved by the sub-panel as a whole, which also took responsibility for the final classification. Oversight was provided by an international member of Main Panel D.
51. Environment templates (REF5b) had changed in REF 2021 in that they consisted of only four sections: (1) context and structure, research and impact strategy, (2) People, (3) Income, infrastructure and facilities, and (4) Collaboration and contribution to the research base, economy and society. As a new element, institutional environment templates (REF5a) were submitted for context. In its assessment, the sub-panel focussed primarily on the evidence provided through the submitting units' templates (REF5b) yet took the institutional environment template (REF5a) into account to inform judgements where there were gaps in the narrative or where cross-referral was explicitly indicated in the REF5b text. The environment data reports (REF4a and b) provided context for the relevant sections of the environment templates (primarily on section 2: PGR numbers and 3: income) and informed, but did not determine, grades for these sections. Due attention was also paid to non-HESA income discussed in section 3 but not included in REF4b. The sub-panel received data on the FTE, headcount and ECRs of the submitting units but endeavoured to judge each submission on its own merits. For instance, size was not seen as an unmediated index of sustainability or indeed quality per se, and PGR completion and income per FTE were considered in light of the number of ECRs on the submitting unit's staff. Candour was welcomed, and the acknowledgement of challenges was not regarded as a weakness where it was accompanied by mitigations or a clear strategy for overcoming them.
52. Submitting units did not always find it easy to complete the template following the criteria laid out in the 'Panel criteria and working methods' (paragraphs 346-364) with material sometimes inserted in different sections from those intended. The sub-panel assessed the templates as a whole, taking information into account wherever it was found. However, it could only take into account what was contained in the template and, where templates were poorly written, omissions and lack of detail or clarity could not be

mitigated. In particular, the sub-panel sometimes struggled to find sufficient evidence in support of bold or general claims, or to understand what strategies led to successes achieved.

53. Not all Classics research takes place in the 17 units submitted directly to Sub-panel 29. This overview report, therefore, refers only to a subset of environments that support Classics research and impact activity. While the environments supporting Classics research that Sub-panel 29 assessed were all hosted by research-intensive universities, the sub-panel is aware of a long tradition of excellent Classics research to be found in many diverse HEIs, which, in this REF cycle, included some with no prior history of supporting Classics (see opening and final paragraphs of the Sub-panel 29 report).

i. Unit context and structure, research and impact strategy

54. The submissions provided clear evidence of the general health and vitality of the fields of research covered by Sub-panel 29. The strongest submitting units demonstrated that, and showed how their strategies actively informed their unit structure, recruitment, and research and impact activities. Some weaker statements tended to be more generic or appeared to be devising a strategy retrospectively. In some cases, the sub-panel saw evidence of high-quality activity (outputs, impact, collaborations) which was not, however, noticeably supported by the context in which it was being produced. Research clusters now exist in all submitting units, with some variation as to their formal structure. They enhanced the submitting units' sustainability where they actively promoted internal and external collaboration or benefited from intersections with institutional centres and demonstrated vitality through related workshops, conferences and visiting speakers, as well as publications. Yet, occasionally, research clusters seemed like umbrella headings for contingent rather than strategically organised groupings, raising questions about sustainability even where vitality might be considerable. In some instances, small-sized units clearly enabled an inclusive approach to their research culture, while achieving inclusivity may have been more challenging for larger units. But there was evidence of excellent strategic vision in all sizes of unit. The sub-panel recognised evidence of, and emphasis on, support for individual as well as collaborative research (e.g. through encouragement of applications for fellowships, cross-disciplinary partnerships, or external collaborations). Strong impact strategies included: training for ECRs and PGRs; reducing workloads for those engaged in substantial impact activity; and embedding impact into research activities from the outset. Some submitting units maximised benefits from their HEI's research strategies and provided compelling evidence of how the vitality and sustainability of the unit had been supported by higher level structures, or how the unit had engaged purposefully with this wider framework.
55. Classics is by its nature an interdisciplinary field; consequently, interdisciplinary activity was seen across most statements. Yet it was also noticeable that many submitting units actively promoted interdisciplinary research in a range of different ways: locally, by making it a strategic aim and promoting it within the unit (e.g. through research clusters/centres); within the HEI, through engagement in or leadership of cross-departmental/faculty research centres or themes; or through engagement in national and international groupings of a multi-disciplinary nature.
56. Concern for making research available through open access (OA) was evident in most submissions, however little reference was made to strategies for ensuring research integrity. The OA requirement instated by an increasing number of funding bodies had a noticeable effect, with some projects publishing all their outputs and/or data in OA. The

sub-panel noted that institutionally there were varied levels of financial support for OA publication. Some submitting units clearly went above and beyond requirements and made the promotion of OA publication a strategic goal, for instance through making all research available through institutional repositories, founding and/or leading OA journals, or engaging in and/or leading OA digital humanities initiatives.

57. The sub-panel noted that the post-Covid-19 guidance from REF indicated that accounts of future strategy could be light touch, and it was noticeable that many submitting units had significant, understandable, difficulties in giving shape to their plans when their HEIs have been operating in a highly uncertain context. Yet some units provided clear analyses of challenges and potential ways they intended to address them in the future.

ii. People

58. All submitting units demonstrated at least good, but often excellent or even outstanding, conditions to support the research of their staff. Indicators of how this was achieved included strategic recruitment; workload modelling (providing equity across all staff); provision for training, research mentoring and career development at all career levels; research leave policy. A majority of units reported an increase in staff numbers over the REF cycle. Almost all units demonstrated how they enhanced their sustainability by supporting ECRs in particular, although it was noticeable that some units had not submitted any ECRs. The sub-panel was pleased to see that some submitting units went beyond REF expectations and also offered research mentoring and support to non-permanent and teaching-only staff and integrated them fully within their unit (e.g. including their representation in committees and other unit-wide activities), thus taking account of the fact that many of these staff aim for permanent positions that include research. The sub-panel was slightly concerned that staff entering mid-career often appeared to lose much of the support they had enjoyed previously, and it welcomed strategies that continued to give support to staff at this career stage. Where some research support was provided centrally by the HEI or School/Faculty/College, the most successful submissions explained well how the benefits from these provisions were made to work at a local level. The sub-panel noticed clear differences in the support received by units from their institutions, especially in the form of seed money for research projects and research leave. Although research leave is a crucial element in research support when teaching and administrative loads have increased for research staff in UK HEIs, some HEIs were clearly less generous with their leave policies in terms of the length of service needed to be eligible and/or in terms of competition to obtain it.
59. The sub-panel saw much encouraging evidence of support for PGRs, especially in the provision of training on research methodology, grant capture, interaction and collaboration within and without the HEI, and career development. A majority of units reported an increase in PGR completions compared to REF 2014 beyond what could be expected given the longer REF cycle and there was an overall 11.49% increase from the beginning of the REF cycle up to 2018/19. Within submitting units and institutions, PGRs were mostly well-embedded in their units, often collaborating on research projects and participating in centres, and sometimes sustaining their own research networks. A number of submitting units worked actively to find some financial support for PGRs who had not won research awards, and several took action to prepare PGRs and post-docs for employment within and outside academia (e.g. by offering training and opportunities for teaching or through placement opportunities). There is widespread recognition that the majority of PGRs move on to non-academic positions, and it was encouraging to see evidence of the employability of Classics PGRs within a wide range of professional occupations.

60. Commitment to equality, diversity and inclusion (EDI) was visible in the majority of submissions and, in the best cases, attention to EDI permeated all activities including recruitment and promotion, the make-up of committees, REF submission, and diversification of the PGR community from which future Classics scholars will be recruited. Many submitting units were able to report improvements on gender equality with several reaching gender parity. Yet few units considered EDI beyond gender, by also addressing characteristics such as ethnicity, disability or socio-economic status and offering a range of data on the relative diversity of its staff and PGRs. A minority offered only generic comments on policies and/or failed to address how EDI informed their REF submission (as was expressly requested). Where gender and other imbalances were visible, the sub-panel appreciated the presence of upward trajectories and/or specifics on how the unit intended to address the issue in the future.

iii. Income, infrastructure and facilities

61. Income generation had clearly been a key objective of most submitting units, and many units reported a significant increase in external income since REF 2014 beyond what could be expected given the longer REF cycle up to 2020. The sub-panel noted and welcomed a great diversity of income streams, plenty of imagination in thinking beyond UKRI funds (such as HEI funding, philanthropic donations, non-academic sources) and demonstration that such income was strategically and effectively sought and used. The sub-panel considered that a strategy for spreading grant capture across all stages of career including ECRs, rather than dependency on a few staff, is key to sustainability. Accordingly, the strongest submissions provided evidence for how income generation was pursued strategically and at all career levels, supported by training, internal peer review, mentoring, pump-priming, seed-corn funding, support during the award period etc. Often insufficient articulation of policies and strategy could make success in grant capture appear contingent, raising questions over sustainability. In turn, de facto moderate success rates in grant capture were sometimes mitigated by carefully considered income strategies. The sub-panel observed that large grants are now being won for a wider range of research projects than ever before.

62. Infrastructure varied greatly between submitting units, and the sub-panel was aware that this is arguably the element of the research environment most dependent on central HEI decisions. Yet the sub-panel noted signs of HEI investment in Classics, sometimes quite considerable. The best infrastructure provision included not only a research library, but also university museums and special collections, archives, digital resources or Digital Humanities centres, archaeology labs, and space and resources for research centres at a local level. The strongest submissions did not just list centrally provided infrastructure but demonstrated how submitting units worked with and benefitted from it. Where such provision was more limited, the sub-panel recognised submitting units' initiatives to maximise benefits from similar infrastructure outside their institution.

iv. Collaboration and contribution to the research base, economy and society

63. The sub-panel found collaborations with external researchers often to be one of the strongest elements in a submitting unit's research environment, with most units having extensive links both nationally and internationally, and within and without the HEI sector. Particularly impressive was evidence of increasing engagement with areas outside Europe and North America, including in China and the Far East, South America, and the Middle East. Some units took advantage of staff connections and built on these with a real sense of strategic purpose, assisting more junior staff to enter into networks or to create their own.

64. The sub-panel was gratified to find much excellent work that engaged with diverse communities of non-academic users, which benefitted from the firm hold on the popular imagination that is a persistent strength of Classics. The sub-panel saw excellent work from academics across the discipline in all types of media (tv, radio, print media, blogs and social media). Evidence for engagement with non-academic communities included excellent examples of local and regional partnerships, often involving museum visitors, theatregoers and schoolteachers or students, but also extending to local historians, amateur archaeologists and other groups where there is still potential for more collaboration of this kind. Submitting units differed, however, in their approach to such engagement, and the sub-panel sometimes observed a lot of activity demonstrating vitality in this sector accompanied by little unifying structure or strategy, thus raising questions about sustainability. Moreover, reference to diverse communities or societal benefit was frequently limited or left to the detail contained in the associated impact case studies.
65. Across all submitting units, researchers have been developing and maintaining strong networks that have long existed within the field and Classics as a discipline has for long flourished thanks to individual and collective commitment to, and engagement with, activities supporting the health of the discipline nationally and internationally. Accordingly, the sub-panel saw evidence for such commitment in all submitting units with activities including, but not limited to, sponsoring local, national and international events and conferences, membership or leadership of learned societies, editorial boards, advisory boards, peer reviewing, etc. It was encouraging to see the sustainability of the discipline boosted by the presence of notably more ECRs than in the past in national and international committees (including in leading roles on their boards), although some units relied too heavily on just a few staff playing leadership roles nationally or internationally. The sub-panel was also pleased to see that many units engaged in close partnership with organisations that are promoting Classics and diversifying its beneficiaries, such as Classics for All.

Conclusion

66. Sub-panel 29 has assessed high-quality research that embraces vast sweeps of time (from pre-history to the present), of geography (from the UK and Europe to Africa, Asia and the Americas), of approach (from textual criticism to cognitive psychology), and of primary sources analysed (from pottery to social media networks). This UK-based research is demonstrably in partnership with, and often leads, Classics in the rest of the world and engages with diverse non-academic communities locally and globally.
67. Sub-panel 29 welcomes signs of even greater inclusion of, and support for, PGRs and ECRs in shaping the future of Classics research. However, in relation to EDI, units generally seem better at developing supportive strategies in their engagement with non-academic communities than within their own research environments. More attention to EDI is needed in the recruitment and sustained support of staff, especially as the pandemic will have long-term and unequal effects on their ability to do research.
68. Classics research has clearly expanded during this REF cycle. Staff increases were reported across a majority of the units submitted to Sub-panel 29. It is gratifying to see that medium-sized units have had the opportunity to excel under the revised terms of this exercise and that the vitality of Classics is manifest across all the units that submitted to Sub-panel 29. Equally encouragingly, Classics research can also be found

within more than 20 units that were submitted to other sub-panels by both pre- and post-1992 HEIs.

69. The growth and vitality of Classics is especially impressive given that the circumstances for producing Arts & Humanities research and impact have never been so difficult. The future sustainability of our discipline, however, depends on structural and financial security and support.



Sub-panel 30: Philosophy

1. All sub-panel members have discussed and collectively agreed this report. It should be read alongside the Main Panel D report which contains a description of main and sub-panel working methods and discusses matters of common interest. The academics on the sub-panel represented a range of areas of the discipline and were drawn from a variety of institutions, while the impact assessors covered central areas of impact.

Summary of submissions

2. Philosophy as a discipline in the UK covers a range of fundamental questions, from those which have preoccupied human beings for millennia, to those that are posed by extremely contemporary issues and problems, such as the ethical issues raised by climate change, by AI, and by the rise of social media. Whereas in the past philosophy in the UK was dominated by certain schools, methods or institutions, the discipline now is remarkable for its diversity and openness, demonstrating world class research in a range of areas and employing a range of approaches, often involving collaboration and crossing boundaries. This has allowed various new fields to emerge that approach issues in innovative ways, such as formal epistemology and environmental philosophy, whilst the canon of the history of philosophy has continued to widen. At the same time, the sub-panel also noted and welcomed innovative approaches in more established parts of the discipline. The submissions assessed by the sub-panel showed that it delivers world-leading transformative outputs and outstanding impact across units with a variety of income levels and staff numbers. Philosophers are also collaborating widely throughout the academy, with partners across the sciences, social sciences, and humanities. There is strong evidence that as well as advancing global philosophy research they are shaping approaches and responses, with others, to key global challenges, thereby enhancing research across a range of fields. As a result, UK philosophers are global leaders in numerous areas of philosophy and in key contemporary debates within the discipline and beyond.
3. Of the 35 submissions, 28 were received from English institutions, one from a Northern Irish institution, and six from Scotland. No submissions were made from institutions in Wales, although outputs from Welsh institutions were cross-referred. World-leading research activity in philosophy was found in HEIs in all four devolved administrations of the United Kingdom, and outstanding impact in the case studies from the three devolved administrations that submitted to this sub-panel.
4. The number of submitting units reduced from 40 in REF 2014 to 35 in REF 2021. As there have been no closures in the sector, this cannot be the explanation for the reduction. The pattern of cross-referrals indicates that some institutions put smaller units together and

submitted them into one UOA and then asked for cross-referral along disciplinary lines. It is possible that this was in order to reduce the number of impact case studies which the institution needed to submit, rather than reflecting a concern about submitting to the Philosophy sub-panel.

Table 1: Summary of Submissions

	Number of submissions	Cat A staff FTE	Headcount staff	Research outputs	Double-weighted outputs	Outputs per 1.0 FTE	Impact case studies (ICS)	Staff FTE per ICS
REF 2021	35	692	734	1,707	187	2.46	87	7.95
REF 2014	40	591	641	2,174	107	3.67	101	5.85
% difference	-12.5%	17 %	14.5%	-21.7%	74.8%	-33.0%	-13.9%	35.9%

5. Submission sizes ranged from 105 researchers (98.1 FTE) to five researchers (5.0 FTE). Nine units submitted between 5.0 and 9.99 FTEs, 17 units between 10.0 and 19.99 FTE, four units between 20.0 and 29.99 FTEs, three units between 30.0 and 39.99 FTE and two units more than 70.0 FTE
6. In line with the amendments to submission criteria the sub-panel saw a decrease in the number of outputs submitted per staff FTE in comparison to REF 2014. The total number of outputs assessed by the sub-panel was 1,707.
7. The total HESA recorded income for units submitted in the Philosophy UOA for the REF 2021 period was £97,705,128, which is significantly higher than in REF 2014 (£41,605,000). Given that the census period was seven years for REF 2021 and only five years for REF 2014, an increase in income is to be expected in the overall figure; however, the average annual income increased by an impressive 67.7%, from £8,321,000 in REF 2014, to £13,957,875 in REF 2021. The sub-panel observed a diverse range of funders from national and international sources including Research Councils, British Academy, UK-based and international charities, and government bodies, charities and industry in the EU and beyond. Despite the increased number of staff submitted in REF 2021, annual HESA-recorded income per FTE for Philosophy units increased by 43.1% from £14,080 in 2014 to £20,141 in 2021. This is in contrast to the picture for Main Panel D as a whole where there was a small drop of 3.4% compared to the average income per FTE in 2014.
8. As evidenced by the environment statements, greater levels of institutional support have been put in place to help staff succeed in grant capture. In addition, units are evidencing more robust strategy and planning to enable grant capture and build critical mass in key areas of strength. There is also evidence of greater diversity in the range of funders. While UKRI funding has decreased, philosophers have substantially increased funding from other sources, showing innovation in taking advantage of new and emerging income

funding sources, including international funding streams such as EU funding (for example, average annual income 2013-20 from EU government bodies was £3,651,677). In addition, many awards involve collaborative and interdisciplinary research. The intellectual value and impact achieved as a result of this funding, both within and outside the discipline, was clearly demonstrated.

9. During the REF 2021 period, the number of doctoral degrees awarded has grown to 1,320, compared with 715 in REF 2014. In terms of average doctoral degrees awarded per year, this represents an increase of 32%, from 142.8 completions per year in REF 2014 to 188.5 per year in this REF cycle. There was evidence of high levels of academic and pastoral support for PGR students across the sector. Some units demonstrated innovative support and new models for non-traditional PGR students, thereby improving diversity in the post-graduate philosophy community. There was also evidence of impressive records of academic placement and career progression in some units.
10. The sub-panel noted, as it did in response to REF 2014, that the impact requirement is particularly demanding on staff in very small units. In REF 2021, 9 of the 35 submissions were under 10 FTE. Despite this, a number of these smaller units were able to score highly.

Working Methods

11. In establishing its working methods Sub-panel 30 adhered to the assessment principles and framework adopted across Main Panel D (see paragraphs 23-34 of the Main Panel report) and engaged in the calibration exercises that were conducted both within the sub-panel and then across the main panel (see paragraphs 40 – 47 of the Main Panel report). Sub-panel 30 ensured robust evaluation by careful reading and discussion between sub-panel members and assessors of all outputs, environment templates, and impact case studies. Regarding all three components, assessment was distributed in order to ensure each panellist or assessor shared assessments with a large number of other panellists/assessors in order to maintain a high degree of uniformity in calibration within the sub-panel.
12. Allocation of outputs to readers was made on the basis of expertise, avoiding conflicts of interest, and also taking into account the desirability of discussion regarding quality among a wide variety of readers to ensure uniformity of calibration. Allocation methods were in line with Main Panel working methods outlined in paragraphs 28 – 30 of the main panel report.
13. The sub-panel paid particular attention to the need to avoid implicit biases in all of its assessments. The sub-panel developed a Fairness in REF Intention Plan to assist in this regard, which was also helpful in encouraging assumptions to be challenged.
14. The table below shows the average profiles for each element of the assessment, weighted by FTE, for Sub-panel 30.

Table 2: UOA average profiles

	% 4*	% 3*	% 2*	% 1*	% Unclassified
Overall	40	41	17	2	0
Output	36.6	43.4	18.8	1.1	0.1
Impact	41.9	36.4	16.9	3.0	1.8
Environment	46.9	44.4	8.2	0.5	0.0

15. The overall profile for Sub-panel 30 showed that 81% of research activity (outputs, impact, and environment) was judged to be world-leading or internationally excellent. This outcome reflects the strength of philosophy in the UK, which is widely recognised and acknowledged. Philosophy units have continued to produce research with impressive levels of impact, across numerous impact types. The results for environment show how this success is underpinned by units which generally have effective strategies and structures in place to support staff in their research activities. The sub-panel also noted that collaborations beyond academia and with other disciplines was widely embedded across the sub-disciplines in philosophy and evidenced in many sub-profiles in co-authorship, collaborative grants, and impact case studies.

Outputs

16. The table below shows the average output sub-profile, weighted by FTE, for Sub-panel 30.

Table 3: UOA average outputs sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
36.6	43.4	18.8	1.1	0.1

17. In REF 2021, 80% of outputs submitted to UOA 30 were judged to be world-leading or internationally excellent. This compares to 77.6% of outputs for Main Panel D as a whole.

18. The sub-panel found excellent research in all sub-disciplines of philosophy and across a range of disciplinary approaches. It noted the continuing strength and vibrancy of traditional, long-established, core areas of philosophy. It also observed and welcomed the emergence of the field of formal epistemology, and the increase in submissions in feminist philosophy, environmental philosophy, moral psychology, philosophy of the emotions, philosophy of health, philosophy of AI and technology.

19. Interdisciplinary research is strong, with philosophers making connections with research in many disciplines including psychology, biology, computer science, physics, and other sciences, classics, literature, politics, law, among others. Many outputs submitted to other sub-panels were cross-referred to Sub-panel 30 (see tables 6 and 7 for details), showing that philosophers or those carrying out research in philosophy are often located in other disciplinary units or in interdisciplinary units. Philosophy submissions also demonstrated a range of methodologies, and an engagement with research internationally, though the vast majority of submissions were in English. The use of the IDR flag by HEIs was not adopted consistently across the submission, perhaps because

submitting units were not certain how the flag would be used; as a result, no useful data was gained from the flagging process.

20. Co-authored publications were widespread across submissions and were assessed identically to single-authored outputs. The quality of both types of publication was judged broadly equivalent in terms of the scores for world-leading and internationally excellent research.

Output types assessed

Table 4: Output types

Output type	% of assessed outputs
A – Authored book	15.92%
B – Edited book	0.79%
C – Chapter in book	14.14%
D – Journal article	68.42%
E – Conference contribution	0.07%
N – Research report for external body	0.20%
R – Scholarly edition	0.07%
T – Other	0.07%
U – Working paper	0.26%
V – Translation	0.07%

21. The journal article remains the principal output type, increasing as a proportion of output types assessed by from 59.1% in 2014 to 68.42% in REF 2021. At 15.92%, the proportion of monographs was broadly similar to 2014 (15.7%); but there was a significant decrease in the proportion of book chapters, down from 22.4% in REF 2014 to 14.14% in the REF 2021. World-leading research was evident across the submission, with longer-form outputs which allow original and significant arguments to be developed at length and in depth often performing strongly. Short and less in-depth outputs tended to do less well, perhaps because lack of space available to authors can mean that their contribution is necessarily narrower and more modest. Some book chapters were found to be lower in originality and significance, which may reflect the fact that papers in collections can sometimes be commissioned for relatively limited purposes. World-leading work was found in all areas of philosophical research and was produced by philosophers at all career levels.

22. Small numbers of other output types were submitted, including translations and scholarly editions, and these were welcomed by the sub-panel.

23. Outputs were judged entirely on the merits of their content and without regard to the perceived prestige rankings of journals or other external indicators of quality. REF quality was determined wholly in the light of the REF criteria, with the majority of work deemed rigorous in the sub-disciplines of philosophy, and the highest scores attained for work of clear originality and significance, for example, in terms of breaking new ground and opening up new debates.

24. It was observed that there was no clear correlation between quality of output and the perceived prestige of the place of publication: outputs judged to be world-leading on reading and discussion by sub-panel members appeared across the range of journals, from those conventionally judged high prestige to lower prestige journals. Some outputs appearing in high-ranking journals in the discipline were judged to fall short of internationally excellent and world leading quality by the sub-panel, for example by adding only incrementally to philosophical debates. Analogous observations were made with regard to monographs or book chapters and the perceived prestige of publishers.
25. World-leading work was found across journal-types, including specialist journals and journals not in main-stream philosophy; and world-leading monographs were published by non-traditional and trade presses, as well as long established university presses.
26. This outcome is taken by the sub-panel to confirm the necessity for panel members to read outputs in order to assess quality robustly. This again shows, as it did in REF 2014, that units should be guided by the REF criteria of assessment, particularly by the originality and significance of the research itself, which is essential for attaining the highest scores, rather than the place of publication or the perceived relative standing of the sub-areas of philosophy.

Table 5: Double-weighting requests

Research outputs	Outputs with request for double-weighting	Double-weighting requests approved
1,703	187 (10.89% of outputs)	184 (98.4% of requests)

27. Almost all requests for double-weighting were approved. Most accepted requests (but not all) were for monographs. Double-weighted outputs formed a larger proportion of the total number of outputs compared to 2014 (up from fewer than 5% to 10%). Such outputs were more frequently judged to be of world-leading quality than single-weighted outputs. In some cases, units appear to have been reluctant to double-weight outputs but, had they done so, they would have scored better overall. Units that scored highly generally applied double-weighting to their advantage.

Cross-referrals and joint assessment

28. Sub-panel 30 received a total of 41 outputs through cross-referral; all of these came from sub-panels within Main Panel D. Sub-panel 30 requested advice on 60 outputs, the majority of these were cross-referred within Main Panel D. The table below details the cross-referrals into and out of Sub-panel 30.

Table 6: Cross-referrals

Cross-referrals out to other sub-panels			Cross-referrals in from other sub-panels		
Within MPD	Outside MPD	Total out	From within MPD	From outside MPD	Total in
50	10	60	41	0	41

29. The sub-panel undertook joint assessment of 18 outputs. The table below summarises the outputs jointly assessed by Sub-panel 30 with sub-panels within Main Panel D, and between Sub-panel 30 and sub-panels in other main panels.

Table 7: Joint assessment

Outputs jointly assessed with other sub-panels		
Within MPD	Outside MPD	Total
11	7	18

30. The sub-panel received advice from members of other sub-panels for 69 outputs, either through cross-referral or joint assessment. Cross-referrals and joint assessments took place with 20 different sub-panels across the four main panels, the largest set of cross-referred outputs going to Sub-panel 28 (History).

31. The sub-panel gave advice on 50 outputs submitted to 13 other sub-panels, with the largest sets of cross-referrals coming from Sub-panel 27 (English Language and Literature), Sub-panel 28 (History), and Sub-panel 34 (Communication, Cultural and Media Studies, Library and Information Management).

Impact

32. A total of 87 impact case studies were submitted to Sub-panel 30. The number of impact case studies per submission ranged from two to eight. The average FTE per case study ranged from 2.5 FTE in the smallest submission to 12.26 FTE per case study in the largest. A very small proportion of impact was scored as unclassified; this classification was due to failure to meet the threshold criteria for the underpinning research.

33. The table below shows the average impact sub-profile, weighted by FTE, for Sub-panel 30.

Table 8: UOA average impact sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
41.9	36.4	16.9	3.0	1.8

34. The sub-panel benefitted from the contributions of three user members who were involved in all aspects of the impact assessment and attended all meetings where impact was discussed. The user members brought valuable expertise in judging the quality of the impact of research beyond academia. Impact assessors came from sectors where philosophy has demonstrable impact, including medicine, public engagement, overseas development, and government bodies.

35. As a discipline, philosophy demonstrated its capacity to generate impact at a high level, with over three-quarters of its research judged as attaining outstanding or very considerable impacts in terms of its reach and significance. Changes in the exercise make direct comparisons with REF 2014 impossible, but assessors with experience of 2014 (including two of the three impact assessors) were strongly of the impression that overall, the quality of the cases and their presentation had shown improvement since the previous exercise. Improvement was noted in the reach and significance of the impact case studies, evidenced by the extent of partnerships and collaborations which

formed pathways to impact, and which are often long-standing and embedded in the research of individuals and the strategies of units. It was also agreed that the more structured impact template used in REF 2021 had improved the presentation of case studies as had the introduction of Annex A to provide examples of impact types and evidence of these types.

36. The sub-panel was impressed by the breadth of the range of impact types evidenced across a wide variety of social and cultural contexts. High-quality philosophical research generated an impressive array of interventions beyond the academy, leading to genuine change. The submissions demonstrated the ability of philosophy to contribute to a range of beneficiaries, running from members of the public through to private institutions, professional organisations, cultural bodies, and government agencies. A number of case studies showed international reach in areas such as environmental policy, product design, intellectual property rights, educational practices, and health care.
37. Areas demonstrating well-evidenced, high-quality impact from philosophy, in terms of reach and significance, included the following:

Public policy and practices

- influencing policy and practice on the evaluation of the effectiveness of interventions in the areas of international development, climate change, education, child protection, policing, and risk-management, through work with government departments and agencies, educational providers, and child-protection agencies in the UK and abroad.
- contributing to the development of new policies and practices in the regulation of print media in collaboration with media regulators.
- contributing to the development of standards and policies across the financial sector.
- informing the development and introduction of new national ethical guidelines for AI and data science, through membership of and/or advice to governmental and non-governmental bodies.
- developing and delivering training for legal bodies, health professionals and social workers, and professionals in the financial sector.

Health and wellbeing

- influencing the evaluation of the effectiveness of health interventions both in the UK and globally by working with government and national agencies to create new standards for evidence-based assessments.
- contributing to the introduction of new policies and guidelines by the World Health Organization, by NICE in the UK, and by national bodies in a number of other countries.
- helping to establish new ethical and evidential standards for the evaluation of health interventions during health emergencies, via work with the WHO and national organizations.
- shaping NHS policy on the use of confidential data, through collaborative work with a range of partners with direct impacts for patients, regulators and healthcare professionals in hospitals, primary care and public health.
- changing regulations and professional guidelines on physical and mental health care practices with impacts benefiting patients, healthcare professionals and public awareness on topics including donor conception, psychiatric care, and palliative care.

Finance

- informing government policy on insurance, banking standards and financial services.
- influencing economic policies for a range of public bodies in the UK and beyond.
- improving decision-making and risk-assessment leading to enhanced problem solving.
- working with business and industries on the development of commercial products.

Cultural life and public understanding

- contributing to public understanding of the arts, and of the history of philosophy.
- enhancing public debate and awareness concerning a range of key contemporary social issues including issues of race, gender and identity, through public engagement, educational initiatives, mentoring the media, and other approaches.
- contributing to public understanding of emotional and mental health conditions.
- developing and deepening the public understanding of ethical issues, including in healthcare, business, education, and social and economic justice.

Observations on quality of submitted impact case studies

38. The sub-panel noted that in most cases impact on governmental or international policy was particularly well evidenced and presented. There were some cases where changes to public understanding needed more evidencing, as dissemination and engagement activities were described without making an adequate case for resulting impact. The most convincing case studies drew upon a range of evidence types and sources to demonstrate the significance of impacts claimed. The sub-panel sought to recognise the value of all types of impact, and to consider evidence that was appropriate to the impact type.
39. The most successful case studies clearly evidenced the change in the world which had resulted from the research. They unambiguously set out the impact, describing the type of impact and the beneficiaries, with all claims supported by evidence which was appropriate to the impact type. Where quantitative data was used, this was properly explained and contextualised. Likewise, testimonials were properly integrated into the narrative, and were used to explain the change involved, and not just to make positive endorsements. The best case studies also established a clear causal link between the underpinning research and the impacts claimed.
40. Some case studies would have benefitted from a better demonstration of how dissemination had led to the impact claimed, a clearer description of the nature of the change for beneficiaries, and more appropriate evidence as to the impact type claimed. Less successful case studies presented activities with the potential to generate impact, but failed to describe or evidence the resulting change convincingly.
41. The sub-panel observed that many case studies were built on deep relationships with beneficiaries and a commitment to building partnerships outside academia. Nonetheless, impressive impact was demonstrated not only by case studies that were based on long-established collaborations, but also by those that had been developed more recently. Some projects with major external funding achieved impact with considerable reach and significance, while in other cases, by contrast, outstanding impact emerged from QR-funded research.
42. A small number of case studies were accompanied by a statement detailing disruption to the achievement of planned impacts and/or the collection of key corroborating evidence caused by the Covid-19 pandemic. Where supplied, the sub-panel took account of statements and assessed impact achieved during the assessment period.

Environment

43. Overall, the sub-panel was impressed by the environment created by philosophy units, and saw a clear link between this and the quality of outputs and impact. There was excellent evidence of vitality in the form of staff growth, significant and widespread grant capture leading to imaginative research projects, flourishing PGR programmes, and national and international collaborations. Sustainability was evidenced by well-conceived strategies and effective policies for supporting staff and their research, while many staff made significant contributions to the strength of the discipline.
44. The table below shows the average environment sub-profile, weighted by FTE, for Sub-panel 30.

Table 9: UOA average environment sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
46.9	44.4	8.2	0.5	0.0

45. The sub-panel noted the following in relation to the individual sections of the environment statement:

i. Unit context and structure, research and impact strategy

46. Many units were able to demonstrate a clear strategy that related well to the structure of the unit, as well as its past record and future plans. Some (mostly larger) units showed they covered the range of philosophical fields, whilst other (mostly smaller) units focused on more specific areas; both strategies were welcomed by the sub-panel. Likewise, there was variation in the use of research groups and clusters, where different models were shown to work. While some units evidenced their commitment to open research, and most mentioned research integrity, in general these aspects of this section were treated rather cursorily in most statements.

ii. People

47. Overall, the submissions showed that there is a clear commitment to staff recruitment, welfare, progression and EDI issues across the discipline, though there is some variation in the support and internal funding offered for research, and in how far units have got in achieving diversity. The view of the sub-panel is that QR funded research leave is of great importance for a healthy research environment. There was also clearly a commitment to the PGR communities, though the size of PGR communities varies greatly, from 0.6 research degrees per FTE to 4.2; but all units recognised the value of PGRs to their research activities, and made attempts to integrate them as much as possible.
48. The panel looked for strong evidence of good practice as regards policies for promoting EDI, and was pleased to find it in a good number of submissions. The treatment of ECRs, including fixed-term staff, was also held to be important evidence regarding a supportive research environment. The best practice evidenced in both these respects could usefully be extended to all units. It was also noted that the SWIP/BPA good practice guide had had a positive influence on many units, but there was a need to extend this approach to other forms of inequality. While some units commented adequately on the role of EDI issues in their selection of outputs for submission to REF, more information and reflection on this issue would have been welcomed by the sub-panel.

iii. Income, infrastructure and facilities

49. As noted in paragraph 7, across the discipline there has been a substantial increase in research funding, though there is also considerable variation between units, from £1,872 per FTE to £46,494 annually. The strongest environment statements showed evidence of high levels of funding and of a culture of grant-seeking, with a good spread of funding across staff, research areas, and funders. As evidenced in the HESA data, Philosophy has shown particular strength in less traditional funding streams for the discipline such as EU funding and international charities. The submissions generally demonstrated that units are supported in their research by the necessary levels of infrastructure and facilities.

iv. Collaboration and contribution to the research base, economy and society

50. Considerable evidence was provided of the often collaborative and interdisciplinary nature of philosophical research, and of how staff are committing themselves to a wide range of activities that contribute to society through impact and through public engagement, as well as to activities that contribute significantly to the health of the discipline.

Observations on quality of submitted environment templates

51. Submissions varied in how well they articulated their position in the document. The stronger submissions made full use of the published guidance and addressed the points in the template. In the weaker submissions, claims were left vague and insufficiently evidenced, and some of the requested information was not provided. Some documents could have been improved in the following ways:

- a clearer articulation of overall strategy, which conveyed the work and future aims of the unit in a clear and factual way.
- use of relevant data to articulate the position of the unit, particularly in relation to EDI, staff progression, and PGR numbers.
- clearer presentation of income, and more detailed accounts of how it gave rise to the resulting research.
- an account of the approach to collaboration and contribution to society and the discipline which went beyond listing activities, and also showed how widely this involved the whole unit.

52. The sub-panel noted that one form of clear evidence of a high-quality environment for PGR students is a good record of placement of PGR graduates in jobs both within and beyond academia.

53. Some units submitted outputs from scholars on 0.2 – 0.29 FTE contracts who are based overseas. There was clear evidence that such scholars were able to make valuable contributions to the research environment. However, in some cases evidence was insufficient to establish that the relevant scholars had a substantive connection with the submitting unit; those staff were considered ineligible and removed from the submission along with outputs attributed to them.

Overview

54. Based on the strong results for the discipline, and their extensive reading of material, the sub-panel was able to conclude from the REF 2021 exercise that Philosophy in the UK produces outstanding research, much of which is often relevant beyond academia, and thus that the discipline continues to uphold its global standing. The best outputs demonstrated adventurous and agenda-setting research, which was found in units across different sizes, parts of the country, and disciplinary specialisms. Impact case studies revealed the distinct and influential contribution of philosophy to thinking and practices on a wide range of important issues – for example, healthcare and social policy, and the implications of technological advance. Equally, environment statements showed these initiatives are generally well-supported by units, and that staff take seriously the need to contribute to the health of the discipline, while planning creatively for the future. Thus, despite the challenges faced in the sector over this period, the outcome of REF 2021 shows that the discipline has successfully increased and enhanced its high levels of national and international research excellence.



Sub-panel 31: Theology and Religious Studies

Overview and summary of submissions

1. All sub-panel members discussed and collectively agreed this report, and it should be read alongside the Main Panel D (MPD) overview report which contains a description of main and sub-panel working methods and discusses matters of common interest. Our sub-panel found renewed evidence through this exercise of the vital contribution that research in Theology and Religious Studies is making within the wider research landscape of UK higher education. Religion – broadly understood - has been an integral part of human cultures and societies, shaping knowledge, moral traditions, social institutions and collective rituals, and has been deeply inter-twined in processes of social change, cultural creativity and conflict. Research that we assessed on the nature of religious traditions, practice and texts – and the lives and communities formed in relation to them – is making a significant contribution both to understanding the past and social, cultural and geo-political processes in the contemporary world. This research is also providing an essential space for thinking critically about key issues of existence, personhood, community and society from within the conceptual and moral frameworks of a range of religious traditions.
2. Research in Theology and Religious Studies is also making an essential contribution in building religious literacy. This is important not only for strengthening public understanding of the nature and significance of religion across the world, but for enabling better informed public policy and professional practice. As the place of religious organisations, beliefs and practices in wider society continues to be contested in relation to principles of free speech, rights, equality and the (post)secular public sphere, academic research in these fields is providing concepts and substantive knowledge to enable more nuanced debate.

3. Academic research in Theology and Religious Studies is enabling members of religious communities to find new ways of understanding and engaging with their traditions in ways that are providing richer understanding of their past, greater critical engagement with texts, practices and ideas, and new forms of religious thinking that support sustainable, inclusive and just societies. It is also helping members of different religious communities to understand points of connection and difference between their traditions in ways that can support constructive and respectful dialogue and thoughtful engagement with wider society.
4. Throughout this exercise, we have seen outstanding evidence of the ability of research in Theology and Religious Studies to produce transformative knowledge not just for academic researchers, but for the social, cultural and emotional well-being of individuals and communities. Beneficiaries of this work include individuals and communities who might otherwise be vulnerable either to harmful expressions of religious life, or to misunderstanding or mischaracterisation of religious beliefs and lives in public policy, organisational practice and public debate.
5. This exercise has again demonstrated the intellectual, social and cultural importance of sustaining research excellence in this subject area. Conducting such research with the highest standards of rigour demands considerable subject knowledge, specialist training in relevant conceptual approaches and debates, and sophisticated linguistic and methodological competences. It is best sustained by academic units with specialist expertise in the study of Theology and Religion which often provide significant added value through enabling inter-disciplinary and multi-disciplinary engagement between scholars with shared experience in this field. Given the benefits of this work, it is of clear strategic importance to the research profile of UK higher education that such specialist units are maintained in the future.
6. Key data for submissions to our sub-panel, compared to submissions to UOA 33 Theology and Religious Studies in REF 2014, were as follows:

Table 1: Key submission data to UOA 31, compared to that for UOA 33 Theology and Religious Studies in 2014

	Number of submissions	Cat A staff (by FTE)	Outputs submitted	Double-weighting requests	Case studies submitted	Doctoral degrees awarded	Total research income (£m)
REF 2021	31	505.12	1,247	300	74	1,737	58.03
REF 2014	33	413	1,562	112	78	1,310	27.32

Table 2: Sub-panel 31 average weighted profiles

	% 4*	% 3*	% 2*	% 1*	% Unclassified
Overall	38	41	19	2	0
Output	33.9	43.4	21	1.5	0.2
Impact	44.6	37.9	15.5	2	0
Environment	47.1	38.1	12.7	2.1	0

This table shows the average for each element, weighted by FTE, for Sub-panel 31

7. Of the 31 submissions that we received, 27 were from institutions in England, three from institutions in Scotland, one from an institution in Wales and none from institutions in Northern Ireland. The staff size of submitted units ranged from 55.2 to 3 FTE. The headcount for Category A submitted staff was 550, of whom 74 were early career researchers. Average doctoral degrees awarded by submitted staff FTE was 3.41, and the average annual research income per submitted staff FTE was £16,412. The average number of impact case studies per submission was 2.39, and the number of staff FTE per impact case study in each submitted unit ranged from 1.5 to 11.35. The 'Guidance on submissions' for REF 2021 allowed for joint submissions between two or more institutions, but we received no submissions of this kind. If a similar research evaluation exercise is undertaken in the future, there could be scope for considering whether joint submissions based on stronger research collaborations between some units in our subject area might be beneficial.
8. We recognised valuable work being undertaken in all submitted units. There was a considerable range of institutional and unit missions, histories, contexts and sub-disciplinary approaches evident across them. Submissions were made both from units focused on well-established sub-fields in Theology and Religious Studies as well as multi-disciplinary submissions which drew on other humanities and social science disciplines (including Philosophy, History, Politics, Classics and Archaeology). We saw great value in the diversity of units working in our subject area and undertook our assessment work in ways that would identify evidence of excellence fairly across all of these. Outputs, impact case studies and environment statements were allocated through the process described in the Main Panel D report (paragraphs 28 - 30), in such a way as to ensure fair and rigorous grading according to the REF criteria, and any conflicts of interest within the sub-panel were addressed according to the process described in the Main Panel D report (paragraph 31). As a sub-panel, we collectively developed a bias mitigation plan, and revisited this at all of our assessment meetings to ensure that any possible bias could be identified and challenged. We reviewed all Covid statements submitted in relation to outputs, environment and impact case studies and used these to inform our assessment decisions in accordance with the principles set out in the 'Guidance on revisions to REF 2021' (REF2020/02) document.
9. The majority of submissions to our sub-panel were from units with less than 20 FTE staff and there were numerous examples of units of this size performing at the highest levels. The relative distribution of staff across submissions meant that a small number of units made up a significant proportion of all staff submitted to our sub-panel – with the five largest units making up 42% (by FTE) of all submitted staff. An explanation has been given

in the accompanying main panel report on how sub-panel profiles published by the REF are calculated to give proportionate weight to the grades of individual units according to their size (see paragraph 4 in the main panel report).

10. Given that nearly half of all staff (by FTE) submitted to our sub-panel were based in a small number of larger units, the performance of these larger units had particular weight in the final profiles for our sub-panel. The grade profiles of some of these larger submissions contributed to our sub-panel profile in the highest grade band being slightly lower than the Main Panel D average for both outputs and impact. As will become clear in this report, there was no straightforward correlation between the size of a unit and its grade profile. Instead, grade profiles achieved by units reflected a more complex inter-play between the quality of work of individuals and groups, the degree of focus and strategic planning within the unit, and the wider institutional resource and support provided to a unit.

Outputs

11. Our sub-panel profile for outputs was as follows:

Table 3: UOA average profiles

	% 4*	% 3*	% 2*	% 1*	% Unclassified
REF 2021	33.9%	43.4%	21.0%	1.5%	0.2%

12. The relative proportion of output types assessed by our sub-panel was as follows:

Table 4: number and proportion of output types assessed by Sub-panel 31

Output type	Number of assessed outputs	% of assessed outputs
Authored Book	384	40%
Edited Book	39	4%
Chapter in Book	201	21%
Journal Article	304	32%
Other output types	27	3%
Total	955	100%

13. In our assessment of outputs, we were impressed by the breadth, vitality and versatility of research across our subject area. We found examples of world-leading research across all of the sub-fields of Theology and Religious Studies, including archaeological, ethical, historical, linguistic, philosophical, social-scientific, textual and theological fields of study. World-leading research was found in scholarship across the full range of traditions and communities studied in our subject area as well as on the intersections between religion and education, law, politics, health, welfare and international development. We also noted outstanding work in fields beyond traditional or

institutional religion, including work on non-religion, therapeutic and existential cultures, and religious dimensions of culture and society. We found clear evidence of strength in research on global religion, including on issues of religious diaspora and migration, as well as outstanding research on religion in Africa, North and Latin America, the Middle-East, and Asia. In addition to a substantial body of outstanding work in well-established fields of study such as languages, texts and religious thought, belief and practice, we also found work of the highest quality in the study of embodiment, emotion, material and visual cultures, practice, space and a range of forms of media and cultural production. A range of outstanding work was also found in scholarship on the 'non-human', including on animals, climate change and environmentalism, the post-human and technology, with clear evidence of work in our subject area making important contributions to the wider field of environmental humanities. Alongside the continued strength of well-established approaches to study, we were also pleased to see evidence of critical, often multi- or inter-disciplinary approaches, including in relation to gender, race and sexuality, becoming part of the mainstream of our subject area.

14. We received requests for double-weighting for 24% of the outputs submitted to our sub-panel. Approval was given to 97% of double-weighting requests. Requests were refused when insufficient evidence was provided of sufficient research effort to justify double-weighting. In a small number of cases, this included books which, despite being longer-form outputs, demonstrated comparatively little original research. We were pleased to see double-weighting requests generally being used more consistently across submissions than was the case in REF 2014. Double-weighting of an output should not be assumed to be an indicator of quality and we saw a number of examples of double-weighted outputs which received lower grades. However, outputs for which double-weighting requests were made did tend on average to receive slightly higher grades.
15. We undertook our assessment entirely, and only, according to the criteria set out in the REF 'Panel criteria and working methods'. Outputs were assessed on the merits of their content, with no quality judgments being made on the basis of the output type, publisher or the standing of the author. World-leading outputs were produced by scholars at all career stages in our subject area, and it was particularly encouraging for the future of our subject that a large number of outstanding outputs were submitted by early career researchers. This may raise questions for submitting institutions about how the strong research trajectories of early career researchers can be sustained as they move towards mid-career. Conversely, we also found a small but notable range of outputs submitted by senior colleagues which received lower grades. For any future REF exercise, we would again encourage submitting institutions to base their evaluations of outputs for submission entirely on the merits of an individual output itself in relation to the published assessment criteria.
16. The inherently inter- and multi-disciplinary nature of Theology and Religious Studies meant that most outputs flagged as inter-disciplinary were able to be assessed within our sub-panel. Where we lacked relevant expertise to grade a specific output, these were cross-referred to other sub-panels. Outputs requiring linguistic competence not available within our sub-panel were assessed through use of cross-referral or specialist advisers. We cross-referred a total of 51 outputs out to other sub-panels and received 37 outputs cross-referred into the sub-panel (as set out in table 5). We reviewed grades and feedback for outputs which we cross-referred out to other sub-panels and on the basis of these checks have a high degree of confidence that these were assessed to the same standards used in our own sub-panel grading.

Table 5: Cross-referrals (and joint assessment)

Sub-panel	Number of outputs cross-referred into sub-panel*	Number of outputs cross-referred out of sub-panel*
4 (Psychology, Psychiatry and Neuroscience)		2
11 (Computer Science and Informatics)		1
15 (Archaeology)		3
18 (Law)		1
19 (Politics and International Studies)		6
20 (Social Work and Social Policy)		1
22 (Anthropology and Development Studies)		1
23 (Education)	1	
25 (Area Studies)	5	19
26 (Modern Languages and Linguistics)		1
27 (English Language and Literature)	1	
28 (History)	29	
29 (Classics)	1	11
30 (Philosophy)		2
33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies)		3
Total	37	51

*This data is based on assessed outputs with double-weighted outputs counting as only one output.

17. Interdisciplinary research (IDR) was a standing item on all meeting agendas, and we received regular updates and guidance from the sub-panel's IDR adviser. While the sub-panel noted a considerable variation in the ways in which institutions had used IDR flags at the point of submission, all outputs were subject to a review of their inter-disciplinary status at the point of assessment. Our sub-panel members were encouraged to include a note on the inter-disciplinary status of outputs at the point of review, which served as a helpful aid to monitoring the extent and nature of inter-disciplinary submissions overall. We judged that around 10% of outputs submitted to our sub-panel constituted inter-disciplinary research, and found no evidence of any notable variation in grading for these compared to outputs produced within single disciplines.
18. We found examples of world-leading research across all of the types of outputs submitted to our sub-panel. We found most examples of world-leading research in authored books, where the longer-form of the output had been used very effectively to produce work which demonstrated levels of rigour, originality and significance that made the output a primary point of reference on that subject. However, a significant proportion of authored books that we assessed were found to be internationally excellent or internationally recognised in quality. The longer-form of the output was not so effectively used in books which were primarily a cumulative summary of existing

knowledge, lacked clarity in their aims and argument or attempted ambitious intellectual projects which were weakened by the work's lack of rigour or superficial use of source material. It should not be assumed that a particular output form will necessarily receive higher grades.

19. Edited books provided strong evidence of outstanding research when they had been effectively curated by editors to produce a primary point of reference on a particular text, thinker or phenomenon. In many such cases, the contributions of multiple authors had been effectively structured to engage with clearly identified research questions, or to advance a particular research agenda, in ways where the value of this work extended beyond what could have been achieved by a single author. Similarly, edited books received higher grades when the focus, aims and substantial contributions of the project were clearly articulated and contextualised. The research contribution of this editorial work was sometimes clearly set out in additional statements submitted with the output, but often made clear through substantial introductory or concluding chapters in the edited volume itself. By contrast, edited books achieved lower grades when the research element of the editorial work was less clear and their content was loosely structured around a common focus in ways that did not generate well-defined or transformative contributions to knowledge. Some forms of edited books, such as collections of conference papers or Festschriften often seemed less well-focused in this regard.
20. From consultations undertaken during the criteria-setting phase of this exercise, we were aware of some perceptions in submitting institutions that particular output types were unlikely to receive high grades. It is worth noting in relation to this that we assessed a number of textual commentaries, scholarly editions, dictionaries, grammars and translations which were graded as world-leading. Outputs of this kind which received the highest grades were usually characterised by outstanding standards of rigour and demonstrated a sophisticated grasp of linguistic, textual and translational approaches to their subject. Textual commentaries scored less well where the originality and significance of their contribution to their field was weaker, but were graded as world-leading when they produced transformative new insights or approaches, or demonstrated a depth of knowledge on the text which would make the work a primary point of reference.
21. We received a very small number of outputs which were graded as unclassified because we judged them not to meet the REF definition of research.
22. It is important to recognise the considerable demands of producing a world-leading research output and to have realistic expectations of the capacity of individual researchers to produce multiple outputs of this standard over a single REF cycle. This is particularly the case as the most common practice in our subject – as with many other humanities disciplines across Main Panel D – remains single rather than multi-authored publication. The outcomes of our assessment demonstrated that some caution should be exercised in relation to the notion of 'research stars' consistently producing work of world-leading quality. Levels of research productivity will take different trajectories for individual researchers reflecting both their personal and institutional circumstances and the nature and evolution of their work. We found it encouraging for the vitality and sustainability of our subject area that world-leading research was produced for this exercise by more than a third of all submitted authors, distributed across all our sub-fields. We recognise the importance of HEIs being able to provide research environments to nurture and enable this research capacity in the future. Bearing these points in mind, considerable caution should also be taken by institutions in the future

in assuming any correlation between the number of outputs from an individual author submitted to this exercise and the quality of their work.

23. We appreciated the considerable work that HEIs had put into making these submissions. There were some instances, though, in which the quality of additional information on outputs provided by institutions could have been stronger. Whilst most double-weighting requests made a clear case with reference to the relevant criteria, some were very brief and gave little helpful information. In the latter cases, we were generally able to form our own view of the suitability of double-weighting by looking at the output itself, but our process would have been helped by clearer justifications provided by submitting institutions. Additional information on the research component of the editorial work for an edited book or scholarly edition also varied in quality. In some cases, usually characterising higher scoring outputs, a clear and substantial explanation of the research contribution of this editorial work was provided – and was also usually provided in the text of the output itself. In other cases, sometimes characteristic of lower scoring outputs, additional output information failed to provide any explanation of the distinctive research elements beyond normal editorial responsibilities. Where the text of edited books also failed to explain any research elements to this editorial work, these outputs were then assessed only on the basis of the content directly written by the submitting author.
24. We did find some cases of textual overlap either between outputs submitted by the same author to this exercise, or between an output submitted to this exercise with material published by the same author before this REF cycle. Where necessary, we adjusted grades for these outputs in accordance with the principles set out in the REF ‘Guidance on submissions’. For any future exercise we would encourage HEIs proactively to identify any such overlap when making their submissions.

Impact

25. Our sub-panel profile for impact was as follows:

Table 6: Impact sub-profile for UOA 31

% 4*	% 3*	% 2*	% 1*	% Unclassified
44.6	37.9	15.5	2	0

26. The increase in impact graded outstanding for our sub-panel in this exercise closely matches the average increase for Main Panel D as a whole compared to REF 2014. Whilst exercising some caution in drawing strong inferences from this comparison, our general impression was that this increase in the proportion of impact graded outstanding reflected improved planning, resourcing and recording of impact work in a number of institutions over this past REF cycle.
27. We benefitted greatly from the involvement of three research users who brought both substantial experience of a range of different settings relevant to impact in our subject area and helped our sub-panel undertake and reflect on our assessment work. Feedback from our research users has been incorporated into this report.
28. We saw a wide range of impacts across the submissions to our sub-panel including substantial influences on:

- government policy and on policies of major non-governmental organisations,
- legislation and the outcomes of legal cases,
- professional training and practice across different settings (including education, health-care, mental health services, pastoral care and the military),
- heritage and public understandings of the past (including in relation to specific religious and cultural communities, events and sites)
- self-understanding and practice within religious organisations and on relationships between religious communities, and
- public understanding across a wide range of ethical and religious issues.

29. Across this work, we found evidence of a very strong commitment to under-represented or vulnerable groups (including through activities which empowered them, led to beneficial interventions or reduced harms), to constructive social relations between communities and to ethical engagement with the non-human world. A strong theme across this work was the importance of religious literacy for effective policy, legislation, professional practice and the quality of public life. In addition to outstanding examples of impact across all of these different types at national and international levels, we also saw cases of outstanding impact on specific sites and local communities and on the well-being of particular groups. This range of impact was comparable to that submitted to UOA 33 Theology, Divinity and Religious Studies in REF 2014 and demonstrates a breadth and depth of impact achieved by researchers across the full range of disciplinary specialisms in our subject area, as well as significant use of inter- and multi-disciplinary methods and perspectives.
30. In addition to material submitted in the form of impact case studies, we were also aware from REF5b submissions of wider cultures of public engagement in a number of units. It is important to acknowledge the societal value of the work of these sustained cultures of public engagement within units and institutions. We also recognised some forms of public engagement which, in part because of their highly collaborative nature, might not yield the kind of evidence required for impact case studies but which were nevertheless of considerable social benefit. In both this wider public engagement work, and some impact case studies, we also saw evidence of impact that is likely to grow in coming years.
31. Outstanding impact usually took the form of active shaping of ideas, policies and practices and, occasionally, the prevention of outcomes that beneficiaries would have experienced as harmful. Impact case studies receiving outstanding grades were characterised by highly significant impacts and were supported by clearly-focused and substantial evidence. Some case studies could have been graded outstanding if they had prioritised giving greater evidence to support claims of their strongest impact over evidencing other impact claims which had less reach and significance.
32. Reasons for lower grades for case studies included impact claims which were well-evidenced but limited in their reach and significance and impact claims which were insufficiently grounded in supporting evidence. Impact claims for which no corroborating evidence was presented, or which failed to meet other eligibility requirements, were excluded from assessment. Whilst the distinction between dissemination and impact appeared generally to be better understood by submitting units in this current REF exercise, there were still some instances in which case studies included narratives about the communication of research but without specifying or evidencing particular forms of change or benefit arising from this.

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33. There was a complex relationship between the size of submitting units and their impact grades. Case studies demonstrating recognised, but modest, impact were concentrated in units with very small (≤ 6 FTE) numbers of staff. It is clearly challenging for very small units to produce two strong case studies. At the same time, there were a number of examples of outstanding case studies in comparatively small units, with two small submissions achieving entirely outstanding profiles for impact. Furthermore, the majority of outstanding case studies that we received were underpinned by the work of single researchers. Whilst we did see strong impact case studies based on the work of multiple researchers, outstanding impact in our subject area is therefore clearly not dependent on the presence of larger research teams. Units with between 12-19.99 FTE staff achieved higher overall impact grades, on average, than those with 20 FTE staff or more. There was, therefore, no simple correlation between unit size and impact profiles, and units' impact profiles were more influenced by the quality of impact work undertaken by specific individuals and groups, the degree of focus on impact activities within a unit, and the level of resource provided by individual institutions to support impact activities.
34. We received very few cases in which panellists were concerned about the potential eligibility of either an entire case study, the eligibility of an underpinning output or the eligibility of a particular element of the claimed impact. This suggests that submitting units generally had a good understanding of the eligibility criteria for impact case studies.
35. In some case studies, we recognised that impacts had arisen not simply through the work of researchers at the submitting unit, but through research and activities of other colleagues as well. Whilst understanding the wish of submitting units to emphasise their individual case for impact as strongly as possible, we sometimes felt that the contribution of the researcher from the submitting institution had been too strongly emphasised to the exclusion of others who enabled that impact. Whilst this did not have any material effect on the grading of case studies, for any future exercise of this kind, however, we would encourage submitting units both to make the clearest possible case for the impact of their research alongside a recognition of the collaborative ways in which impact is often achieved.
36. The pathways through which impact occurred could take a variety of forms, including long-standing engagement between researchers and communities with whom they worked, collaborations or contributions by researchers with groups and organisations on specific issues and more indirect forms in which an external organisation or group made use of a researcher's work in impactful ways without the researcher themselves necessarily having much involvement. We also saw cases in which impact clearly followed after the completion of a particular research output or outputs, as well as cases in which research and impact ran concurrently. We noted that impact could both arise from a specific research output and that it could equally arise from a larger body of work by a researcher that established their expertise in a particular field. In accordance with REF guidelines, we recognised all of these different approaches to be valid. Our assessments of case studies were based only on the evidence of the reach and significance of the impact and was not influenced by judgments about the ways in which that impact had occurred.
37. We found that the nature and extent of impact that researchers achieved could sometimes be influenced by factors largely out of their control. In some instances, outstanding impact was achieved through serendipitous events or the timely coming

together of a researcher's expertise and a societal or organisational need. Equally, in other cases, well-planned and well-resourced impact work did not always achieve what might have been hoped because of factors such as stakeholder resistance. Whilst recognising the influence of these factors, we did not seek to mitigate for these in any way and awarded grades only on the basis of the reach and significance of the impact that had actually been achieved.

Environment

38. Our sub-panel profile for environment is as follows:

Table 7: environment sub-profile for UOA 31, compared to that of UOA 33 in REF 2014

% 4*	% 3*	% 2*	% 1*	% Unclassified
47.1	38.1	12.7	2.1	0

39. As with impact, there were some variations in the material assessed in research environment submissions in this exercise compared to REF 2014, and so some care is again needed in drawing comparisons between environment profiles across these different exercises. There was an increase in the highest grade band for our subject area in REF 2021, compared to REF 2014, which was very slightly above the average increase for Main Panel D as a whole. In part, this uplift reflects a notable increase in grades achieved by the strongest submissions to our sub-panel compared to REF 2014 as well as other indicators of general improvement across our subject area such as the growth in annual research income. It was clear from our assessment that units in our subject area are continuing to play a leading international role across a number of sub-fields within Theology and Religious Studies. More than half of the environment submissions we received were judged to have some world-leading elements to them, with just under a third of all submissions assessed to be predominantly world-leading.

40. Our assessment was based entirely on submitted material and we took great care to ensure that wider contextual knowledge or perceptions that we had about particular units or institutions did not influence this process. Appropriate account was taken of a unit's size when forming judgments about the levels of vitality that it demonstrated, for example in terms of the volume of contribution by the unit's staff to scholarly networks and to wider society. The lowest grades for environment submissions tended to be concentrated in units with very small staff numbers (<6 FTE) and the range of areas to be assessed in environment submissions could be particularly challenging for very small units. We also recognised that very small units might also struggle between the need to maintain a staff group with very diverse research interests in order to deliver taught programmes and the demands of creating a cohesive research culture. In such situations, building shared research cultures with other external institutions might be beneficial. There was a tendency, on average, for comparatively larger units to score more highly in their environment profiles. However, when analysed at the level of individual units there was no simple relationship between size and environment grade and it was not the case that smaller units were inherently unable to support outstanding research environments. Two of the strongest environment submissions were from small units and some smaller units with strong and well-integrated research cultures demonstrated elements of world-leading environments despite limited institutional

resources. We recognised that there could be greater challenges in relation to sustainability for extremely small units. However, doubts about sustainability could also arise in relation to larger units where there was, for example, less evidence of strong strategic planning, of structures and resources for effective development of staff at all career stages or of infrastructure to support grant capture.

41. We recognised that there was not always a direct and close correlation between a unit's grade for its research environment and the grade profile received for its outputs. In some cases, units provided evidence of outstanding research environments which did not find expression in comparable levels of excellence in their portfolio of submitted outputs. Equally, some units submitted a portfolio of outputs which 'outperformed' the level of planning and resource demonstrated in their institution. Such variations, also evident in REF 2014, are not entirely surprising. Research environments play an important role as the context in which excellent research can be produced, but do not straightforwardly determine the quality of outputs generated by staff within a unit. Research environments which provide researchers with more time, financial and other infrastructural resources, an effective culture of critical peer feedback and well-designed support which recognises staff diversity are more likely to generate stronger research outputs. However, many factors can influence the quality of an output, including the stage in which an output is produced in the trajectory of an author's on-going intellectual project, other pressures or demands on an author, the extent to which the quality of an output has been improved through effective peer review and the extent to which well-designed systems and structures in a research environment are actually used in practice in ways that improve the quality of authors' work. A strengthened research environment can also produce world-leading outputs which appear in a subsequent REF cycle.

i. Unit context and structure, research and impact strategy

42. We found excellence in units which provided clear research and impact strategies and particularly welcomed indications of active engagement by staff in the development and collective ownership of these strategies. We saw value in strategic thinking which recognised the specific trajectory and context of the unit, honestly acknowledged challenges and provided realistic frameworks for action. We also noted some aspects of submissions which, to varying degrees, led to lower grades than might have been achieved. Whilst recognising that the development of strategic thinking could be particularly difficult during periods of major change, we found that some submissions presented strategies more as a description of their activities or achievements than reflections on how these had been achieved or might be sustained or extended in the future. Although not always the case, evidence of limited strategic thinking about impact in a unit's environment statement did sometimes correlate with lower grades being achieved by the unit's impact case studies. Evidence of engagement with issues of open access and research integrity which demonstrated innovation, or which went above compliance with widespread sector norms, was welcomed. Credit was given to research environments that demonstrated strategies for interdisciplinary collaboration and innovation (if relevant to an individual unit), rather than simply describing interdisciplinary activities.

ii. People

43. **Staffing strategy and staff development.** We recognised excellence in statements of staff support and development which engaged realistically with issues of succession planning and staff turnover and which provided evidence of relevant, strong and

successful support for staff research and impact activities at all career stages. We found that this section of a unit's environment statement provided weaker evidence of excellence when it primarily described staff activities rather than the policies, structures and resources that supported staff development or how these had been taken up by, and benefitted, staff in that unit. It was very often the case that units which provided stronger study leave arrangements for staff submitted a higher proportion of outputs which were graded world-leading.

44. **Research students.** Excellence in environments for post-graduate research students was demonstrated by clear thinking about approaches to recruitment (including in relation to issues of equality, diversity and under-representation), evidence of robust and effective systems for monitoring and supporting research students, well-designed research training environments and positive outcomes for students. Whilst we recognised that strong metrics for doctoral student completions could be an indicator of high levels of vitality within a unit, this data was interpreted holistically in relation to other indicators of vitality and sustainability such as the quality of a unit's environment for training and support of post-graduate research students. Credit was also given where it was clear that students benefitted from engagement with a critical mass of other research students working in the same broad field, either within an individual institution or through cross-institutional networks. We recognised that some doctoral completions might not always be registered in HESA data and took appropriate note of any evidence provided by units in relation to doctoral completions not captured in their REF4 report.
45. **Equality and diversity.** Discussions of unit-level approaches to issues of equality, diversity and inclusion (EDI) were strongest when they provided clear evidence of active thinking and practical engagement with these issues at unit level. Areas in which submissions demonstrated effective actions included staff recruitment, support, flexible working and workload adjustments (including additional study leave arrangements) and accessibility to research events and activities for staff and students with different needs (including caring responsibilities). Credit was given to submissions which frankly acknowledged areas in which future work was needed and identified clear strategies for addressing these. We recognised that for smaller units it was not always feasible to have the same kind of unit-level structures or policies in place which might be more realistic for larger units, and in some cases found that relevant EDI information for some smaller units was provided primarily in their accompanying REF5a document. Evidence of contributions to national and institutional work in relation to EDI was welcomed, but we particularly valued any evidence of thinking and action in relation to EDI at unit level. In general, discussions of EDI often tended to focus on gender. Whilst attention to issues of gender gave positive evidence of more active engagement with issues of gender inequality across our subject area than in REF 2014, stronger submissions discussed a wider range of protected characteristics and other potential sources of inequality. When submissions referred to receiving an Athena Swan or other equalities-related award, we gave greater credit when an explanation was given of any specific actions or plans this had led to in relation to staff research, representation and career development. Weaker submissions tended to demonstrate little or no reflection either within the unit or the wider institution on EDI issues. Given the nature of our subject area, it was notable that very few units recognised that religion or belief is a protected characteristic or considered the implications of this for their research environment, including approaches to recruitment. The quality of information about the process for selection of outputs, including in relation to EDI, was very inconsistent across submissions, with some not

providing any information on this at all. Whilst the turn to use of more digital and online resources was often regarded as having some positive benefits in EDI terms, there may be scope for further reflection about any challenges in relation to equality or access that might also be associated with this.

iii. Income, infrastructure and facilities

46. Evidence of excellence was demonstrated by securing high levels of external funding (including both funding recorded in the REF4 report and funding not captured in HESA submissions), clear plans, sufficient staffing and effective structures for sustaining or growing these income flows, strong institutional investment in research and impact activities, and other indications of excellent infrastructure to support research. As with REF4 data on doctoral completions, we did not determine grades simply on the basis of the level of funding stated in the REF4 report but used this data to inform a more holistic judgment on the wider environment for income and infrastructure for that unit.

iv. Collaboration and contribution to the research base, economy and society

47. We welcomed indications of strategic thinking or policies in relation to supporting staff contributions to the academy or to wider society. In practice, though, most units submitted statements that provided summaries of staff activities and achievements rather than saying much about the environment that had supported these. The strongest submissions were characterised by high levels of vitality and sustainability in staff contributions as evidenced by substantial contributions to disciplinary and interdisciplinary fields at national and international level, major leadership roles, awards and other substantial activities. We found excellence in statements which provided evidence of significant contributions to society which extended beyond those submitted in the unit's impact case studies. We also saw strong evidence of sustainability in submissions where contributions were being made by a wide range of members of staff at different career stages and which did not appear to rely on contributions from a small proportion of staff at a senior level.



Sub-panel 32: Art and Design: History, Practice and Theory

Overview

1. All sub-panel members discussed and collectively agreed this report. It should be read alongside the Main Panel D overview report which contains a description of main and sub-panel working methods and discusses matters of common interest.
2. The structure and content of this report provides an overview and key issues pertaining to the Sub-panel 32 submissions to REF 2021.
3. Sub-panel 32 received and assessed research from all facets of art and design: history, practice, and theory.
4. The sub-panel welcomed the creativity, innovation, diversity, and quality of the research submitted in all fields. These included an expanded range of monographs, edited books, special editions, journals and papers, confidential reports, curated exhibitions, creative artefacts and practices, films, screen-based media, online and digital installations, performances, programmes, and events.
5. All sub-panel members, users and assessors commended the rigour, integrity, professionalism and the mutual support and collegiality of their peers and their openness and contribution to discussion, particularly given the demands and limitations of online meetings.
6. The academic expertise of the sub-panel reflected subject breadth of submissions, with 42 panel members and assessors drawn from a diverse range of institutional types and representing all four devolved administrations of the UK. The sub-panel user members and assessors were all experienced users of academic research and represented national museums, galleries, and archives sectors, curation, arts programming, arts management, and arts agencies including LUX, Arts Council England, and Creative Scotland.
7. The sub-panel received 86 submissions, including multiple submissions from two HEIs, and 269 impact case studies. There was a significant differential between the smallest (3.3 FTE) and the largest (191.67FTE) submission. Two HEIs were submitting to REF for the first time, nine submitting to Art & Design for the first time or did not submit to REF 2014 and ten specialist arts institutions.

Table 1: Summary of submissions (page 156).

Table 1: Summary of submissions

	Number of Submissions	Category A FTE Staff	Research Outputs	Double-weighted outputs	Impact Case Studies
REF 2021	86	2607.19	6388	609	269
REF 2014	84	1604	6356	87	239

Additional Summative Data

Table 2: UOA average profiles

	% 4*	% 3*	% 2*	% 1*	% Unclassified
Overall	37	41	19	3	0
Output	30	41.9	23.9	3.5	0.7
Impact	45.7	40.4	11.3	2.6	0
Environment	47.9	41.4	9.9	0.8	0

This table shows the average profile for each element, weighted by FTE, for Sub-panel 32

8. Of specific note given the profiles outlined in Table 2 above, was the significant increase (1000 FTE) submitted to Sub-panel 32 for REF 2021. This represents an increase of over 62% since REF 2014. It was the highest increase in Main Panel D and suggests that a high proportion of researchers were submitting to REF 2021 for the first time.

Working methods

9. The sub-panel applied the REF 2021 criteria and working methods as outlined in the 'Panel criteria and working methods' (REF 2019/02) drawing on the expertise of the panel and applying, rigorous peer review of all outputs, impact case studies and environment statements. Comprehensive and iterative calibration exercises were conducted within the sub-panel prior to and throughout the assessment phase to ensure consistency of judgements and application of the criteria.

10. The sub-panel did not privilege any type or form of research, research output or research environment and was cognisant throughout the assessment of the challenges

faced by all submitting HEIs in preparing for REF 2021 submissions during the Covid-19 pandemic. In addition to regular calibration and to mitigate unconscious bias, the sub-panel developed a Fairness in REF Intention Plan to mitigate all potential forms of bias and used as an aide memoire for all sub-panel meetings.

11. For further information on working methods and calibration, refer to Main Panel D report paragraphs 23 – 34 and 40 – 47.

Double-weighting

12. The sub-panel welcomed the very significant increase in double-weighted outputs from 87 in REF 2014 to 609 in REF 2021. This included all output types, subjects, and forms, from monographs through to multi-component and practice research. Most double-weighting requests were accepted, well-articulated and generally correlated with higher scores, positively reflecting the diversity of long-form types of research across art and design. The strongest submissions deployed double-weighting strategically and effectively. The sub-panel observed that more practice research and multi-component outputs could have been double-weighted which might have enhanced the profile of some submitting units.

Cross-Referral

Table 3: Cross-referrals Sub-panel 26

	Into sub-panel		Out of sub-panel		Outputs assessed
Within MP	72	1.25%	69	1.20%	
Outside MP	4	0.07%	112	1.95%	
Total	76	1.32%	181	3.13%	5,768

13. Across Sub-panel 32, 181 outputs (3.15%) were cross-referred or jointly assessed, of which 132 were requested by submitting units. Wherever requested, outputs were cross-referred to the identified expert sub-panel. The sub-panel also cross-referred or sought a joint assessment for 49 outputs, from the appropriate expert panel where they considered they did not have the relevant expertise to fully assess the quality of research. The percentage of cross-referrals is broadly similar to REF 2014, although given the declared submission intentions for REF2021 the sub-panel had anticipated and included an expanded range of panel expertise.

Equality, Diversity, and Inclusion (EDI)

14. Consideration and integration of equality, diversity, and inclusion (EDI) showed a marked improvement, in a context in which public awareness, expectations and consideration of EDI were now considerably higher. The strongest submissions demonstrated clear strategic links between a well-evidenced institutional commitment to EDI and the submitting unit's response to both their research outputs and environment.
15. The sub-panel observed that the degree to which submitting units addressed EDI varied considerably. This was particularly challenging for some small submissions specifically where these were also in small institutions where the supporting infrastructure may be more modest. For some submitting institutions, it was difficult to present actioned policies or outcomes without identifying individual researchers, particularly where the submitting unit represented a subject cluster that was not directly aligned to an institutional management structure.
16. REF 2021 included the requirement for submission of an institutional statement (REF5a) for the first time. The REF5a provided an institutional context for each submitting unit. This presented challenges in explaining EDI for many HEIs of all scales and types.
17. In many cases the relationship between institutional level policies and data and evidence of the embedding of EDI within unit level environments was not clear. In some submissions, the sub-panel identified notable omissions, for example, focusing primarily on gender with limited or no reference to the full array of protected characteristics, due attention to intersectionality, or how broader fundamental and systemic issues (e.g., institutional racism) were being actively addressed.
18. The sub-panel also observed the influence of art and design researchers who were actively producing interdisciplinary investigations in which issues of intersectionality, gender, race, identity, class, and disability were central. Evidenced in impact case studies, it was clear that through historical, theoretical and practice research many had made a profound difference to policies, practice and communities in challenging Anglo-European perspectives and surfacing colonial, social and cultural issues through, for example, exhibitions, co-design, and public and community engagement.

Interdisciplinary Research

19. REF 2021 placed increased emphasis on interdisciplinary research and Sub-panel 32 included three interdisciplinary advisers whose role was to support and advise on the assessment of interdisciplinary research in the submissions.
20. Research in all fields of art and design has become increasingly interdisciplinary by virtue of the character of contemporary research practice, accentuated by significant growth in thematic and interdisciplinary research funding. For some submitting units this shift has been beneficial, as evidenced by the increased participation of art and design researchers in large programme grants and the subsequent increase in research income across the period. Equally, in most research fields there was strong evidence of research that was advancing disciplinary forms and deepening the fields of disciplinary inquiry.
21. The expansion of interdisciplinary research across the Sub-panel 32 submissions produced innovative approaches and new perspectives in all forms of art and design research. Theoretically enriched research was evident and had clearly developed

through the migration of concepts between a wide array of disciplines. The sub-panel recognised that the strongest interdisciplinary research was characterised by the mutual respect for disciplinary firmness and disciplinary protocols and the willingness and hospitality of disciplines to engage with and welcome new and different perspectives, forms of language and practices of research that enrich the processes and rigour of inquiry.

22. Submitting institutions took varied approaches to the identification of interdisciplinary research and interdisciplinarity was recognised and welcomed even when not flagged by the submitting unit. Across Sub-panel 32 only 72 outputs were flagged as 'interdisciplinary' by submitting units. However, a further 314 outputs referred to outputs as 'interdisciplinary' in their additional output data (English language abstract; double-weighting request; additional information), although these had not been flagged. Across the submission the total of interdisciplinary outputs identified was therefore at least 386, although the sub-panel noted that many more could have been identified as such. It is not possible to draw out any specific interdisciplinary trends, other than to acknowledge the quality, diversity, and extensive range of research in history, theory, and practice.
23. In some submissions, there appeared to be a conflation of requests for cross-referral with the identification of interdisciplinary research, although all interdisciplinary indicators were acknowledged across the submissions and requests for cross-referrals or joint assessment made by submitting HEIs were honoured for the outputs they identified.

Outputs

Table 4: UOA average outputs profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
30	41.9	23.9	3.5	0.7

This table shows the average output sub-profile, weighted by FTE, for Sub-panel 32

24. 72% of the art and design research submitted to REF 2021 was judged to be world leading and internationally excellent, demonstrating vitality, creativity and innovation in its global reach and content, in its interdisciplinary engagement and in the variety of media and forms with which research resides in the public domain.
25. Most of the research submitted to Sub-panel 32 fell within the disciplinary expertise of the art and design sub-panel, although compared to REF 2014 there had clearly been an expansion of the form, methods, research practices and content of the outputs as well as evidence of researchers working in increasingly interdisciplinary contexts. This was compounded in some cases by the decision of HEIs to submit larger, composite submissions including a diverse range of subjects reflecting internal disciplinary re-alignments and structural changes, but also attracting a proportion of outputs that were out-with the disciplinary remit of panel and therefore required cross-referral or joint assessment.
26. As with interdisciplinary research, institutional approaches to requests for cross-referral or joint assessment of outputs beyond the sub-panel's expertise were varied. At the disciplinary extremes, outputs submitted to Sub-panel 32 included studies in medical

and life sciences, psychology, chemistry, physics, mathematics, engineering, and computer science through to archaeology, sociology, environmental science, English literature, language and linguistics, philosophy, media studies and politics. The sub-panel is indebted to the expertise and contribution made by sub-panel members from across all four main panels for their collaboration, advice, and guidance.

27. Alongside significant interdisciplinary research, the sub-panel welcomed the evidential strengths in disciplinary research. These are expanded in more detail below.

Histories: Art, Design and Architecture

28. World leading and internationally excellent research has remained an evident national strength across the full spectrum of histories and theories of art, architecture, and design. Overall submissions included a significant volume of monographs, book chapters and edited books and journal articles. Art historical work embraced the full chronological spectrum from Classical, Byzantine, Medieval and Renaissance through to 18th, 19th, 20th century and contemporary studies including digital visual culture, digital imaging, and methodological studies of digital art history. The sub-panel particularly welcomed the loosening of disciplinary art historical boundaries resulting in an expanded range of methodologically and theoretically enriched art historical research. This included the substantial development and diversification of feminist studies and practices in the visual arts that was matched by increasing attentiveness to decolonizing methods and expanding the international reach of research, as well as revisiting established ground in new creative ways including contributions to studies exploring climate change, carbon futures and social inequality, among others.
29. Similar strengths were evident in architectural and design histories. These included innovative and well-structured architectural monographs, journal articles and book chapters, and in design history, significant strengths in fashion and dress, textiles, and typography, with many outputs also linked to high profile exhibitions, events, and impact case studies. The sub-panel noted a small decline in the visibility of design history as a disciplinary specialism, although recognised a broadening of design history's engagement with complementary areas such as ethnography and design practice. Although there was a healthy range of journal special issues and edited volumes devoted to design history research, the number of disciplinary monographs was proportionally fewer than in art history.
30. The sub-panel noted that the monograph remains a key output type for art, design and architectural history and theory, although other publishing modes such as journal special issues and edited volumes arising from conferences, exhibitions and funded projects were also prominent among the highest quality outputs. The diversity of publishing types and forms was welcomed. However, the sub-panel noted that the continued health and sustainability of disciplines is dependent on supporting this diversification while at the same time recognising and protecting the sustained time required to produce monographs and other long-form research within the complex demands of modern academic life.

Art

31. The volume, quality, diversity, and originality of research in fine art and socially engaged arts practice were impressive. Outputs included curation, film, photography and drawing and the critical intersections with histories, visual and material cultures, critical, cultural and media studies, philosophy, politics, anthropology, ethics, and aesthetics. The submissions evidenced world-leading and internationally excellent research in all genres

of the arts and all output formats. The strongest submissions demonstrated iterative, systematic, and reflexive approaches to critical and creative inquiry that were well structured and where the research dimensions were clearly explained and presented. Collaborative social practice was evident across the submissions, often co-produced with cultural organisations and community groups with both formal and informal institutional relationships.

32. Conversely, there were relatively fewer discipline-based practice submissions, where for example, the resulting output comprised sculpture, painting, or printmaking, although those submitted were generally strong and the research dimensions were clearly articulated. There was a concomitant increase in co-produced, collaborative, multi-media, performative installations, and events, where arts researchers were facilitating complex, creative interactions within and between communities to surface, voice and situate co-produced cultural, social, or political ideas in the public domain.
33. Shifts in art research were also inflected in significant growth in curatorial practice and the expanded field of curatorial theory, constituting a broader field of curatorial studies. This was evidenced through complex collaborations with cultural organisations, where, for example, research and knowledge exchange between museum professionals and researchers were developed.
34. The expansion of curatorial studies also highlighted distinctions between museological curatorial researchers conceiving and constructing exhibitions and/or working with archival material to construct exhibitions and those researchers blending curatorial, performative and arts practices to empower others through an array of experiences, media, and technologies and/or through forms of co-production and collaboration.
35. The quality and presentation of curatorial research was varied across the submissions with stronger outputs articulating a diverse range of research imperatives, including for example, links to historical conservation and material science, or in others the curation of social practice. Some outputs did not clearly differentiate between research and impact.
36. The sub-panel welcomed the inclusion and increased visibility of museum curators and conservators and modest growth in applied conservation and the technical and scientific analysis of objects. There was relatively limited evidence of digital conservation or techniques for replication and replacement.
37. Drawing research has also grown significantly since REF 2014, with a range of outputs exploring both the analytical and scholarly practices of drawing and how drawing practice can be interrogated and used methodologically to transgress or overcome barriers of language and cultural difference.
38. Of note was the increased confidence, vitality and scope of drawing research both for its own sake, including the scholarship and analysis of diagramming, forms of technical drawing in architectural practice and creative ideation in craft, design, and arts practice. Studies included the means, media and methodological analysis of personal narrative, expressive, communicative, and symbolic forms of image and mark-making deployed for example, in education, psychology, sociology and anthropology.
39. Photography, Film and Moving image remained key areas of strength across the submissions although there was a noticeable reduction in immersive installations since REF 2014. Particularly striking was world leading research in film and photographic history working with an expanded sense of the archive and an increasingly diverse range of archival sources. This was echoed in the development of photographic practice

research drawing on historical methods and practices, revisiting and reworking archival material, and re-contextualising existing images in evolving political, cultural, and social contexts.

40. Across photographic history and practice there was a notable thematic focus on borders and identity, though less on race and colonialism than was evident in art history. As in other forms of arts practice the use of photography in participatory and collaborative work had expanded, although there was considerable variation in the rigour of the research. The strongest examples clearly articulated the research imperatives, the role of the researcher, the methods, and purposes of collaboration, and were accompanied by a clear commitment to an ethics of collaborative practice.
41. In a similar vein, innovative and experimental approaches to film documentary and the effective use of the 'essay film' to tackle complex and intersecting political, social, and philosophical issues and contemporary debates on a range of subjects including, for example, disability, sexuality, football, and trans-studies, all of which presented compelling well-defined research narratives.
42. Theoretical research in photography, although strong, tended to be less innovative and to deploy more familiar and established theoretical models and although there was a notable growth in animation, the submissions were generally less successful in fully articulating the research dimensions of the output.

Design, craft, architecture

43. World-leading, and internationally excellent research was in evidence across all fields of design, craft, and architecture, although the quality was variable across disciplinary areas. There was evidence of strengths in sustainable design, design-engineering, digital and games design and service design and in the development of industry standards.
44. In fashion design there was evidence of new generations of researchers and a notable growth and confidence in the production of monographs, journal articles, edited collections, and book chapters exploring issues of identity, industrial heritage, sustainable and ethical fashion. The sub-panel noted an apparent reticence to submit fashion artefacts or collections and would have welcomed the submission of outputs articulating the advancement of practice research in fashion. Similar strengths were evident in the presentation of textiles research, extending from fibre arts and traditional craft practices through to textile science and engineering, environmental and intelligent textiles, and their contribution to sustainability as well as their application in improving health, care and wellbeing.
45. Graphic and communication design was strengthened specifically where it brought together history, practice, and theory both through books on key international design figures and letterforms and employing the medium of exhibitions, that integrated curation and research using collections and archives and supplemented by catalogues and gallery guides.
46. The sub-panel noted growth in the volume and diversity of comic studies, graphic novels and 'zines' across several submissions and including theoretical, analytical and creative approaches to visual narrative and a focus on the representation and communication of social issues.
47. The strongest crafts research was rich and diverse and included the production of innovative digital, analogue, and conceptual works, and a marked expansion of crafts scholarship evidenced in journal articles and book chapters documenting an array of

practices, material insights and experimentation. The sub-panel specifically noted the advancement and maturing of digital making in crafts processes and practices both technically and conceptually. In a similar way to both drawing and photographic practice, crafts researchers also deployed their practices to engage hard-to-reach communities in co-creation and shared activities to stimulate dialogue and enhance understanding about a range of societal issues. Some weaker submissions did not articulate the research dimensions of the work and tended to conflate research and dissemination.

48. Architectural research was distributed between UOA 32 and UOA 13 (Architecture & Built Environment) and the two sub-panels cross referred and shared assessors to ensure parity and consistency of assessment. The scope and diversity of the research was impressive although its quality was variable, and in some cases sub-panellists noted a division between those submissions focused primarily on environmental science and architectural technologies and others exploring architectural design practice, urbanism, and architectural humanities. In addition to strengths in architectural history and theory the strongest architectural design submissions were innovative and articulate and clearly identified the research dimensions of the output, while others presented professional practice with limited scholarship in which it was difficult to understand either the research or the specific contribution of the researcher.
49. As anticipated, there was also growth in digital forms of design research that included software development, digital tools, and computer games, as well as historical archives and resources and innovative forms of virtual environments. The sub-panel identified world-leading and internationally excellent research in all genres and output types, although they also noted that some digital outputs submitted were under-developed, incomplete, password protected or inaccessible due to software redundancies. Audit queries were raised in these cases.
50. A modest number of reports (38) for external bodies were submitted and the sub-panel noted that in several cases these were predominantly consultancy, and the research dimension was neither evident nor explained. The stronger submissions clearly identified the research questions, while weaker submissions were generally the response to a clear and detailed client brief but lacked evidence of research.
51. When compared to REF 2014, the sub-panel noted a marked decline in the submission of designed products and artefacts and a persistent, albeit much diminished, submission of various forms of high-quality professional and advanced practice, presented as research. Although the sub-panel appreciated the quality of professional practice, such outputs were largely descriptions of practice activity, and lacked scholarship and contextual references or conflated method and theory, sometimes including theoretical references to submissions without explanation or evidence of the research conducted.
52. REF 2021 provides a unique opportunity to gain an overview of the changing research landscape in all disciplines. The sub-panel noted that growth of interdisciplinary research has had several intersecting impacts on design research that require further reflection. As noted above, interdisciplinary research requires acuity, confidence and clarity of disciplinary protocols and forms of practice to ensure that, in entering any interdisciplinary dialogue, the discourse is equitable and mutually respectful.
53. Design research submitted to REF 2021 included the integration of more design researchers working within large interdisciplinary programmes and tackling thematic challenge-led research that is more scientifically driven. In such contexts design researchers are well-positioned both as interdisciplinary leaders and as effective and

responsive collaborators, often working within and across disciplinary groupings and resulting in the production of multi- and co-authored papers or journal articles, in which design researchers, although invaluable, are less likely to be primary authors. Although already common in engineering design, there are several challenges to be addressed in this period of transition. The first is that multi or co-authored papers in arts and humanities research are slowly becoming more common and it is vital that design researchers lead in their production and in documenting summative design narratives. The second is the potential loss of visibility of design research, as noted in design history above and the third is the potential hollowing-out and diminution of design research and its continued advancement. This REF 2021 overview therefore represents an important opportunity to reflect upon how design researchers can continue to lead and contribute to interdisciplinary research, but equally how design research can continue to evolve and advance its future knowledge, skills, and competences.

54. The sub-panel observed that this interdisciplinary transition also highlighted some methodological and ethical challenges, including a perceived division between quantitative and qualitative methodologies and relatively limited use of mixed methods approaches that are needed to support and enable design researchers to manage intersectional ethical practices, research integrity and to lead and work within complex interdisciplinary partnerships.

Pedagogy

55. Sub-panel 32 received a relatively small but significant range of educational and pedagogic outputs. These were varied in quality with few of world leading or internationally excellent quality. Of specific note were educational books, pedagogic papers and chapters exploring a range of critical issues for the future of art and design education and the creative industries including strategies for decolonising the curriculum, for addressing race, gender, class, and equalities of condition within creative educational practices, as well as those examining educational tools and technologies and their impact on learning and on the mental health and wellbeing of students. Many of these outputs were descriptions of teaching projects and presented useful reflective or experimental case studies, often funded through Tempus or Erasmus + networks and working with small sample groups. In many cases these failed to present the underpinning scholarship, articulate the research dimensions, or sustain the research and present summative findings.

Outputs formats

Table 5: Types of output assessed

	REF 2021	Percentage of outputs
A - Authored book	626	10.85%
B - Edited book	250	4.33%
C - Chapter in book	856	14.84%
D - Journal article	1724	29.89%
E - Conference contribution	179	3.10%
F - Patent/ published patent application	12	0.21%
G - Software	4	0.07%
H - Website content	10	0.17%
I - Performance	97	1.68%
J - Composition	14	0.24%
K - Design	36	0.62%
L - Artefact	349	6.05%
M - Exhibition	668	11.58%
N - Research report for external body	29	0.50%
O - Confidential report for external body	7	0.12%
P - Devices and products	13	0.23%
Q - Digital or visual media	160	2.77%
R - Scholarly edition	4	0.07%
S - Research data sets and databases	1	0.02%
T - Other	728	12.62%
U - Working paper	1	0.02%
V - Translation	0	
Total number of outputs assessed*	5768	

*Double-weighted outputs count as one item

56. The table above presents a breakdown of the output types assessed by Sub-panel 32. Although submitting HEIs did not use the output categorisation consistently, there was an increase in the use of the multi-component output 'other' category compared to 2014, and a subsequent and marked reduction in 'artefact', 'design' and exhibition. The significant increase (c.700%) in double-weighting requests for all forms of research is also reflected above, illustrating how outputs, often comprising for example, an exhibition, catalogue and accompanying guides, and the submission of practice research, all used the 'other' category effectively to represent an array of different types of long-form outputs to good effect.

57. The significant increase in the submitted FTE, and a combination of the REF 2021 requirement to submit fewer outputs per FTE; refinements to the guidance since REF 2014, encouragement to request double-weighting, to develop and submit sustained and rigorous bodies of practice research in a range of categories, and the evolution of the multi-component output had clearly had a cumulative impact on the resulting profiles and submissions to Sub-panel 32.

Multi-component outputs

58. The explicit introduction and guidelines for the multi-component output form in REF 2021 enriched the submissions from all disciplinary fields in Sub-panel 32. It was used effectively in art, design, and architectural histories to encapsulate, for example, historical and theoretical work and associated exhibitions; for pedagogic and socially engaged research to demonstrate process and outcomes; for interdisciplinary projects that included papers, experiments and for various forms of art, design, curatorial and performative practice research. On reflection, the sub-panel noted that some interdisciplinary design research projects could have been more effectively presented as multi-component outputs by combining papers documenting the formative stages of the project and presenting the findings in a holistic and summative form. Where the outputs from practice research were multifarious, submitting HEIs often elected to use the multi-component 'other' category and to describe thematic research questions and explain how the different components responded to the research questions, as opposed to selecting other REF categorisations (e.g., artefact, exhibition, visual or digital media).
59. Overall, the sub-panel was impressed by the quality of the research and variety of the submissions. The strongest multi-component outputs were proportionate in length, clear, concise, and provided evidence of all aspects of the research.
60. Two key issues impacted on the accessibility of these outputs and in some cases the format obscured the reading and understanding of the research. The first was the structure and clarity of the research narrative. Stronger submissions included precision in framing the research investigation, clear explanations of research methods and methodology, the inclusion of the research elements to be assessed and a summary of findings, insights, and the dates and means of dissemination. In weaker submissions, it was unclear what the output comprised of and what elements were to be assessed. In some cases, the research was described or illustrated, but not available or accessible to the assessors. These included where, for example, a series of paintings, photographs or film screenings or an exhibition were described, but could not be viewed or were password protected, as this inhibited the assessment. The second related to the use of different proprietary repository systems that were in some instances complex to navigate and either distorted or compromised the viewing of the research, or conflated research and professional practice. Irrespective of format, the sub-panel's focus was on seeking out and assessing quality research.

Practice research

61. REF 2021 provided significant evidence of world-leading and internationally excellent practice research, presented under an array of headings within the REF categorisation system. Practice research was submitted under several categories including, but not limited to performance, composition, design, artefact, exhibition, devices, and products, digital or visual media in addition to those presented as multi-component outputs and outlined above.
62. The strongest practice research submissions demonstrated maturity and a notable refinement in the language and narratives of researchers deploying an array of media, forms of experiential, embodied and performative practice, or producing visual and material artefacts and experiments. The sub-panel observed that some of the strongest practice research submissions had been developed systematically and over time rather than for REF submission and demonstrated precision and depth in articulating the research and its contribution to the culture of the submitting unit.
63. In all forms of multi-component output and in the submission of practice research, weaker submissions were either overly complicated, disproportionately long and lacked clarity in identifying and articulating the research, or minimal in length and lacking scholarship or explanation beyond an inventory as to what had been done and produced.

Journal cultures

64. The interdisciplinary expansion of history, practice, and theory evident across the submissions to Sub-panel 32, has resulted in an increased breadth of output types, as outlined elsewhere in this report. There was a notable increase in art and design researchers engaging more confidently with interdisciplinary research in life, health, physical and social sciences, and co-producing and co-authoring many more journal articles, papers, and prototypes on the periphery of art and design and less singular in their disciplinary focus. In many cases art or design researchers are not lead or primary authors, and art or design is a supporting element in a more complex, multi-dimensional research challenge. (See also paragraph 52).
65. Although it is vitally important that this interdisciplinary research continues and that art and design researchers are part of collaborative teams, it is also essential that lone and individual scholars and scholarship and the disciplinary specialisms of art and design are sustained and given time, such that the protocols, skills, scholarship, and knowledge associated with disciplinary firmness are sustained and similarly advanced.

Edited books and chapters

66. Despite the additional guidance provided in REF 2021, approaches to the submission of edited books varied, and were also impacted by the submission challenges presented by the pandemic. The sub-panel observed a distinction between two forms. The first were edited books submitted that comprised collections of chapters, either from conferences or from a research project, for which the editorial is a general overview of the topic and description of the following contents. The second form was the edited book in which the editorial introduction clearly identified the origination of a research project and/or a series of research questions that offered a distinctive theoretical or conceptual intervention, for which the following chapters function as elaboration of the concept and/or question, or of related aspects. In either form, the editor(s) may

also have contributed a chapter or chapters, producing a multi-component output form requiring further elucidation. The strongest submissions clearly articulated the research dimensions of the editorial role and appropriately identified the context and contributions of the editor.

Covid-19

67. The significant challenges for all submitting institutions of compiling a complex collection of monographs and book chapters, multi-component outputs and practice research during the pandemic was recognised. On reflection the sub-panel noted that this had also resulted in a higher number of physical outputs being submitted than was initially anticipated at the outset of the REF exercise (USB sticks also counting at 'physical outputs' for REF purposes). This was also likely exacerbated by the limitations of the submission system format requiring a single PDF, which in several cases would have compromised the integrity of practice research and some multi-component outputs, where the tactility and materiality of the output was integral to the research.

Impact

Table 6: UOA average impact profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
45.7	40.4	11.3	2.6	0

This table shows the average impact sub-profile, weighted by FTE, for Sub-panel 32

68. Sub-panel 32 received 269 impact case studies (an increase of 12.5% on REF 2014) distributed across the 86 submissions. 50% of the submissions submitted the minimum of 2 case studies and 8 submissions (c.10%) submitted between 6 and 10 case studies.

Calibration

69. Prior to assessment, the sub-panel conducted a comprehensive calibration choosing a range of non-conflicted case studies to discuss. This exercise was undertaken in parallel with calibration exercises undertaken across Main Panel D and across all four Main Panels. All the impact case studies submitted were assessed as set out in the Main Panel report paragraphs 53 - 55. All panellists were appreciative of the dialogue between academic researchers and user members and the complementarity of the expertise in reaching a consensus on the overall assessment of impact.

Range and type of impacts submitted

70. The sub-panel was impressed by the diversity, reach and collaborative nature of art and design research and the substantive body of evidence provided by the impact case studies produced for REF 2021.

71. The cumulative contribution art and design research has made to economic regeneration, to health, social justice, placemaking, environmental sustainability and to the quality of cultural and public life and the wellbeing of communities is significant. The assessment of impact was holistic, did not privilege reach over significance and recognised considerable global impacts as well as those that were regional in their scope but profound in their effect and affect.
72. The quality profile for impact demonstrates considerable progress since REF 2014.
73. The sub-panel noted a high degree of collaboration between HEIs and external organisations, often facilitated by the HEI, and leading to, for example, researchers collaborating with an external partner or partners, to realise environmental or health impacts by collectively engaging and working with specific communities. These collaborations, whether local or international, brought together the requisite and mutually beneficial skills and capabilities required to enable transformation, change and interdisciplinary knowledge exchange with non-academic users, audiences, and beneficiaries.
74. A simple analysis of the 269 case studies highlighted that around 50% (135) of the case studies included partnerships with galleries, libraries, archives, and museums (GLAM). As outlined above, this included some case studies where HEIs were collaborating with these organisations to generate impact for other communities of users, beneficiaries or audiences, and others, where the impact was a more direct transformation between the academic research conducted and the impact claimed, for example, directly within the museum or gallery. A similar proportion of the case studies (135) were focused on transforming or shaping community, civic or public understanding. Overall, 12% (33) of case studies focusing on equality, diversity, or social justice and a further 13% (35) on improving health and wellbeing. A significant cluster, 32% (87) of case studies predominantly underpinned by architectural and design research, resulted in the development of product, service, and business innovation and/or impacts focusing on climate change and environmental sustainability, many relating to urban development and placemaking. Another notable cluster of case studies 18% (47) generated transformations in digital products and/or manufacturing.

Feedback on Submissions

75. Impact submissions to REF 2021 demonstrated that the environment and ecosystems supporting impact in many institutions has evolved and matured. Significant investment has clearly been made in nurturing partnerships and collaborations, and these formed a consistent hallmark of the stronger and more confident case studies, where the researchers and their collaborators had clearly taken ownership of translating the research and creating the conditions to deliver impact.
76. A distinguishing feature of the strongest and most successful case studies was that they generally focused on a key field of research and differentiated evidence of a primary impact claim from other, or potential other emergent or supplementary impacts. Case studies were less clear where they claimed several different impacts and failed to distinguish the differential reach and/or significance of those impacts. This tended to lead to diminution of the impact claim. Where these more diffuse impacts were most successfully communicated there was a clear and evidenced narrative of how each element had contributed to a coherent 'whole'.

77. The strongest impact case studies were precise in their claims and clearly explained the relationship(s) between the research conducted and the impact claimed however nuanced or complex. The very best examples triangulated quantitative and qualitative evidence of the changes, transformation or benefits that had resulted, using contextualised data, well-chosen testimonials, and experiential excerpts of feedback to reinforce the significance of the impact.
78. Conversely, less successful case studies often described pathways to impact, made vague, generalised, and unsupported impact claims. Some were heavily reliant on personal visibility or the esteem of specific individuals, others lacked a clear explanation of relationship between the research conducted and the impact claimed. In several submissions cases studies failed to differentiate impact from dissemination and outreach and conflated activities, visitor footfall, viewing numbers or website hits, the 'underpinning' research, or 'body of work' with evidence of change or transformation.
79. This was particularly notable in public engagement claims and in the fields of curation, broadcast, and social media, where the impact sometimes appeared transactional and lacked evidence of systematic or iterative development with partners or collaborators. In several cases involving technical innovations, impact claims appeared premature, and although potential impact is inadmissible the claims demonstrated evidence of a vibrant research environment that bodes well for the future.
80. While acknowledging how challenging it is to evidence change, which is often complex and nuanced, user members noted the limited use of existing impact tools, methods, and frameworks to support evidence gathering and that could be adapted and mutually beneficial to art and design researchers in working with partners. Significant research with the creative industries sector was similarly notable both in terms of its critical approaches to value, and innovations in approaches to financing research, dissemination, and knowledge exchange.
81. User members also observed that the strongest public engagement case studies referenced and responded specifically to external policy frameworks and/or to their regional context with the benefits of identifying shared purpose and the mutual benefits of working collaboratively and gathering and sharing data between partner organisations. This enabled them to reach and communicate with a diverse range of publics, audiences, and communities of practice. Adapting generic frameworks and developing sector skills, expertise, and effective tools for the creative integration of research and impact was identified as an opportunity for the future.

Reflections on the assessment of impact

82. User members commented positively on the governance, management of unconscious bias and conflicts of interest and appreciated the provision of checklists and guidance that served as an aide memoire during assessment period. All sub-panel members, users and the impact assessors commended the rigour, reflection, and integrity with which the assessment of impact was conducted. Of specific note was the sensitivity and acuity with which impact case studies were considered in context, and with reference to the nature and location of the submitting institution; particularly in recognising evidence of profound local impact as well as notable case studies presenting impact of exceptional global reach and significance.

83. User members and impact assessors highlighted the relative lack of visibility and recognition of art and design research more generally and stressed the opportunity and the evidence that the impact case studies offer in making a compelling case for the role and strategic importance of creative and cultural sectors.

Perspectives of user members and impact assessors

84. Overall user members and assessors were impressed by the volume, diversity and quality of the impact case studies submitted, but raised some concerns about the sustainability of the activity within the current higher education infrastructures, noting the potential vulnerability of the sector to leadership changes within institutions and/or the vagaries and shifts in public policy that could de-stabilise partnerships and undermine the significant progress that has been made in the recent past.
85. In recognising impact as a key area for development within HEIs and in arts and cultural organisations, user members noted the importance of mutual learning and of working to maximise the benefits of strategic partnerships. Some user members expressed surprise at the lack of evidence of impact on teaching given this was explicitly made permissible in REF 2021.
86. There was considerable debate within the sub-panel about how to communicate effectively and reinforce the importance of mutually beneficial, interdisciplinary partnerships. User members identified some concerns about how several case studies had tended to homogenise or instrumentalise institutional relationships with arts organisations, museums, and galleries, sometimes presenting them as passive partners with limited agency in the process of developing 'game changing' curatorial innovation, transformation, or other benefits, that did not always stand up to scrutiny when presented to professionals in the sector.
87. There were marked differences in the levels of institutional support for impact as presented in the REF5b statements. In some cases, these were less compelling than the evidence presented in the case studies. Many environment statements also lacked references to civic or regional industrial strategies or to the distinctive policies of the UK's devolved administrations in claims for job creation, start-ups or in improvements to graduate employment, all of which are vital in demonstrating the impact of higher education on economic prosperity and regeneration.
88. User members also observed that, compared to other sectors of the economy, the creative industries do not systematically recognise, promote, or commission research, or co-develop impact in partnership with HEIs, despite evidence of considerable growth in formal partnerships since REF 2014. The opportunity for leveraging this potential was identified as a means of enhancing the resilience of the sector.

Covid-19

89. The sub-panel noted that although there had been some notable disruption due to Covid, this had also stimulated creative responses and rapid technological and social change. Given the opportunities that impact case studies offer to showcase innovative, creative, and collaborative actions, it is anticipated that the longer-term and more profound impacts of Covid may ultimately be more visible in future REF exercises.

Environment

Table 7: UOA weighted environment profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
47.9	41.4	9.9	0.8	0

This table shows the average environment sub-profile, weighted by FTE, for Sub-panel 32

General

90. Changes to REF 2021 were most evident in the submission and the assessment of the research environment. The requirement to produce a contextual 'Institutional Statement' (REF5a) introducing the unit Environment Statement (REF5b) informed by the provision and analyses of standard data resulted in the preparation of a generally informative but complex document for submitting HEIs and for sub-panels.
91. The tenor of the REF5a statements varied considerably although it provided useful context in understanding the scale and mission of the submitting institution. In some submissions there was limited cross-referencing between the two statements, and in others there was little or no mention of Art and Design and its institutional context or contribution (see also paragraph 148 of the Main Panel D overview report).

Calibration

92. Prior to the assessment of the REF5b environment statements, the sub-panel conducted a comprehensive series of calibration exercises, to ensure that all panel members gained an overview of the breadth and diversity of submissions. Given the structural changes to REF 2021 this enabled the panel members to familiarise themselves and to distinguish contextual elements from the assessment of the unit's environment statement (REF5b). To ensure that any prior knowledge of institutions played no part in the assessment of REF5b, due attention was drawn to the Sub-panel 32 Intention Plan identifying the potential risks of unconscious bias. Specialist institutions submitting to only one UOA were not required to submit REF5a although some elected to do so.

Assessment

93. Each REF5b Statement was assessed by a minimum of three academic panellists and one user member, specifically reviewing the strategic support for impact. All submissions were assessed in accordance with the rubric set out in the 'Panel criteria and working methods'. Some submitting units had included information in different sections of the statement from those intended. Given the complexities of the template and the challenges of submission for HEIs during the pandemic, the sub-panel took a holistic view of the submission and of the evidence presented in making its assessment. (See also paragraph 152 of the main panel report).

i. Unit context and structure, research and impact strategy

Overview

94. There was growing evidence across the submissions to Sub-panel 32 of the integration of historical, theoretical and practice research and considerable improvement in understanding the interrelationships between research and impact. The final weighted sub-profile for environment demonstrates the vitality, diversity, resourcefulness and sustainability of Art and Design and considerable advancement of research and impact support since REF 2014.
95. The sub-panel found no direct correlation between the size of the submitting unit and the quality of the research environment. In submissions comprising of under 10 FTE there was significant variation in the quality profile demonstrating some of the highest and some of the lowest scoring units. There was some concern that for smaller units and those with high proportions of fractional staff, meeting the REF5b requirements for REF 2021 presented specific challenges. However, the sub-panel was impressed by units submitting to REF (and/or Sub-panel 32) for the first time, that had presented clear evidence of the strategic investment they had made to integrate research and impact and develop their PGR community.
96. The sub-panel was impressed by the integrated support provided to enable both disciplinary and interdisciplinary research communities to flourish. Despite the impact of Covid-19, a period of challenging economic circumstances and some significant academic restructuring, submitting units evidenced their resilience, ingenuity and creativity and the societal and cultural contributions their research has made locally, nationally, and internationally.

Interdisciplinary research

97. Since REF 2014 the context for many submitting units had significantly altered, with several smaller units being subsumed into larger research and teaching clusters. This resulted in changes in how submitting units presented research groups, ranging from those that were used to organise, describe, and explain the research undertaken, after the fact; to longstanding coherent research centres, strategically developed to foster interdisciplinary research or to strengthen disciplinary or thematic research. In some submissions these responded directly to the evolving funding landscape and societal 'Grand Challenges' and had been successful in generating innovative strands of research but had also influenced how some art and design research is conducted.
98. Submissions were varied in the degree to which they successfully articulated support for interdisciplinarity. Whether large or small, the sub-panel welcomed the articulation of research environments that included both subject and methodological diversity, with some units evidencing impressive collaborative interdisciplinary work with or within pure and applied life, health, and/or physical science clusters, in collaborative laboratory-based teams and in interdisciplinary clusters that combined arts & technology to stimulate innovation and creativity. Other units were more discretely structured to support and strengthen disciplinary focus and identity, and to reinforce rigorous, world-leading research and scholarship, particularly where these were located within larger social science and humanities clusters.

Strategy

99. The articulation of research and impact strategies was variable across the submissions. Stronger submissions provided reflection on REF 2014, contextual changes and an analysis of previous achievements and outcomes. These were aligned to the purpose of the research and impact infrastructure described and produced strategies with clear indicators of success that informed the subsequent REF5b narrative.
100. The stronger submissions articulated the approach to selection of the impact case studies submitted and how impact was supported, and weaker submissions tended to redescribe the case studies.
101. In several submissions the relationship between the strategies outlined in the REF5a and REF5b statements did not align, and it was unclear how unit strategies might be achieved. Some submissions signalled growth in income and lists of planned activity, without reference to the how these could be achieved, hence raising some concerns about their sustainability.

Open access, ethics, and research integrity

102. Good practice was evident in most submissions including awareness and assurance of compliance in open access, ethics and research integrity considered more broadly. In some cases, there was limited evidence as to how the submitting units were actively engaged in contributing to the institution's research culture and environment. The sub-panel raised concerns at the notable absence of references to ethics or integrity relating to participatory research with potentially vulnerable communities and which was prevalent in some impact case studies and in arts practice. The strongest submissions identified practical developments in enhancing research integrity, as well as innovative approaches to open access and the use of alternative forms of media and publishing.
103. The sub-panel recognised the very significant challenges posed by open access publishing and the often-prohibitive costs facing researchers in the histories, practices and theories of art and design. They noted the serious questions associated with all forms of image-rich publishing given the forthcoming challenges in achieving open research in a constrained funding landscape. These will need to be considered by institutions as they are crucial in supporting the vitality and sustainability of future research environments for all Sub-panel 32 disciplines.

ii. People

104. The sub-panel were impressed with the overall improvement in staffing strategies since REF 2014 and the commitments made to invest in and support research careers. Strong submissions described in detail the opportunities and mechanisms available to develop mutual support and nurture ambition within research communities, whether working collaboratively or in teams, as lone scholars, or as creative practitioners. These were often established and recognised by the institution, and strategically supported locally by the unit to ensure that all staff at all career grades had opportunities to develop, produce quality research and facilitate impact, through the allocation of time to undertake substantial projects or applications for grant funding. Many units also identified the importance of recognising academic engagement with and contribution to training, mentoring and peer review within the wider research ecosystem.
105. Most submissions targeted support for Early Career Researchers (ECRs) which was detailed and clearly delineated including, for example, relief for teaching and/or administration. In stronger submissions, claims were supported by evidence of career

progression, grant funding successes or publication. As anticipated research leave schemes were varied across the submissions, with some units having regular access to cyclic and dedicated periods of research time, while in others, such schemes were competitive, given the limited resources available. In less comprehensive submissions, there was little clarity as to how such competitive processes were managed to ensure clarity and fairness.

106. The sub-panel expressed some concern with reference to the reported percentage of staff on eligible contracts submitted, in that it appeared to mask a range of staffing complexities including 'split contracts' between those awarded Significant Responsibility for Research (SRR) and staff on teaching and scholarship contracts. There was limited evidence as to how such staff might transition to research careers and specifically the challenges this presents for fractional staff, given that in some instances academics without SRR were, for example, leading impact case studies.

Postgraduate research support

107. Comprehensive support for postgraduate research students (PGR) was evident in almost all submissions although the detail of the provision varied considerably. The strongest submissions demonstrated how integrated and vital PGR students were to the unit's research culture, including for example, their incorporation in both the institutional and local governance of research, their leadership of and participation in research activities through public engagement, committees, working groups, seminars, and conferences as well as their contributions to teaching. Many of the submissions evidenced active PGR communities, and identified dedicated funding to facilitate events, publication, and participation in external networks and to increase diversity within the PGR communities.
108. The sub-panel recognised units who had successfully supported their own staff to undertake doctoral studies and a small number of institutions who had recently achieved or were working to achieve higher degree awarding powers and were currently supported by partner institutions. Both were identified as indicators of developing sustainability, although the detail of such support was variable.
109. The sub-panel noted the positive benefit that UKRI Block Grant Partnerships (BGPs) and Centres for Doctoral Training (CDTs) had made, specifically the substantial investment by AHRC since 2013. The total number of doctoral degrees awarded in the REF 2021 census period was 3009 which represents a significant increase compared to REF 2014 in both number and proportion. There was clear evidence of the benefits for those units that were part of PGR consortia specifically in advancing practice research and integrating history, practice, and theory through facilitating academic and professional networks across the creative and cultural sectors was prevalent.
110. Participation in Collaborative Doctoral Awards (CDAs) was also noted as invaluable, specifically where these had enabled a sustained dialogue between a unit and an external partner through creative collaborations or co-supervision, led to professional skills development and in some cases provided opportunities for future employment. For those units without access to funded consortia the sub-panel were impressed with the levels of institutional commitment and support provided to sustain their PGR communities. Although supportive of the increase in PGR funding, the sub-panel raised concern as to the sustainability of some PGR clusters given the long-term diminution of funding, reducing access to academic and research positions and the limited diversity of post-doctoral opportunities and training in the creative and cultural sectors.

Evidence of support for EDI

111. The most effective presentations of equality, diversity, and inclusion (EDI) in the support and recruitment of staff were generally where the strategy and stated commitment of HEIs was integrated and evidenced through application at unit level and where the examples provided were specific and tangible. The strongest submissions included, for example, how EDI policies were effective in recruitment, promotion, in the compilation of submission to REF, in the constitution and practices of committees and in the diversification of their PGR communities.
112. Similarly, when considering EDI, the most impressive units were self-reflective and analytical, describing their existing policies, providing evidence, and identifying where further attention was required and planned. Weaker submissions tended to be reductive, identifying only gender parity with little or no mention of other protected characteristics. The sub-panel acknowledged the use of charter marks such as Athena SWAN, Race Equality, and Stonewall in raising awareness and consideration of EDI; although they noted concern that some units predominantly cited these as proxies for quality and delivery, rather than demonstrating how achieving these threshold standards, had stimulated an evidential difference in the quality and experience of the research environment.

iii. Income, infrastructure, and facilities

113. Although research income was generally improved there was no evidence that the volume of HESA-income represented an effective proxy for the production of quality research. World leading, and internationally excellent research was identified across the entire range of submissions irrespective of the levels of income achieved.
114. The average annual income for Sub-panel 32 was £13,592 per FTE and there was significant variation in the levels of HESA income ranging from zero to more than £60K per FTE. There was evidence of considerable diversity in the strategies for achieving and managing funding success from UKRI and the European Union, exacerbated by differential approaches that were also regionally nuanced. Submitting units also outlined varied approaches to the use of endowments and the deployment of Global Challenges Research Fund (GCRF), Regional Growth Funding (RGF) and European Regional Development Funding (ERDF), often augmented by a high volume of non-HESA sources that were documented both in the environment and output narratives. Stronger submissions linked funding awards to outputs and demonstrated the effective use of funding irrespective of its volume, particularly where it was related to practice research and to the production of artefacts, exhibitions, events, screenings, or performances.
115. The sub-panel recognised the substantial volume of research that was facilitated by non-HESA income and that effectively enabled dissemination and impact. Art and Design communities have long sustained complementary symbiotic relationships with cultural and community collaborators through their ability to attract and to balance auditable funding for research and non-HESA income from an array of sources such that it supports and augments civic and public engagement. The sub-panel noted concerns about the future sustainability of some units where the mechanisms for the growth of research income were less evident.
116. Some submissions presented narratives of significant awards that were not yet evidenced in the submitted research due to their positioning in the REF cycle or delays due to Covid.

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117. Descriptions of strategic investment in research infrastructure and facilities were variable across the submissions. The sub-panel appreciated the investment in technical personnel and development of both digital and analogue studio provision for making, screening, editing and performance as well as investment in gallery and innovation spaces to facilitate research and development, dissemination, knowledge exchange, business, and industry liaison. The sub-panel also recognised the growth of digital resources and considerable investment in and development of collections and archives that are relevant and important to all forms of art and design research in creating a vital and sustainable base for future research.
118. Stronger submissions outlined how such facilities, often shared with teaching, were specifically deployed for research or for enabling impact. The sub-panel recognised the resourcefulness of smaller units and institutions that were submitting to REF for the first time, in reshaping of their facilities to support research and impact. In most submissions little emphasis had been placed on environmental sustainability and how materials, resources and facilities were addressing zero carbon aspirations. Less impressive were generic claims of financial investment in infrastructure or descriptions of facilities yet to be completed.
119. There was considerable evidence across the submissions of institutions developing strategic and complementary partnerships with external creative and cultural organisations resulting in expanded opportunities for undertaking research and co-developing impact and outreach beyond the academy to support shared civic and social objectives. Stronger submissions had integrated these arrangements within their strategies for research and impact and within the narrative evidence of their contribution to the research base, economy, and society.

iv. Collaboration and contribution to the research base, economy, and society

120. Across all submissions the breadth, vitality and contribution of art and design research provided compelling evidence of world leading and internationally excellent communities of practice, making significant contributions to their respective creative and scholarly fields, to learned societies, professional bodies, subject associations, to the creative industries and to cultural and public life across the UK and internationally.
121. The stronger submissions followed the REF guidance and produced a narrative description, augmented by summative data, presenting a rich and varied body of evidence of creative, leadership and advocacy roles that contributed to the governance, promotion and standing of UK art and design in all its forms, and by researchers at all career stages. The stronger submissions also provided specific examples of achievements that were closely aligned to their strategic purpose, impact case studies and to creating career development opportunities for researchers and PGR students.
122. The sub-panel recognised the significant contributions many researchers had made to their academic, creative, and regional communities and how these had facilitated and sustained longstanding partnerships and collaborations that had made a difference to creative and cultural life whether locally, regionally, or internationally. Stronger submissions also outlined the unit's commitment to working with other public sector bodies and businesses to enhance the environment, prosperity, and the quality of civic life in their immediate vicinity. Submissions that presented lists of activities, made generic and repetitive claims, and were dominated by the esteem of a few prominent individuals were less impressive.

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123. On reflection, Art and Design researchers across the full range of submissions to Sub-panel 32 demonstrated their resilience, creativity, and ability to lead and to collaborate effectively in many different interdisciplinary contexts. The agility and responsiveness evidenced in both outputs and impact case studies and contextualised in the environment template demonstrated the openness and hospitality of this broad sector and its facility to create and sustain multi-dimensional and mutually beneficial partnerships.
 124. Rarely are the research benefits of all forms of art and design quantified, explained, documented, or distilled as they are in the submissions to REF 2021. So much of their value is frustratingly difficult to capture, challenging to measure, and often resides in the profoundly felt and heard but unspoken experiences of the many diverse communities, beneficiaries, and audiences with whom we work. The sub-panel had the privilege to read, view, listen and discuss the collective wealth of the submitted research and witness the many contributions and profound difference it has made to so many through the questions we ask, the creative encounters we enable and the narratives we make and reshape, and that have established art and design in the UK as world leading.



Sub-panel 33: Music, Drama, Dance, Performing Arts, Film and Screen Studies

1. All sub-panel members discussed and collectively agreed this report, and it should be read alongside the Main Panel D (MPD) overview report which contains a description of main and sub-panel working methods and discusses matters of common interest.

Summary of submissions

2. Sub-panel 33 received 84 submissions from 77 institutions with seven multiple submissions for REF 2021 in music, drama, dance, theatre, performance, live and sonic art, film, television and screen studies. While the overall number of submissions remains the same as in REF 2014, the decrease from ten to seven multiple submissions suggests a greater level of multidisciplinary integration in the submitting units. The submissions came from a large range of institutions, including monotechnic, conservatoires, specialist arts universities and larger multi-faculty universities. Of the 84 submissions, 73 came from institutions in England, five in Scotland, four in Wales and two in Northern Ireland. Ten institutions submitted to UOA 33 for the first time and a further three institutions submitted multiple submissions for the first time. Submission size ranged from 43 researchers (39.63 FTE) to five researchers (3.6 FTE). Nine units submitted between 30 and 39 FTEs, 19 units between 20 and 29.99 FTEs, 44 units between 10 and 19.99 FTEs and 12 between 3.6 and 9.99 FTEs.
3. 1,712 Category A staff were submitted to UOA 33, against 1,318 to UOA 35 in 2014, demonstrating an overall increase of 30%. A proportion of this increase can be attributed to the named inclusion within UOA 33 of Film and Screen Studies, which has led to the submission of more researchers in these areas. Of the total submitted staff, 224 were flagged by HEIs as ECRs (against 280 in 2014), although this data is unlikely to be wholly robust given the different ways in which the individual HEIs compiled the submissions and the divergent definitions of ECR status across sector bodies. Table 1 provides a summary of the submissions to UOA 33.

Table 1 - Summary of submissions (page 180).

Table 1 – Summary of submissions

	Number of submissions	Cat A FTE staff	Cat A headcount staff	Submitted research outputs	Double-weighted outputs	Impact case studies (ICS)	FTE per ICS
2021	84	1,523.27	1,712	3,707	485	197	7.7
2014	84	1,142	1,318	4,261	167	197	5.8
% change from 2014		33.4%	29.8%	-13%	190.4%	0%	32.8%

General observations

- The submission to UOA 33 is notable for its diversity: we assessed research from multiple types of institution, from units of considerably varying size, from units representing both single and multiple disciplines, and from units with both long-established and newly emerging research cultures. The research base in our disciplines is notable for its inclusivity in relation to research fields and researcher background, and highly conducive to the production of innovative and creative work that responds to the evolving needs of industry, society and scholarly enquiry. The sub-panel found world-leading research across a broad spectrum of submission types and output categories, suggesting that excellence is widely distributed amongst units in our field, nourishing a nationwide research contribution of considerable vitality and sustainability. 96.4% of submitting institutions had an element of 4* across outputs, environment and/or impact.
- The submission as a whole demonstrates the strengths of research in our area, with outputs demonstrating originality and innovation in format as well as content, rigour in pushing at boundaries, and significance for both academic and non-academic audiences. Collaboration appears more in evidence than in 2014, both in the co-authorship of outputs and in the notable partnerships with HEI and non-HEI partners narrated in the impact case studies and environment templates (see paragraphs 60-61 and 109). Collaborative research with stakeholders was evidenced in outputs, as well as narrated in the environment and impact submissions. Rich intersections and cross-fertilisation between different disciplines were also noted, both between and beyond the subjects represented by the UOA (see paragraph 57). Cross referral and joint assessment were deployed as necessary for outputs at the boundaries of or resting outside the areas of the UOA (see paragraphs 13 and 51, and Table 5).
- Covid-19 brought significant challenges to the disciplines represented by UOA 33, including periods of lockdown, a rapid move to online working, the impact of illness, bereavement and loss, unexpected caring responsibilities, and the cancellation and

disruption of research-related performances and events. The sub-panel received evidence for the effects of the pandemic upon the completion of outputs, strategic plans, and impact delivery (including the assembly of relevant data and testimonials). Conversely, imaginative, research-led responses to Covid-19 were also evident in many submissions, reflecting the centrality of research in UOA disciplines to individual wellbeing and the cultural health of towns and cities. The sub-panel anticipates that these responses to the effects of the pandemic will be more fully represented in future research.

7. The continuing decline of arts subjects in secondary education since 2014 is one of the factors that has brought challenges to the sustainability of our disciplines in HEIs, evident in a number of well-publicised cuts to departments and subject areas during the cycle. The sector remains vulnerable to changes in attitude to the 'value' of creative arts subjects. This places at risk the rich and deep contribution made by researchers in our disciplines - both as practitioners (directors, designers, composers, conductors, editors, performers, dramaturges, curators, programmers and programming consultants, software and technology developers) and as scholarly researchers collaborating with practitioners - to a creative industries sector that contributed £115.9 billion to the UK in 2019 (DCMS report, 19 Feb 2021). The research we have assessed is a primary source of innovation and growth for entertainment and the arts throughout the UK. REF4 data shows a total HESA recorded income of £95,397,818 (2013-20), but the environment narratives demonstrate a comparably significant amount of funding received in the form of commissions and awards from cultural organisations, private foundations, and charities, underlining the integration of UOA 33 research within the cultural sector. 58 out of 84 submissions recorded non-HESA research-related income totalling over £26.5 million, and a further 10 submissions made reference to non-HESA funding without providing specific amounts; this points to the seminal role of this funding in both the realisation of outputs and in supporting the broader research culture.
8. Sub-panel 33's **working methods**, including the allocation of outputs, were grounded in the assessment principles and framework used across Main Panel D (see paragraphs 23 - 34 of the Main Panel section). A model of distributed leadership was adopted, with the chairing of different items undertaken by sub-panel members on a rotating basis. A 'Bias Mitigation and Fairness in REF Intention Plan' (known across Main Panel D as an Intention Plan) was developed collectively by the sub-panel, and was discussed, updated, and referenced at each meeting. It remained a live, iterative document throughout the assessment process, acting as a pillar of our working methods by ensuring continuing vigilance with regard to conscious and unconscious biases, and an awareness of how these may be related to inequalities in our sector. A randomised list of institutions was used to structure members' reading, ensuring shared timelines for agreement of scores and helping to minimise the role of personal preference in the reading process. Calibration and moderation exercises developed at sub-panel and main panel level across the entire assessment period ensured consistency in grading practices.
9. The sub-panel observed that the **staff FTE-weighted profiles** for UOA 33 - which take account of the relative size of submissions in calculating the proportion of activity at each starred level for a given unit of assessment - did not differ significantly from the unweighted profiles. This is because UOA 33 has a relatively narrow range of different sizes of submission, and no substantially large submissions. All the profiles presented in this report are weighted profiles.

10. The sub-panel observed different kinds of **relationship between the three elements of assessment**. Whilst environment acts as the context for achievement in outputs and impact during the cycle, environment is also scored on future-facing aspects. Individuals may also achieve strongly within less propitious environments, and vice versa. Each element was scored according to the criteria articulated in the 'Panel criteria and working methods' document, with a clear recognition of the differences between the sets of criteria. As such, a very high percentage of world-leading outputs did not always equate to a very high percentage of 4* in environment and/or impact.

Table 2 - Overall profile for UOA 33

% 4*	% 3*	% 2*	% 1*	% Unclassified
39	36	20	4	1

This table shows the average overall profile, weighted by FTE, for Sub-panel 33

Outputs

11. 3,707 outputs were submitted to UOA 33; of these, 3,233 were assessed, with the remainder being reserves which were not required as the associated outputs were accepted as double-weighted. A breakdown of outputs received across the sub-panel's different disciplinary areas is recorded in paragraphs 21-51 below. A breakdown of the output sub-profile is recorded in Table 3.

Table 3 - Output sub-profile for UOA 33

% 4*	% 3*	% 2*	% 1*	% Unclassified
35.8	34	24.7	5	0.5

This table shows the average output sub-profile, weighted by FTE, for Sub-panel 33

12. 13.1% of the submitted outputs had **double-weighting requests**, an increase from the 3.9% submitted to REF 2014. While the sub-panel welcomed the double-weighting requests accompanying outputs where the scale of academic investment in the research activity and/or the intellectual scope of the research was judged as considerable, it noted that the percentage was significantly lower than the Main Panel D average of 17.2% and around half the level of UOAs 27, 28 and 29. This was perhaps surprising in that all HEIs could provide a reserve output to accompany all double-weighting requests – the sub-panel assessed 17 reserve outputs. The sub-panel identified a significant number of outputs that demonstrated sustained research effort, extended or complex research, the collection and analysis of a large body of material, a complex, extended and/or multi-layered process of creative investigation or the investigation of a particular topic, theme or artistic form from different perspectives and/or in relation to different contextual fields and discourses where no double-weighting requests were made; these included monographs, edited collections and practice research. 15% of the 84 submissions had no double-weighting requests.

Table 4 - Double weighting requests

Total outputs submitted	Total outputs assessed	Double-weighting requests	% double-weighting requests accepted
3,707	3,233	485	96.5%

13. 176 outputs were **cross-referred or referred for joint assessment** out of the sub-panel and 112 outputs were either cross-referred or referred for joint assessment into the sub-panel as indicated in Table 5 below. All HEI requests for cross-referral were accepted by the sub-panel.

Table 5 - Cross referrals and joint assessments into and out of Sub-panel 33

	Cross-referrals IN to SP33	Cross-referrals OUT of SP33	Joint Assessments requested by other SP	Joint Assessments requested by SP33
Sub-panels outside Main Panel D	15	65	3	13
Sub-panels within Main Panel D	59	85	35	12

14. The sub-panel was able to read outputs across **ten languages**. **Specialist advisers** worked with the sub-panel on scoring outputs in areas including acoustics, animation, arts and health, dance history, medieval music, music education, pedagogy, music therapy, music and cognition, and computational musicology.

Output types

15. As Table 6 indicates, Sub-panel 33 received outputs in a broad range of types and forms. The data on submitted outputs records only how the submitting institution chose to classify the output type; the sub-panel found a good deal of crossover and porosity between the categories, notably in the area of practice research; a significant quantity of research in composition and performance was submitted under 'Other' or 'Digital or visual media', for instance. 29% of the outputs submitted were in non-text-based media and/or formats. In keeping with paragraphs 206-7 of the 'Panel criteria and working methods', all outputs were assessed robustly on their own terms, with no privileging or disadvantaging regarding output type, publisher, journal, publication timing within the REF cycle, length, or language. World-leading research was found in the large majority of output types.

Table 6 – Outputs assessed, by submission classification

Output types	Count	Percentage of assessed outputs
A – Authored book	510	15.77
B – Edited book	224	6.93
C – Chapter in book	587	18.16
D – Journal article	970	30.00
E – Conference contribution	15	0.46
H – Website content	14	0.43
I – Performance	162	5.01
J – Composition	365	11.29
K – Design	6	0.19
L – Artefact	7	0.22
M – Exhibition	27	0.84
N – Research report for external body	5	0.15
P – Devices and products	1	0.03
Q – Digital or visual media	95	2.94
R – Scholarly edition	29	0.90
S – Research data sets and databases	2	0.06
T – Other	213	6.59
U – Working paper	1	0.03
Grand Total	3233	100

16. **Output forms** included archives, artefacts, articles, book chapters, CDs, conference presentations and papers, databases and data sets, devices, digital and visual media, DVDs, edited volumes, exhibitions, fiction, films, hardware, installations, journal articles, monographs and authored books, multichannel works, performances, poetry, podcasts, recordings, scores, scholarly editions, software, video essays, websites, and working papers. Whilst the traditional forms of book, chapter and journal article were still submitted in large numbers, the sub-panel found that other more unusual output forms could embody originality, significance and rigour just as compellingly, and score at the highest level.
17. As Table 6 shows, the sub-panel received a significant number of **edited volumes**; not all of these evidenced a strong research contribution on the part of the editor, but in some the editor's role was judged to have been decisive in defining a new research field and advancing the research agenda. **Book chapters** embodying high levels of originality, significance and rigour were also identified, although the sub-panel also saw a quantity of work that largely summarised the arguments of others, and therefore had limited scope in terms of originality and critical enquiry. A significant proportion of work across all the most strongly represented output categories was **co-authored** with other

academics or collaborators from outside academia, reflecting the growth of collaborative ways of working within our disciplines. In keeping with the methods described in 'Panel criteria and working methods', paragraphs 216-236, the sub-panel assessed this work in exactly the same way as single-authored work and found comparable levels of excellence within it.

18. The sub-panel noted the submission of outstanding **multi-component outputs** for practice research that gave a clear sense of how the distinct components constituted the output. In the strongest cases, the research to be assessed was clearly differentiated from contextual materials, and the originality, rigour and significance of the research was evidenced through clear articulation of both process and findings. In some instances where a collection of creative and or critical work was presented as a single output, it was not always clear from the submitted materials how the items selected related to different parts of a single project and were collectively greater than the sum of their parts ('Guidance on submissions', Annex K).
19. In a very small number of cases, **output presentation** raised some challenges. PDFs of articles and book chapters were not always presented in their entirety, with missing pages, footnotes/endnotes, and/or bibliographies. Multichannel works or outputs with software implications were not always readable or accessible, with occasional missing or truncated elements requiring audit requests to HEIs.
20. The sub-panel identified impressive levels of world-leading research across all the different sub-disciplines submitting to UOA 33. Of particular note were the **contributions of ECRs**, which, although not always clearly flagged within submissions, were (as in 2014) often characterised by the highest levels of excellence, frequently extending the boundaries of disciplinary areas in important and influential ways.

Music

21. Work in music constituted 47.5% of the outputs submitted to the sub-panel. Of the 84 submissions to UOA 33, 64 contained a substantial proportion of music outputs, reflecting either the work of a named music department (sometimes included in a joint submission) or a multidisciplinary environment in which music research plays a substantial role. 26 of these submissions were sole submissions from individual music departments. World-leading research was found in 97% of the 64 submissions containing music outputs. Research from units submitting music research to REF for the first time often reflected strong collaborative and industry relationships, and in some cases extended the discipline into new and significant areas of enquiry.
22. Approximately 50% of outputs in Music were flagged by HEIs as either 'musicology', 'contemporary popular music studies' or 'ethnomusicology'. Outputs in these areas predominantly took the recognised forms of monograph, article or book chapter, although there were also a few submissions in these areas that innovatively explored the potential of digital forms of presentation to lead to new kinds of insight. Work in composition and related forms of artistic practice was submitted under a number of different headings; in total this amounted to just less than 30% of all Music outputs, representing a slight dip on REF 2014. Musical performance comprised around 5% of all Music outputs. The sub-panel noted with concern that the new rules around output submission for REF 2021 which gave greater flexibility to HEIs over output selection may have led HEIs to act cautiously in relation to creative outputs, based on unfounded

assumptions that such work could not score at the highest level. Similar caution was found in the approach to double-weighting of creative outputs. Gratifyingly, the creative work received by the sub-panel abundantly demonstrated the world-leading nature of much research in this area, as did work across all the main categories of music output.

23. The sub-panel observed, as in 2014, that impact and collaboration were well embedded in many outputs, serving as a reminder that the different elements of the REF exercise are frequently inseparable within the work of HEIs. The sub-panel noted an increase in work engaging with issues of race, sexuality, disability and other axes of social difference, reflecting wider shifts of awareness within the creative and cultural sectors. The sub-panel noted that they saw very few submissions in languages other than English, and that article submissions predominantly came from journals that were UK or US-based, raising the concern that important elements of research activity which may flourish beyond Anglophone contexts were not receiving due recognition.
24. Healthy numbers of outputs were submitted under each of the historical musicology sub-categories; popular music studies and ethnomusicology were comparably well represented. As in 2014, it is clear that traditional disciplinary boundaries are increasingly being eroded, and the sub-panel was aware of significant overlap and cross-fertilisation between work linked to different submission categories. The historical, geographical and cultural coverage of these outputs was extensive, ranging from highly innovative work on the earliest notated music through to a substantial body of work on the long 20th century up to the present. The sub-panel noted a considerable number of items investigating 17th- and 18th-century music, including some highly novel contextual or interdisciplinary approaches, along with a resurgence of analytical interest in 18th-century music. Within opera studies a focus on singers and productions was a significant emerging area. Work on both opera and film included some outstanding outputs that reconceptualised the intersections between media, music and sound across genres and formats, and addressed global perspectives in new ways. In popular music studies, outstanding research was found in fields including hip-hop, EDM, digital culture, and application of digital methods; research on popular music was notable for deploying a wide range of methods, including a significant use of music-analytical and ethnographic approaches, and work using new digital techniques. Many outputs in music analysis were judged to meet the highest standards of originality, significance and rigour; the sub-panel noted however that historical musicological and analytical approaches to 19th- and 20th-century repertoire sometimes appeared to be pursuing separate paths, with limited methodological dialogue between the two areas. Research in ethnomusicology continues to thrive in the areas highlighted in the REF 2014 report. Additionally, the submission included notable work exploring the intersections with sound studies and urban studies, historical approaches within ethnomusicology, and emerging work engaging with heritage and cultural policy. Outputs in ethnomusicology adopted a wide range of approaches to analytical method, from investigation of musical elements and parameters to work that rethought analysis and which centred the idea of embodiment. Excellent work was also found in applied ethnomusicological work related to the social impact of music. Methodological and theoretical rigour were clear strengths of many outputs in ethnomusicology. The submission of performance-practice research connected to a range of world traditions and intercultural musical encounters was regarded by the sub-panel as a welcome development.
25. Since REF 2014 a number of topics and approaches have broken out of their specialist enclaves to become more widely influential within musicology. Approaches informed by sound studies were found in musicological work on all historical periods (especially

post-1800). Embodiment and the theory of emotions also formed important strands, often in tandem with a focus on listening, again pursued in work across all centuries and multiple cultural contexts. Histories of technology and transnational reception histories were significant across a number of sub-disciplinary areas, as were studies of music and politics, approached both institutionally and through questions of personal identity.

26. The submission included a number of scholarly and critical editions of musical works, many of which were regarded by the sub-panel as essential points of reference, demonstrating the highest levels of significance and rigour. 'Performing editions' were judged to be more variable in quality; here, originality, significance and rigour were sometimes less evident. Archival research continues to underpin outputs of different kinds, from 'first' performances of manuscripts to detailed reception histories. The sub-panel noted that the geographical range of the archive has extended to become transnational and global.
27. Research submitted under the categories of 'music psychology' and 'music and science' comprised almost 10% of the Music submission. It included a significant body of work on the social impacts of music, community music, and the relation of music to health, therapy and wellbeing. A further notable body of work made use of methods and knowledge from cognitive science and neuroscience to advance musical understanding. Multidisciplinary work spanning music and science also used musical insights and techniques to advance research in other fields, including the human brain and behaviour, archaeology, and human and animal evolution. The sub-panel saw some unusual and creative work engaging with evolutionary history and prehistory, and multidisciplinary collaborations with researchers in archaeology, acoustics, and sound studies.
28. Performance studies remains a thriving field, with outputs submitted under a number of different sub-disciplinary categories. Work in this area often provided evidence of a mutually beneficial relationship between scholarly research method and performance methodologies. High-scoring performance outputs included research that pursued novel historically-informed approaches to diverse repertoires, and which involved collaborations with composers and technologists on the creation of new work. Some convincing multi-component items effectively combined performance and historical or other critical work. The sub-panel welcomed the submission of research in popular music practice. The sub-panel noted a lack of confidence in the double-weighting of performance-based and composition outputs, despite the substantial complexity and scale of some of the submitted work in this area. Organology remains a small but important area of research, often producing world-leading research with high levels of rigour; here the sub-panel noted particular areas of focus upon acoustics and materiality.
29. The submitted outputs in composition comprise a body of work of remarkable diversity, embodying types of enquiry and insight that span multiple aesthetic terrains, professional and community contexts, and new and old technologies. In acoustic composition, outstanding levels of rigour, imagination and creative scope were found across the full range of orchestral, instrumental and vocal music, including much work generated in partnership with commissioning bodies and performing organisations. The sub-panel noted an increase in composition outputs investigating the composer's own performance practice, and some highly original enquiry-led work that would not have been feasible to realise outside of the HEI context. Research in electronic and electroacoustic composition was often characterised by outstanding levels of originality and rigour, and in some instances contributed to technical advances that have significance for research in engineering, computing and acoustics. As in other fields,

composition work frequently straddled more than one of these submission categories, and each output was assessed on its own terms. Some composition and improvisation work was judged to lie at the forefront of exploration into networked technologies, web-based performance and gaming technologies. Some outputs in jazz and improvisation were scored at the highest level, as was composition work designed for industry and the commercial sector – including work for television, games, product design and commercial albums. The field of music production has matured and is now more confident as a creative research field, able to take advantage of the burgeoning body of written research in this area. Evidence was also provided of effective engagement with local communities, with some composition outputs developed iteratively through collaboration with community members; this work was frequently of a high standard in terms of rigour and innovation, and represented a valuable contribution to the development of the art form. The sub-panel also noted a body of creative work that aligned itself with particular identities, or that engaged with the changing politics of identity over the assessment period, and consider this to be an encouraging sign of the consolidation of greater plurality within compositional practice.

30. It is clear that the boundaries of music studies are increasingly difficult to demarcate rigidly, and that productive intersections with the methods and insights of other disciplines are increasingly central. The sub-panel found a great deal of impressive and sometimes boundary-pushing engagement with diverse fields, both within and beyond the arts and humanities. Alongside the numerous interdisciplinary aspects mentioned in the previous paragraphs, the submission notably included work that placed music in the context of digital culture, drew on methods from art history and book history, investigated the relationship of music, language and law, and applied perspectives from heritage studies. The sub-panel also saw practice-led work that made significant contributions to advancing new sound and media technologies.

Drama, Theatre and Performance (including Cultural Policy)

31. Work in drama, theatre, and performance constituted 30% of the outputs submitted to the sub-panel, evidencing a dynamic disciplinary field with a rich and important proportion of work operating across these intersecting domains. Indeed, the porosity of the flagged categories for outputs make specific percentages of outputs in each area difficult to calculate. Equally, much of this research also interacted with disciplinary areas covered by the whole sub-panel, such as music, film, television, and screen work. Reflecting this rich diversity, there was a wide range of submission formats realised across a range of media — with 14.4% of outputs in non-text-based media.
32. The sub-panel received an impressive range of work across diverse areas and topics: applied and socially-engaged performance; contemporary theatre and performance theories and practices across all processes (including designing, devising, directing, dramaturgy, performing, technical areas and writing); digital tools, forms and processes; diversity, participation and ethics; embodied knowledge; environmentally-focused research; historical and historiographical work; theoretical or philosophical analyses and enquiries; work on or in the creative industries. The sub-panel also observed the foregrounding of research and methodologies beyond the Global North, US-Eurocentric and Anglo-centric context.

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33. Much research showed wide engagement with the shifting contexts in which theatre and performance is crafted and experienced in the 21st century. As in 2014, a large proportion of work explored current, recent and late 20th-century practices, demonstrating the UK's strength in this area. This included distinctive work on: live art practices and theories, though with less in this area than in 2014; movement and dance theatre; musical theatre, voice and sound; performer training; and sports and performance. A strong vein of historical work appeared both in recognised modes of historiographical research – engaging with theatrical cultures from the early modern period onwards – as well as in innovative practice research being used to explore theatre history. Archives were often distinctly positioned as the subject of research, as a site for performance or as a creative stimulus rather than just as a resource for conducting research. There were fewer studies of individual playwrights than in REF 2014, although a number of outputs looked at historical trends in writing and broader dramaturgical currents.
 34. Practice research as a mode of enquiry continues to be vibrant, with many pieces drawing on extensive and often collaborative investigative processes, with other artists, academics or a range of communities. These manifested in numerous modes: from websites through designs to feature-length films or edited extracts, as plays or other forms of writing, with often very high-quality documentation. This documentation was often crucial in serving as a proxy for a live event but was also often helpfully employed to contextualise and elaborate upon the research process and findings (see also paragraphs 52-56).
 35. There was much that was collaborative in methodology and/or execution across many outputs. Innovative engagements with the creative industries included considerations of scenography and lighting, sometimes in carefully curated contexts, and revisionist approaches to directing and stage craft, ensembles, and companies. A distinctive proportion of outputs were produced by or with industry practitioners, demonstrating the deep and important intersections and collaborations with the sector both in the UK and internationally. These underpin our disciplines, and it was clear that academic research both shapes and draws on professional practice in a productive symbiosis.
 36. Engagement with the creative sector also included a small but distinctive vein of outputs influencing and reflecting on cultural policy. The sub-panel noted specialisms in funding, cultural value and leadership as well as work that challenged the lack of ethnic and racial, social and gender diversity in arts and cultural leadership. Much research in this area also focused on participation and audience development, as well as practice research involving local, national and international cultural organisations. Distinctive reflection on audiences and spectators, including many outputs on immersive works, sometimes followed through into, or came out of, broader work on policy and arts organisations. The sub-panel also observed a growth of participant-oriented research, with some outputs featuring a specific focus on non-professional participants.
 37. There was less focus on the specifics of space or place than in REF 2014, replaced by a broader awareness of the environment, ecology, and sustainability. A sense of regional identity and location was still central to some research, and impressive work which reflected on creative work in the devolved nations was often rooted in nuanced considerations of languages, audiences, and cultural policy, sometimes in devised work from small-scale to substantial events or at other times re-envisioning well-established plays.

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38. The sub-panel was struck by work dealing with mobilities of all kinds, from global movement and migration to local walks, some of which explored the post-Brexit environment in Britain. There was a notable focus on research looking at European theatre and performance from outside Europe or the cultural implications of exiting Europe, especially in outputs published later in the REF publication period.
 39. A strong vein of outputs was identified in technology and assisted performance, as well as the use of digital tools, including motion capture, Virtual Reality, and with a particular interest in sound. Innovation was present both in the design and execution of original new works and in the wider reflections on the ethical, practical, and other disciplinary implications of these evolving technologies. There were several explorations which examined how performance (and spectating) opportunities might be enhanced through new technologies.
 40. The sub-panel identified a discernible shift away from applied practices located in very specific contexts towards tackling wider issues of social justice and equity, including consideration of personal and group ethics. Such outputs often drew on collaborative or participatory methodologies and moved beyond the dominant UK focus evident in 2014 to encompass cross-disciplinary socially-engaged practices with a richer global span (for example across Africa, Asia and the Latin America). The sub-panel also identified this renewed international focus in several other areas of research, including performance, theatre practices and playwriting, as well as theatre history/historiography.
 41. This expansion in applied research was further evidenced in a broader focus on interdisciplinary research in arts, health and wellbeing, often (but not exclusively) explored through practice research. Often this included a holistic consideration of the performer and beneficiaries, sometimes drawing on collaborations with health-based providers and organisations or scholars from health studies. Notable examples of challenge-led interdisciplinary research addressed global health, the climate crisis, the ageing society, and the ethics of AI.
 42. The sub-panel was struck by how frequently theatre is used as a methodology or lens for examining particular social, political, cultural, medical, or scientific issues or practices. This reflects the adaptability of theatre and performance and the ability to evolve in response to new paradigms. Much writing and practice research was considered to be inherently interdisciplinary, even if this was not specifically emphasised or even referred to. Indeed, interdisciplinary work was identified across many of the areas identified above, often engaging with the sciences, mathematics, or health and wellbeing, and with particular growth in work exploring the relation between theatre, philosophy and political theory. All these disciplinary and interdisciplinary areas are continually evolving, producing rich insights that span the cultural forms and practices represented by the sub-panel.

Dance

43. Dance research outputs made up 6% of the overall output submission. Dance research was distinctively present in many interdisciplinary outputs, either leading the research or working in collaboration with other disciplines, demonstrating the importance of dance studies within creative arts scholarship and beyond. Notable examples included dance studies in collaboration with and impacting dance science, digital humanities, health and well-being, music, and psychology. Strengths were identified in outputs that signalled new and interdisciplinary trajectories for dance research, particularly in a context where dance has seen considerable shrinkage in higher education during this REF cycle, evidenced in a slight decrease in outputs from REF 2014. Whilst fewer in number, outputs were notably diverse in research focus, methodologies, and reach, and, coupled with greater selection in the submission more generally, a significant increase in quality was recognised. The sub-panel particularly noted the growing number of high-quality outputs from ECRs, signalling the field's dynamic and promising futures.
44. Outputs in Dance were identified in the following areas: choreography and creative practices; critical dance studies; dance and cultural identities beyond US and European contexts; dance analysis; dance and digital media; dance, cognition and psychotherapy; dance dramaturgy and movement for theatre; dance ethnography; dance, health and wellbeing; dance history, historiography and archives; dance, interculturalism and transnational practices; dance and philosophy; dance science; and urban, popular and social dance. A strong focus on contemporary (20th and 21st century) dance cultures was present alongside some outstanding historical work, and research that foregrounded dance research from beyond the Global North. Distinctive publications on ground-breaking choreographers and choreographic practices were a notable strength. Less research in phenomenology was submitted than in 2014, although the sub-panel noted real evidence of greater rigour and developing criticality in the presence of phenomenology as methodology underpinning research in different formats. Dance science research offered some innovative analyses of dance training methods and injury prevention but the extensive growth in this area evidenced in REF 2014 was not matched in REF 2021.
45. Critical dance studies — making up 50.7% of the outputs in Dance — has grown in confidence, deepened and broadened in scope, and consolidated its identity to emerge as one of the strongest areas of dance research seen by the sub-panel in 2021. Highly distinctive work was identified in units with a critical mass of dance scholars. Pockets of excellence were also recognised in submissions where dance was present within larger multidisciplinary teams.
46. There was a significant proportion (28.7%) of practice research, although this was of variable quality. Strengths were noted across a broad range of practice outputs, including in screendance, in choreography for the stage and gallery, in site-based performance, in digital and web-based dance work, and some exciting practice focused on engaging non-professionals to enhance cultural engagement and wellbeing.

Film and Screen Studies

47. In REF 2014, 11% of the overall output submission to UOA 35 was identified as belonging to the categories of film, television, screen studies and broadcast media. The recognition of film and screen studies in the title of UOA 33 has brought an increase in outputs in this area, evidenced both in new multidisciplinary configurations from units that had submitted in music alone in 2014, and units submitting for the first time. 16% of the outputs submitted to UOA 33 were in the broad areas of film and screen studies.
48. Outputs in film, television, screen, and broadcast media submitted to the sub-panel demonstrated a veritable and impressive expansion of fields. These included: cinema histories: documentary practice and participatory engagement; ethnographic documentary; experimental and artists' film and mixed-media installations; film philosophy; histories of censorship and regulation practices; media archaeologies; national cinema, with a strong emphasis on transnationality; popular genre studies; screen music; technologies and animation; television histories; and world cinemas. Shifts were noted from 2014 with celebrity studies more in evidence than conventional star studies – although examples of the latter were strong. Film and television histories engaged with a broad range of historiographical and archival-based approaches. New developments in global and transnational research observed in REF 2014 were accelerated in a number of REF 2021 submissions, evidencing growth and vitality in that area. Experimental practices were in evidence, largely (although not exclusively) presented in non-written outputs. While there was less evidence of new work developing in film and media theory per se, work in this area was often interdisciplinary in its intersection with philosophy. Interdisciplinary dialogues were also strongly present in film and music outputs and recognised in outputs working across film and literature and/or adaptation studies. A number of submissions explored connections between film, television and other art forms, evidencing continued interest with intermedial forms, histories and aesthetics. Engagements with platforms for exhibiting and distributing work – from festivals to streaming platforms – and their impacts on the production and reception of both film and television products were also noted, reflecting new modes of documenting and understanding the shifting audiovisual landscape.
49. Gaming was an emerging area in 2014. In REF 2021 this field, alongside related technological forms such as Virtual Reality and podcasts, was more strongly in evidence. Digital innovation was strongly present in these newer areas, with an increased proportion of outputs submitted in non-written formats such as video essays and composite portfolios. High degrees of originality were identified in practice filmmaking outputs across varied forms, from the creative documentary to promotional shorts.
50. The sub-panel identified an increase in practice research outputs with a compelling interdisciplinary dimension (see also paragraph 57). Areas of strength in practice coalesced around narrative filmmaking, autoethnographic filmmaking (the essay film), and participatory filmmaking engaging with diverse cultures, with distinctive examples of decolonising, ethnographic or anthropological filmmaking strongly in evidence. Creative filmmaking outputs were also notable in the areas of memory studies and health and wellbeing (including mental health and end of life care) - several projects here were funded by Wellcome. Further significant practice research in film included projects realised in partnership with NGOs, and collaborations with indigenous communities, and/or focused on sites of conflict.

Outputs outside these disciplinary fields

51. The sub-panel received 0.5% of outputs in areas outside the UOA descriptor provided in the 'Panel criteria and working methods' (paragraphs 160-61). These included outputs in advertising, art history, contemporary art, creative writing (including fiction and poetry) and the philosophy of art. These outputs were cross-referred to sub-panels 27, 32 and 34.

Practice research

52. The sub-panel noted many examples of outstanding practice research across all forms, as described in paragraphs 28-29, 34, 46 and 49-50 on the different disciplinary areas. The sub-panel saw much outstanding practice research that was socially engaged, including applied work situated in a wide range of contexts, and work co-created with community partners or professionals. The sub-panel also identified world-leading practice research that demonstrated originality, rigour, and significance in aesthetic or formal terms alone.
53. Many practice research outputs were succinctly supported with a well-written 300-word statement that illuminated the research process and insights. In other cases, carefully chosen contextual information helped illuminate the research. This could include material already in the public domain, and/or material newly prepared to elucidate research findings and/or aspects of the process of the research.
54. The sub-panel recognised the challenges presented in submitting materials when the original live format (e.g., an installation, performance, or exhibition) could not easily be recreated. In many cases, considerable thought had evidently been given to the presentation of materials that documented both research process and insights. In some instances, however, the research element was not well documented or articulated. In such cases, the sub-panel sought to 'see through' presentational shortcomings, crediting identifiable research dimensions even where they had not been explicitly spelt out in the documentation.
55. The sub-panel noted the many advances made by researchers in filming, recording, editing, and presenting their work, often using sophisticated digital tools and processes. The REF guidelines allowed for submission of audio-visual materials via a variety of means, and the sub-panel accordingly assessed work presented on a great range of online platforms and physical media. In future, it is to be hoped that USB sticks, CDs, DVDs, and other physical media not integral to the research investigation can be replaced by online access without any detriment to the work being reviewed and with less environmental impact. The digital materials prepared for REF submission have an important role to play in making sure that practice research is visible and accessible well beyond the REF exercise. We encourage HEIs to make possible the open access archiving of such materials in both institutional and sectorial repositories, for the benefit of academic and public use.
56. On occasion, practice outputs were judged by the sub-panel to lack a clear research component. A small proportion of practice research outputs appeared to retrofit research questions and a research-based process to work that was created with other agendas or purposes in mind. The sub-panel was also sometimes left unclear as to the specific research contribution made by the submitting author. Such problems notwithstanding, across all of the disciplinary areas the sub-panel saw many outstanding practice research outputs that were either authored by professional practitioners or drew successfully on often complex collaboration with professionals and industry partners, and which clearly embodied a process of enquiry leading to new insights.

Interdisciplinary research

57. The sub-panel identified an inconsistent use of the interdisciplinary flag, making it an unreliable indicator of the quantity of interdisciplinary research across the submitted outputs. The sub-panel found interdisciplinarity to be deeply embedded across all fields of research represented by the UOA, with a high proportion of work demonstrating inter-, cross-, and multi-disciplinary currents, and a permeability to methods from other fields. The cross-disciplinary nature of many of the submitting units provided a rich environment for interdisciplinary exchanges. The multidisciplinary composition of the sub-panel assisted with the assessment of a number of the key areas in which interdisciplinarity was identified. These included: AI; arts and health; curation and preservation of heritage; ecology; ethnographic documentaries; engineering and informatics; film music; gaming technologies; music and neuroscience; photography; sound recording studies; physics; psychiatry; psychology; and work on social and criminal justice. Further notable examples of interdisciplinary work are identified in the paragraphs on the different disciplinary areas.

Equality, diversity, and inclusion

58. The sub-panel noted a growth in work on the politics of difference and the diversity of identities and representations, compared to 2014. The strongest research in these areas questioned established methodologies, recognised and championed different models of knowledge production, and demonstrated that the researcher had reflected upon their own positionality in relation to the subject matter. The sub-panel saw impressive work on subjects including LGBTQ+ cinemas and theatre, drag performance, histories of Black theatre, revisionist analyses of queer, Black and global majority artists, the evolution and deployment of global cultural forms, performance and race, performance and gender expression, diasporic and indigenous cinemas, and theatres engaged with refugee communities and asylum seekers. A number of outputs focused on disabilities, including notably innovative work on new modes of engagement across all disciplines for those with physical, sensory and/or cognitive disabilities. Practice research outputs investigated how questions of equity, equality, diversity and inclusion could be embedded in working methods and modes of dissemination, generating high-quality outputs in a variety of media. The sub-panel noted that research on marginalised and minoritised peoples did not always demonstrate care with regard to the ethical issues that arise in writing about these communities, sometimes resulting in language choices that disempowered them. The stronger outputs evidenced clear consideration of the ethical issues and questions around appropriate language use that arise when deploying co-creative or participatory methods, particularly with minoritised groups.

Impact

Overview

59. Sub-panel 33 received a total of 197 impact case studies. This is the same number as was submitted in REF 2014. The number of impact case studies per submission ranged from 2 to 4, with the average at 2.3 case studies. The average FTE per case study of 7.73 represents the second lowest average in Main Panel D, reflecting the significant proportion of smaller submissions received by Sub-panel 33. The sub-panel noted the potential challenges faced by very small units being required to return two case studies, although we saw examples of outstanding impact from a number of these small units. The sub-panel received six case studies that fulfilled the criteria for case studies continued from REF 2014. The very small number of **case studies scored as Unclassified** resulted from the sub-panel's judgement that the underpinning research did not meet the 2* quality threshold. A breakdown of the impact sub-profile is recorded in Table 7.

Table 7 – Impact sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
43.8	37.5	14.7	3.1	0.9

This table shows the average impact sub-profile, weighted by FTE, for Sub-panel 33

60. The impact case studies submitted to the sub-panel demonstrate the interdisciplinary and collaborative nature of research in Music, Drama, Dance, Performing Arts, Film and Screen Studies, and its capacity to bring benefit to individuals, communities, and organisations ranging from businesses, broadcasters and cultural and heritage organisations through to governments, NGOs, and charities. Arts and health has developed as a major area of impact since REF 2014, as has engagement with climate justice and interventions in relation to diversity, with positive consequences for the reach and significance of research within our disciplines. It is clear that HEIs are often an integral part of the cultural offer in their home-town or city; that they work in concert with local, regional and national government to address social and civic concerns; and that they are fostering innovation across the fields of the arts, cultural policy, and community work.
61. As noted in 2014, the relationship between research and impact in our field is not always linear or one-way, and much of the impact we assessed arose from partnerships with beneficiaries where research was co-developed, and benefit was felt by all parties. Close collaboration between researchers and beneficiaries is often built into the research undertaken within the disciplinary areas covered by the sub-panel, as both the environment templates (REF5b) and outputs clearly demonstrated. The sub-panel wishes to gratefully acknowledge the contribution of the organisations and individuals involved in impact case studies who gave their time and expertise in developing these case studies and in providing evidence of their impact. In particular, we wish to acknowledge those who provided evidence during Covid-19 when many organisations were operating with reduced resources or were significantly over-stretched.

How impact was assessed by the sub-panel

62. The sub-panel benefited from the expertise of a range of impact assessors working in the areas of arts and health, arts and cultural policy, programming, curation, and arts management. Three members of the sub-panel were appointed as research users, and a further two impact assessors joined for the assessment phase. The assessment of impact also benefited from the presence on the panel of academic members who are also experienced practitioners, curators, and programmers and/or have longstanding collaborations with partners beyond academia. The panel were mindful of the risk of assessing in relation to a high baseline, given the track record of our disciplines in outward-facing research, and sought to mitigate this through the Intention Plan. The Plan included a series of prompts specifically related to impact, which were reviewed and refined at each meeting (see also paragraph 8). The prompts covered the potential for bias to emerge, for example, across types of impact or pathways to impact, type of beneficiaries, the question of 'timeliness', and applied versus pure impacts. Each case study was initially assessed by a trio consisting of one impact lead and two further members of the sub-panel and then discussed by the full sub-panel who agreed the final classification. Additional oversight was provided by a series of sub-panel and cross-panel calibration exercises and advice from one of the Main Panel D assessors.

Range of impacts

63. The sub-panel noted the geographical range of impacts and beneficiaries, which spanned Africa, the Americas, Australasia, Asia, and Europe including the UK and Ireland. Case studies engaged with beneficiaries at local, regional, national, and international levels, and some achieved transnational impact.
64. The range of impact described may be loosely grouped into the following areas:
65. Impacts on **civil society** included initiatives aimed at promoting understanding of disability and neurodivergence; active attempts to increase and support working-class performers; work with migrant and refugee communities, and communities affected by climate change, war and social deprivation; and work challenging racism, sexism and bullying in arts and cultural organisations. This sat alongside efforts to raise awareness of diverse cultural practices and to develop new approaches to social inclusion at local, national, and international levels. The sub-panel saw abundant evidence of partnerships with organisations across civil society, often reflecting longstanding, collaborative methods of conducting research and delivering impact.
66. The sub-panel received a large number of submissions describing impact on **cultural life**, including individual creative practitioners, performing arts organisations, broadcasters and publishers, as well as public audiences around the world. Case studies described impacts such as the diversification and broadening of repertoire, changes to programming and organisational policy, influence upon professional and amateur creative practice, the expansion of discourses relating to creativity and the arts, and the creation of artworks experienced and enjoyed by diverse audiences. Case studies described impact on the **curation and preservation of cultural heritage**, including indigenous and endangered heritage, through innovations in interpretation, advocacy strategies and professional development. Beneficiaries included museums and heritage organisations at every scale (local, national, international, and transnational).

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67. As in 2014, the sub-panel received submissions detailing outstanding work in **enriching public understanding of culture and the arts** through community participation and curation, innovations and developments in digital technology and access policies, and well-devised **public engagement** activities such as broadcasts, concerts, and festival programming. The most effective case studies were able to corroborate the impact of such engagement through audience figures, analytics, and user feedback.
68. A number of case studies demonstrated the ways in which sales and grant income contributed to the **economic sustainability** of artists and artistic organisations, cultural and heritage organisations, charities, businesses and local economies. In many cases this was demonstrated through increased ticket, CD, and streaming sales, but there were also benefits to companies and brands in the form of advertising, licensing, consultancy, evaluation, and reputational enhancement, as well as significant innovation in the creation and use of new media formats and platforms for music consumption.
69. The sub-panel received case studies in the areas of **education, training and widening participation**. For instance, music teaching and theatrical performance were shown to be effective means for delivering training to nursing and medical staff and carers. The sub-panel saw case studies addressing barriers to education and training. Evidence was provided of work that made new tools and resources accessible to educators at all levels from schools to university students, as well as content devised, delivered or co-devised for training purposes in fields as diverse as entrepreneurship, diversity and inclusion, climate and social justice, and criminal justice. The sub-panel also saw submissions describing the social and economic impacts achieved by supporting creativity through new technologies and pedagogic methods.
70. An increase was observed by the sub-panel in the number of case studies related to **health and wellbeing**. Impacts were identified on physical and mental health in all age groups, and ranged across medical, clinical, and community settings, including under-served and disadvantaged communities. Impacts were evidenced on the populations directly experiencing health issues, associated wider communities (including family members), and health practitioners, including the training of practitioners internationally. These activities demonstrate the continuing and often less publicised role of the arts in addressing health problems, whether through helping patients to cope psychologically and socially, or through direct impact upon health policy. Much of this work relates to global health challenges including cancer, dementia, and Parkinson's Disease, as well as end-of-life care; such impacts further demonstrate the reach and significance of the sub-panel's disciplines in terms of enhancing care and quality of life.
71. Case studies evidenced **policy and organisational change** in settings including local and national government, NGOs, national broadcasters, businesses and commerce, trade unions, and education providers around the world. Some of this work brought benefits for equality and diversity through encouraging improved provision for vulnerable and marginalised groups. The sub-panel also found examples of impact on policy and organisational behaviours that benefited live music venues, non-professional performers and artists, and others making their living in teaching, facilitating and practising the performing arts.
72. The panel noted the diverse ways in which **technology** was featured in impact case studies, supporting innovation in dance, music-making, theatre practice, streaming, gaming, and heritage interpretation and preservation. Work in this area was particularly notable for its commitment to open-source methodologies, and for the diversity of beneficiaries, which ranged from individuals to SMEs, and from governments to

multinational corporations. Some of the case studies evidenced innovative approaches to collaboration and dissemination through online platforms and apps, thereby playing an important role in developing means to remain connected during the pandemic.

Feedback on the quality of the case studies and approaches to presenting them

73. As in 2014, the strongest case studies described clearly how research had led to changes and benefits in their chosen sphere of activity. They **distinguished between impact and activities that led to impact** and substantiated their claims to impact by providing data to support them (e.g., by providing baseline figures for average site visits, visitor spends, or downloads as well as those achieved by their project) or incorporating phrases from testimonials within section 4 (rather than simply cross-referring to the list in section 5). They also avoided jargon and explicitly acknowledged the role of collaborators in achieving impact, change or benefits.
74. High-scoring case studies were characterised by **a clear relationship between the claims made in the Summary of Impact (section 2) and the impacts described in section 4**. They were selective in their references to underpinning research but ensured that the research was clearly linked to the impact, whether through findings, concrete themes, or methodology. Some case studies also made effective use of the guidance in Annex A of the 'Panel criteria and working methods' to categorise the types of impact claimed. Case studies that were very specific about the nature of the impact claimed and offered clear evidence for it sometimes achieved higher scores than those that deployed hyperbole. Claims of transformational impact were more convincing when offered by beneficiaries than when made by impact case study authors. In some cases, claims were tenuous and/or related to wider sectorial changes, rather than substantiated outcomes of the underpinning research.
75. In impact case studies that scored less well, **the link between the underpinning research and the range and extent of the impact** was often less clear. Some case studies struggled to convey how the research insights or findings outlined in section 2 were related to the impact claimed in section 4. Although the template clearly states that HEIs should provide 'a clear explanation of the process or means through which the research led to, underpinned, or made a contribution to the impact (for example, how it was disseminated, how it came to influence users or beneficiaries or how it came to be exploited)' (Annex G, 'Guidance on submissions'), this element of the narrative was sometimes unclear or lacking in detail. The sub-panel reviewed narratives thoroughly to understand the link between the research and the impact, but members could only assess what was provided in the template, and not make assumptions about what might have happened. Weaker case studies were also characterised by a lack of precision in evidencing the claims made. Some lower-scoring case studies offered a list of impacts but did not evidence them all to the same degree, or confused esteem with impact, or presented dissemination as a proxy for impact rather than a pathway to it.
76. In a number of case studies, the underpinning research only just met **the 2* threshold**. In a very limited number of cases, the research as a whole was judged not to meet the 2* threshold and the case study therefore received an unclassified score. The sub-panel noted the need for HEIs to think carefully about the range and nature of material submitted as underpinning research, so that the research as a whole may be confidently judged to have met 2* quality.

77. Weaker case studies did not always acknowledge the **role of partner organisations and collaborators** in their narration of impact. While both research and impact are frequently co-developed and devised with partners and participants, these collaborations were not always articulated ethically. The strongest case studies expressed this sense of shared endeavour; in less strong examples it was sometimes difficult to assess the nature of partnerships or to understand how much of the underpinning research had been undertaken in the submitting unit.
78. **Ethical issues** were also identified in units' narration of change, impact, and benefits. The sub-panel expressed concern about the way in which some case studies presented corroboration of impacts, especially in relation to how data was gathered from vulnerable groups and the ways in which audiences and groups with protected characteristics were described. It was not always clear from the narratives that due consideration had been given to the potentially harmful effects of seeking testimony from traumatised and marginalised people, or that consideration had been given to the potential for further othering or marginalisation of beneficiaries through the narrativisation of the case study. The sub-panel also noted a lack of clarity in some case studies around ethical engagement with volunteers, the ethical implications of work with current and former students, and the managing of relationships between beneficiaries and those testifying to benefits or changes.
79. 47 case studies provided **Covid-19** statements that showed the effects of the pandemic on planned activities and programmes. The sub-panel also noted additional case studies which narrated the impacts of Covid-19 on planned activities – including cancellations and rescheduling, but also the emergence of new opportunities through digital media. In reaching their assessment decisions, due attention was given by the sub-panel to the submitted Covid-19 statement, and the sub-panel used the information provided in the statements in accordance with the guidelines set out in the 'Guidance on revisions to REF 2021' (REF2020/02) document.

Impact and the UOA disciplines

80. The impact case studies received by the sub-panel demonstrate the extraordinary contribution made by research in our disciplines to audiences, artists, charities, businesses, cultural heritage, the creative industries, community organisations, and many other beneficiaries, both in the UK and around the world. They present impressive evidence of the capacity of research in the creative arts to answer pressing social needs relating to health and wellbeing, social inclusion, the changing workplace, and commercial success in a digital economy. They also document the arts' enduring power to offer life-enhancing experiences that spur the imagination and generate both pleasure and wonder. Research in these disciplines is shown not simply to engage with beneficiaries as recipients, but also to throw open new opportunities for self-expression, community participation and collaborative enquiry. At a time when the prospects for both arts education and many cultural organisations appear uncertain, these case studies offer a timely reminder of the very substantial reach and significance of research in the UOA 33 disciplines, which extend well beyond the walls of arts institutions and recognised performance spaces.

Environment

81. The sub-profile for environment testifies to impressive levels of vitality and sustainability across the UOA. Notwithstanding the changed requirements for the environment template in REF 2021, the sub-panel noted a marked increase in the UOA's average environment scores compared to REF 2014. This is all the more remarkable in view of the significant challenges faced by units representing the UOA's disciplines during the cycle, which have included changing institutional priorities affecting the creative arts, and the Covid-19 pandemic which presented special difficulties for research depending on performance activities and access to facilities. Across all submissions, the sub-panel found evidence of creativity, resourcefulness, and adaptability in the face of such challenges, with the consequence that excellent research in the UOA's disciplines was enabled to thrive even in the most difficult circumstances. Nevertheless, the sub-panel did not underestimate the impact this might have on sustainability and staff well-being in the longer term. A breakdown of the Environment sub-profile is recorded in Table 8.

Table 8 - Environment sub-profile for UOA 33

% 4*	% 3*	% 2*	% 1*	% Unclassified
44.5	38.5	14.6	2.2	0.2

This table shows the average environment sub-profile, weighted by FTE, for Sub-panel 33

82. In addition to the comments in paragraphs of 144 – 166 of the main panel report, the sub-panel would like to offer the following observations.

General

83. The sub-panel was careful to ensure that **contextual knowledge about HEIs**, including about prior research assessment performance and developments subsequent to the census date, was not allowed to affect assessment of the information provided in the environment templates. Assessment in small groups was beneficial in enabling members to challenge each other's preconceptions freely, and the sub-panel's Intention Plan (see paragraph 8) reminded members to avoid being influenced by contextual understanding that might be partial or anecdotal.

84. In accordance with paragraphs 336-8 of the 'Panel criteria', **institutions were assessed on the terms in which they had chosen to present the research** of their units, for instance with regard to whether and how to group research activities, and where to submit the research of particular units. The sub-panel read the whole document (REF5a (which was not directly scored), REF5b and the institutional Covid statement) in reaching a judgment and sought to recognise the different ways in which information could be presented across the template. In particular, the sub-panel adopted a flexible approach to the placement of materials in particular sections and sought to see beyond any limitations in the presentation of the material in order to assess the quality of evidenced claims. Data presented in REF4a, b and c were used by the sub-panel to inform rather than drive assessment of the REF5b narrative.

85. Some units **entering REF for the first time** were notably successful in producing evidence for the development of a research culture, such as the benefits of involving researchers from industry backgrounds (especially in relation to generating pathways to impact and wider impact and knowledge exchange strategies), capacity building in

relation to infrastructure development, and contributing to local and national cultural organisations and charities.

86. The **impacts of Covid-19** on research environments took numerous forms, including the postponement of sabbaticals, a shift in institutional focus towards delivery of teaching and student support, impacts on wider research activities (including PGRs), and shifting priorities in relation to research development and delivery. The pandemic took a particular toll on research in the UOA because of the centrality of live performance to research across the disciplines, and because of the high levels of disruption caused to research collaborators in the creative industries. In assessing forward-facing aspects of research strategy, the sub-panel were mindful of the unavoidable uncertainties brought by Covid-19.
87. **Practice research** was an important component of many environment documents. Some units effectively integrated practice research within their research and staffing strategy and demonstrated how PR had a catalytic role in enabling other kinds of activities and research. There were many good examples of how practice research enabled or was a core component of impact, and the strength of the links of practice research activities to industry practices was very evident. However, support mechanisms for staff, such as training regarding practice research and how best to present it, were very variable. Practice research was often supported by non-HESA income, although detail was not always provided of the amount and the precise nature of such support. Information on how facilities and other infrastructure supported or enabled practice research, including its documentation, was also variable. Few templates commented on how activities related to national and international discussions on PR, or were linked to wider discussions of open research. Overall, the stronger submissions articulated in some detail the specifics of how practice research was supported and how it generated vitality and sustainability, and they also recognised within their research and impact strategies the role of practitioner staff as professionals who often also work within the creative industries, with the potential benefit this brings for knowledge exchange.
88. **Interdisciplinary research (IDR)** emerged as a strength across submissions in the UOA. Evidence was provided of significant research collaborations with other subject areas in the arts, social sciences, clinical medicine, public health, neuroscience, physics, computer science and engineering. Many templates showed clearly how IDR had benefitted research more generally within the unit, and how it informed research and staffing strategy. Some units were able to demonstrate sustainability through clear alignment of IDR activities with changes to priorities in research funding and the wider IDR agenda, and also by recognising the changing boundaries of disciplinary identities and the evolution of definitions of IDR. In other cases, references to IDR were less well integrated into the narrative as a whole.
89. A range of levels of engagement with **equality, diversity, and inclusion (EDI)** was evident across units. In the strongest cases, clear evidence was provided that EDI issues were embedded across all elements of the research environment and integrated into research projects as well as institutional practices and policies. Stronger submissions engaged with both visible and invisible modes of diversity and marginalisation, presenting data across several protected characteristics and reflecting on future strategies for addressing weaknesses that the data exposed. Some units productively recognised evolving practice in language around EDI issues, and the contested nature of labels used to categorise different groups. In some cases, greater care was needed in institutions' impact strategies to ensure that the language and conceptualisations being used did not further disempower the communities they were claiming to benefit, or position fluid identities as binary categories.

i. Unit context and structure, research and impact strategy

90. The sub-panel recognised that the units submitted were **diverse and varied** in nature, ranging from single-subject environments to multi-disciplinary structures, and from very small to substantial FTEs. Vitality and sustainability were identified across these different configurations and unit sizes.
91. In the strongest templates, the sub-panel found that **research and impact strategies** referenced objectives from REF 2014, evidenced ongoing strategy in relation to specific achievements and linked future goals to both current activity within the unit and the changing external landscape. In some templates research and impact strategies were not always 'clearly articulated' ('Panel criteria', paragraph 326). Emphasis was sometimes placed upon narrating a collection of activities without evident wider rationale; in others, strategic goals were too generic to count as robust evidence of vitality and sustainability. Research clusters, groupings and themes were easiest to recognise as meaningful structures reflecting a conscious strategy where they clearly informed the narrative throughout the template.
92. In some templates, **impact strategy** lacked detail, or read as a 'bolt-on' rather than a fully integrated element of the wider research environment. The stronger statements did not repeat material already provided in the impact case studies but indicated how those case studies related to the unit's wider approach to achieving impact.
93. A number of templates narrated **the activity of more than one department**, and these frequently provided compelling evidence of the advantages of working in a multidisciplinary way, underlining the benefits that could be brought by collaborative structures and goals. Some of these narratives also effectively articulated those elements of research environment that remained distinct between the different subject areas. In a few cases, the attempt to articulate a single research strategy spanning the different environments was judged not to be substantiated by evidence provided later in the template.
94. The sub-panel observed examples of good practice in units' promotion of **open research** (e.g., founding and writing for OA journals; diverse forms of public dissemination of practice research; contributing to disciplinary and national discussions and policy; involvement in training programmes). The sub-panel found evidence of strong commitment to **research integrity** in units' contributions to both institutional policies and wider national discussions. However, templates did not always demonstrate how units were engaging with or contributing to institutional priorities in relation to both open research and the supporting of a culture of research integrity.

ii. People

95. Throughout all parts of the Environment template, the sub-panel found impressive evidence of **a shared commitment to co-working and collegiality**. This often exceeded an HEI's formal structures of collaboration and mentoring to provide additional informal support arrangements that contributed tangibly to researcher wellbeing, and thereby to vitality and sustainability.
96. The majority of templates reported on a variety of structures and mechanisms, often determined at institutional level, for supporting research staff and their career development. The strongest statements recognised **the diversity of the research base** in the UOA disciplines, and evidenced support arrangements that responded to the different needs of (for instance) practice researchers, researchers entering academia from industry, early-career researchers, or researchers with caring responsibilities or disabilities.

97. The strongest templates provided concrete information on **support for research time and internal funding support**, as well as more targeted initiatives to support impact generation, completion of large outputs, or ECR support. In cases where research leave rotas could not be supported, other models for supporting research time were sometimes compellingly narrated. The sub-panel recognised the importance of targeted initiatives (including teaching buy-out and tailored sabbaticals) offered to support researchers, as well as targeted support for collaborative research with industry partners that aligned with wider institutional and civic priorities. The strongest statements demonstrated that such support mechanisms were administered transparently and inclusively.
98. Specific support for **early-career researchers** (ECRs) such as early research leave, and reduced teaching/administration loads in their first years of employment were considered examples of good practice and an enhancement of sustainability. The sub-panel also judged specific mention of the contributions of ECRs to other aspects of the research environment (e.g., participation in committees, development of research infrastructure, collaborations with other institutions, contributions to research base) to be positive indicators of vitality and sustainability.
99. A small number of templates described dedicated support for **mid- and late-career research staff**, recognising that sustainability is most fully reflected when staff at all stages are enabled to continue with productive research careers.
100. Effective narratives on **postgraduate research students** (PGRs) provided details of integration into the wider research culture, such as joint PGR-faculty initiatives, participation on departmental committees and research centre directorates, contribution to the running of research events and impact activities, and involvement in collaborative research projects. Stronger statements also provided examples demonstrating the vitality of PGR culture, including PGR publications, performances, notable conference participation, and awards. Career destinations provided further evidence of vitality. The benefits of participation in a UKRI doctoral studentship consortium were often effectively narrated, but institutions not involved in these consortia sometimes reported very effective alternative arrangements for attracting and supporting outstanding students. For some units with smaller supervisory capacity, cross-supervisory arrangements between institutions were found to be an important enabler of vitality. The sub-panel considered the provision of career training schemes that recognise the diversity of PGR career trajectories (including beyond academia) a valuable contribution to vitality. REF4 data indicates that 2503 research degrees were awarded during the assessment period.
101. Units' commitment to **equality, diversity, and inclusion** (EDI) in the recruitment and support of research staff and students was most effectively demonstrated when it was realistic and concrete rather than aspirational and vague. Stronger statements encompassed the range of all legally protected characteristics, and in some cases extended also to work with minoritised languages. Many examples of good practice that exceeded institutional baselines were found across the submissions to the UOA: these included (but were not limited to) setting up an anti-racist task force and action plan; bystander training; transgender awareness training; streamlining the process for reporting racism, bullying and harassment; regular culture surveys to monitor the quality of the research environment; identification of mental health first aiders; mentoring on grant applications from a consultant with expertise in neurodivergence; specialist advice for staff and PGRs with dyslexia or dyspraxia; and inviting for interview

all disabled applicants who met the essential job criteria. Awareness of enduring inequalities in the UOA fields was demonstrated in various ways: for instance, by the use of explicitly worded job adverts and targeted PGR funding to attract applicants from under-represented groups; offering 12-month rather than 9-month contracts to short-term teaching hires; ensuring ECR representation on key committees; and dedicated support schemes for PGRs with caring responsibilities and disabilities, amongst other proactive strategies. A number of templates demonstrated commitment to EDI through reflective statements that acknowledged work still to be done, as well as progress made within the cycle.

102. The sub-panel also found EDI considerations addressed in accounts of working with research participants inclusively and democratically, and engagement with marginalised communities. In addition, impressive evidence of staff leading the way in relation to EDI issues within industry and charitable bodies, for instance by co-authoring guidance and policy reports, and important contributions to debates within the disciplines, were also identified.
103. Some templates, on the other hand, approached EDI reductively, making reference to only one or two protected characteristics, and often emphasising gender while neglecting other groups. The sub-panel also noted that where gender was mentioned, it was often in exclusively binarised terms. Not all templates provided details of how due regard was paid to equality and diversity issues in the construction of the REF submission (paragraph 352 of the 'Panel criteria'), including output selection, and how data on the distribution of outputs related to the unit's approach to supporting EDI. Those that engaged most robustly here demonstrated precisely how EDI had informed the selection of outputs, including reflections on the decision-making process.

iii. Income, infrastructure and facilities

104. The sub-panel found abundant recognition of the importance of **facilities and physical infrastructure** to research in the sub-panel's disciplines, including facilities for the screening and production of films, studios for music and sound, laboratory spaces for the development of practice research in theatre and dance, and performance spaces of all kinds. In some templates, this infrastructure was described without explaining how it contributed to research or impact. The strongest statements showed how facilities were used for research and/or impact, and evidenced this with specific examples. HEI investment in physical infrastructure contributed to vitality and sustainability most clearly where that investment was closely linked to the strategic goals described in section 1; general statements about financial investments were less impressive. It was noted that smaller institutions sometimes made extremely resourceful use of limited facilities. The role of facilities and physical infrastructure within units' impact activities was frequently neglected. In a very few cases, mention was made of technical infrastructures being updated to align with **carbon zero aspirations**.
105. The sub-panel noted some fruitful examples of **shared use of resources**, whether by enabling access to the HEI's own facilities for academic and non-academic partners, or making use of the facilities of collaborators. Such arrangements were sometimes effectively tied into the accounts of collaboration and partnerships in Section 4 or linked to the generation of outputs submitted to REF.
106. Many statements did not mention the role of **technical staff** in supporting research and impact activity. Conversely, in some templates it was clear that such staff were an essential part of the research infrastructure and valued as such.

107. In assessing **income**, the sub-panel considered not just the amount of funding received but also what had been achieved with it. In some cases, good evidence was provided that relatively small grants yielded substantial outcomes. Stronger statements also explained what arrangements were in place to support research staff applying for grants (this information could also be reported in section 2).
108. Many units explained the critical role played by **non-HESA income** in supporting the production of excellent research (see paragraph 7). This income – ranging from artistic commissions from festivals, orchestras, galleries, museums, opera, theatre, or production companies, to awards by national and international arts councils, artistic and philanthropic trusts and foundations, and charities – is clearly essential to research across the UOA disciplines and represents a substantial financial investment that complements UKRI funding. In some cases, this income was reported but not clearly linked to research outputs, which limited its usefulness as an indicator of research vitality and sustainability. The strongest examples linked specific non-HESA awards to particular projects and/or outputs.

iv. Collaboration and contribution to the research base, economy and society

109. Taken as a whole, the templates assessed by the sub-panel provided very strong evidence of **the UOA disciplines' substantial engagement** with commerce, the cultural industries and artistic creativity, of significant contributions to many fields within public life, and of leadership roles within academia nationally and internationally. Complementing the impact case studies, the templates offered compelling evidence for interdisciplinary work with criminal justice, health, and cultural organisations, for civic contributions in the form of advisory and governance positions in the arts and charitable sectors and collaborations with local government, and for enduring two-way relationships with artists, performance organisations and audiences. Contributions to broadcasting and public understanding of the arts were particularly noted. The sub-panel noted the significance of many units' contributions to local and regional organisations and initiatives, as well as a wealth of outstanding international partnerships.
110. The best templates provided evidence for **the involvement of either all staff or a substantial proportion of staff**, rather than a small minority, in this collaborative and impactful activity. They also offered convincing accounts of the significance of activities undertaken, and how they added up to a coherent overall contribution, rather than simply offering lists of achievements and roles performed. Accounts of **collaborative work** were especially compelling when they clearly linked to the strategies described in section 1, which may have determined the choice of collaborators, funding schemes, and non-academic partners.
111. The sub-panel found impressive evidence of the substantial **contribution made by researchers to the research base**, including through the undertaking of roles for subject associations, conference series, journals, publishers, scholarly interest groups and working parties, email discussion lists, online information hubs, archives and special collections, and other key parts of the shared national research infrastructure. Submissions that drew out the influence and leadership of such roles, rather than simply offering a list, were most effective at demonstrating vitality and sustainability. Rarely, though, was this work found to be explicitly recognised within units' research and impact strategies, with the danger that it comes to be seen as desirable voluntary work that falls beyond researchers' contracted duties and workload. Collective

maintenance of this research base comprises an essential part of ensuring vitality and sustainability for the UOA disciplines, and recognition of this within individual units' research and impact strategies was judged by the sub-panel as best practice.

Overview – summarising comments

112. The outcomes for REF 2021 demonstrate that the quality of HEI research in Music, Drama, Dance, Performing Arts, Film and Screen Studies is higher than ever, showing a notable increase compared to REF 2014, and laying claim to be amongst the best in the world. As the previous pages have demonstrated, this excellence is by no means a purely academic achievement; accordingly, it cannot be adequately valued solely with regard to the balance sheets of individual HEIs. The research and impact assessed by the sub-panel, often realised through diverse collaborations with national and international partners, forms a crucial element of the UK creative industries sector, seeding industry activity across the devolved administrations and providing the backbone for local, national and international cultural infrastructures. This research is shaping the response of the creative industries to contemporary challenges, upskilling the workforce, and creating opportunity for audiences and artists. It is a key driver of cultural regeneration and the boosting of regional economies in areas targeted by the 'levelling up' agenda, fostering a wider civic vitality that benefits all who live, work and study in these regions. It enables close engagement with diverse local communities, and thereby supports HEIs in satisfying their corporate responsibility commitments. It contributes to the enhancement of public understanding and wellbeing, and so serves the wider civic mission of higher education as a public good. The impact of research in UOA disciplines also reaches well beyond the cultural sector, offering a valuable tool for major advances in fields including health and wellbeing, the environment and digital technology, and thereby contributing to the national response to twenty-first century grand challenges.
113. These achievements depend upon continued investment and support. Of particular importance is the physical research infrastructure and other specialist spaces, equipment and software that meet the needs and quality expectations of the industries with whom researchers collaborate, as well as the communities with whom they engage and who are an essential part of the ecosystem of our HEIs. REF 2021 has revealed the crucial role of ECRs in breaking new ground in research and impact, signalling an exciting future for our disciplines, but acting also as a reminder of the importance of adequate structures of institutional support for those commencing their careers, as well as the continuing importance of PGR funding through UKRI consortia and institutional initiatives. Finally, submissions show that strong steps have been made in equality, diversity and inclusion, but that work remains to be done, both at submitting unit level and institutionally; REF 2021 provides a valuable opportunity for best practice in this area to be more widely disseminated, with the conviction that this will contribute to even greater levels of excellence in research and impact in the years to come.



Sub-panel 34: Communication, Cultural and Media Studies, Library and Information Management

1. All sub-panel members discussed and collectively agreed this report, and it should be read alongside the Main Panel D overview report which contains a description of main and sub-panel working methods and discusses matters of common.

Summary of submissions

2. The sub-panel received 58 submissions including two multiple submissions, a small decrease from REF 2014 when 67 were received. This, reflects, in part, a consolidation of submissions and a fall in the number of smaller submissions to the sub-panel. Of 58 submissions, 49 were from England (56 in 2014), seven from Scotland (seven in 2014), one from Northern Ireland (one in 2014) and one from Wales (three in 2014). We found world-leading research and outstanding impact activity in submissions from English, Scottish, Welsh and Northern Irish HEIs. The total number of outputs assessed by the sub-panel was 3,183 (REF 2014: 3,521).
3. Submission size ranged from 82 researchers (73.86 FTE) to five researchers (5.0 FTE). Six units submitted over 40 FTEs, seven units between 30 and 39 FTEs, nine units between 20 and 29.99 FTEs, 30 units between 10 and 19.99 FTEs and six between 5.0 and 9.99 FTEs.

Table 1: Summary of Submissions

	Number of submissions	Cat A staff FTE	Headcount staff	Research outputs	Double-weighted outputs	Outputs per 1.0 FTE	Impact case studies (ICS)	Staff FTE per ICS
REF 2021	58	1,302.69	1,392	3,207	460	2.46	149	8.75
REF 2014	67	935	1,019	3,521	70	3.76	160	5.84
% increase /decrease	-13.4%	39.4%	36.6%	-8.9%	557.1%	-34.5%	-6.9%	49.7%

4. The procedural changes between REF 2014 and REF 2021 mean that more staff (FTEs) were included in the 2021 submissions, but with a smaller number of outputs (on average). For REF 2014 four outputs were required per FTE, whilst for REF 2021, the requirement was 2.5 outputs per submitted FTE. REF 2021 saw a significant increase in the number of double-weighted outputs submitted and we comment on this below. We welcomed submissions representing a wide range of subject areas across the disciplines within the remit of UOA 34, including a large number in Film and Screen Studies (also covered by Sub-panel 33 - Music, Drama, Dance, Performing Arts, Film and Screen Studies).

Working Methods

5. In establishing its working methods, the sub-panel adhered to the assessment principles and framework adopted across Main Panel D (see paragraphs 23 – 34 of the Main Panel D report) and participated in calibration exercises conducted within the sub-panel and then across the main panel (see paragraphs 40 – 47 of the Main Panel D report). These exercises were conducted across all aspects of the submissions to ensure consistency of approach and interpretation of the criteria. The sub-panel also conducted regular checks and moderation to ensure consistency within the sub-panel across all components of the submission (outputs, impact case studies and research environment).
6. Our working methods for allocation were rooted in the core principles of equity and expertise to ensure a robust assessment by careful reading and discussion between sub-panel members for all aspects of the submission (outputs, impact and environment).
7. In our assessment of the research environment, we focused on the unit statement. Institutional statements provided context, but did not form part of our assessment.
8. The table below shows the average profiles, weighted by FTE, for each element of the assessment for Sub-panel 34.

Table 2: UOA average profiles

Profile type	% 4*	% 3*	% 2*	% 1*	% Unclassified
Overall	38	41	19	2	0
Outputs	33.2	41.7	22.5	2.3	0.3
Impact	47.6	40.3	9.9	2.2	0.0
Environment	41.5	38.4	18.2	1.9	0.0

9. Overall, the sub-panel found strong profiles of research and impact across the submissions, with more than three-quarters being assessed as world-leading or internationally excellent. Units submitting to this UOA are highly engaged in addressing issues beyond the academy through strong collaborations and partnerships. As a result, impact case studies were often a particularly strong element of submissions, demonstrating impressive scope and ambition. Impacts ranged from local to international and across a wide range of domains, with significant and sometimes transformative impact across communities, publics, the cultural and creative industries, policy, government and civil society (see paragraphs 33 to 49 below).

10. We saw an overall increase in quality compared to 2014, with notable increases in the proportion of world-leading research and impact, and decreases in submissions scoring 1* and unclassified. While we use phrases like ‘world-leading’ throughout this report, this is short-hand for the features outlined in the quality level descriptions (in this case 4 star). The quality increase was in line with the trend across all the REF sub-panels and is explained, in part, by a change in working methods (which required fewer output submissions per FTE). However, the sub-panel noted a significant increase in the strength of impact case studies submitted to this UOA across the board. This reflected an improvement in quality levels rather than simply a change in methodology (although we note that the FTE to impact case study ratio was higher in 2021 than in 2014 – see Table 1).

Outputs

11. The table below shows the average output sub-profiles, weighted by FTE, for Sub-panel 34.

Table 3: UOA average outputs sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
33.2	41.7	22.5	2.3	0.3

12. The sub-panel was pleased to note a generally high level of research quality with a clear majority of outputs assessed as internationally excellent or world-leading.
13. We received very substantial submissions in Film, Television and Screen Studies and Cultural Studies, with large submissions in Journalism and News, Media and Cultural Theory, Creative and Cultural Industries, Gender and Sexuality, Political Communication and Popular Culture. We also received numerous types of practice research outputs (see Table 4) across a range of subject areas, and we found a good proportion of world-leading and internationally excellent work in all of these areas.
14. In addition to these larger areas, we found strengths across smaller sub-fields including: Radio and Sound Studies (encompassing audio-based practice research); Social justice and social movements; Practice research; Race, ethnicity, diaspora and postcolonial studies; the Political economy of media and communication.; Information behaviour and practices, information seeking; and Information society, information policy, digital participation and inclusion.
15. Cultural Studies was one of the largest sub-fields submitted to this UOA and we identified much world-leading work in this tradition. However, some of the work categorised by submitting institutions as “Cultural Studies” focused on culture very broadly without addressing the conceptual or methodological traditions of Cultural Studies.

Output types assessed

Table 4: Output types assessed by the sub-panel

Output types	% of assessed outputs
A – Authored book	21.24
B – Edited book	3.42
C – Chapter in book	17.20
D – Journal article	51.45
E – Conference contribution	0.29
H – Website content	0.07
I – Performance	0.25
J – Composition	0.40
K – Design	0.07
L – Artefact	0.15
M – Exhibition	0.25
N – Research report for external body	0.55
Q – Digital or visual media	2.51
R – Scholarly edition	0.00
T – Other	2.04
U – Working paper	0.11

16. Work was submitted, as expected and encouraged, in diverse formats. The most common submission format was journal articles (comprising over half of the submitted outputs to this UOA) followed by authored books (over 20%) and book chapters. The majority of outputs were single authored, although there was a significant number of jointly-authored contributions and a smaller number with more than two authors. We found no substantive differences in quality between single and multi-authored outputs.
17. We found examples of world-leading work across all output formats. However, the proportion of book chapters judged to be world-leading was smaller than for other output formats.
18. We received a relatively small proportion of practice research outputs. As noted in paragraph 13, practice research overall scored extremely well, with a significant proportion judged to be both world-leading and innovative, especially where research questions and contributions were clearly demonstrated and embedded in the work. The most common practice research submissions were digital or visual media and we also received a number of multi-component submissions (i.e., output type, T-Other). These worked well when the relation between the items/outputs was made clear and cohesive – with good signposting – and where there was a summary of the submission (both including and beyond the 300 words) which could be read across all the components. We also noted that few of the more ambitious multi-component submissions came with requests

for double-weighting, even when such a case would have been strong. We welcomed the appropriate use of contextual information and supporting material where there was clear signposting or an indication about how to navigate the submission. Collaborative outputs produced with external partners worked well when the role of the submitting researcher was clearly elaborated. Practice research submissions where the role of the research and researcher was not clearly articulated tended to score less well. Outputs where indications of the critical or commercial success of the output were provided as a proxy for the research dimensions of the output also tended to score less well.

19. The edited collections submitted spanned the full range of quality levels, and just over a quarter was judged to be of world-leading quality. The strongest outputs in this category were those which used the 300-word statement to explain the contribution of the editor (as the submitted author), in providing a clear rationale for the collection, including a rigorous, scholarly and context-setting introductions and conclusions comprising more than thumbnails of the contributions. Those outputs describing how the contributions together constituted a development of the field were particularly well-regarded.
20. The additional information section was used primarily in relation to editorial work and practice outputs. Relatively few submissions used this section – where appropriate – to clarify issues of overlap (within this submission or with REF 2014) and, in a small number of cases, this made it difficult to identify originality.

Double-weighting

Table 5: Double-weighting requests

Research outputs	Outputs with requests for double-weighting	Double-weighting requests approved
3,207	460 (14.45% of submitted outputs)	452 (98.26 of requests)

21. We welcomed the significant, seven-fold increase in the number of double-weighted outputs received by the sub-panel. The great majority of requests for double-weighting was accepted, with only a tiny percentage of requests for double-weighting rejected (e.g., on the grounds that there was a significant duplication of content submitted to this or previous REF panels). While the double-weighting criteria are concerned with scale and scope rather than quality, institutions (as we might expect) appeared to submit requests for double-weighting when they were confident of high-quality judgments. In consequence, a high proportion of (requested and accepted) double-weighted outputs was judged to be internationally excellent or world-leading. Despite the sizeable increase in double-weighted output requests, we identified a number of long-form or large-scale outputs (notably in practice research) that might have been double-weighted, but no requests were made. This may indicate a lack of confidence in submitting practice research, although, as noted elsewhere in this report, practice outputs could and did achieve the highest quality ratings.

Cross-referrals and joint assessment

22. Sub-panel 34 received a total of 46 outputs through cross-referral. Of these 50% were from other sub-panels within Main Panel D and the remaining 50% were from sub-panels within the other three main panels. Sub-panel requested advice on 122 outputs, of which 70% were cross-referred to sub-panels within Main Panel D. The table below details the cross-referrals into and out of Sub-panel 34.

Table 6: Cross-referrals

Cross-referrals out to other sub-panels			Cross-referrals in from other sub-panels		
Within MPD	Outside MPD	Total out	From within MPD	From outside MPD	Total in
86	36	122	23	23	46

23. The sub-panel undertook joint assessment of 67 outputs. The table below summarises the outputs jointly assessed by Sub-panel 34 with sub-panels within Main Panel D, and between Sub-panel 34 and sub-panels in the other three main panels.

Table 7: Joint assessment

Outputs jointly assessed with other sub-panels		
Within MPD	Outside MPD	Total
53	14	67

24. The sub-panel received advice on 174 outputs from members of other sub-panels. These included outputs cross-referred, or jointly assessed with: Sub-panels 25 (Area Studies), 26 (Modern Languages and Linguistics), 27 (English Language and Literature), 28 (History), 30 (Philosophy), 32 (Art and Design: History, Practice and Theory), and 33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies) within Main Panel D. Outputs were also cross-referred to, or jointly assessed with: Sub-panels 3 (Allied Health Professions, Dentistry, Nursing and Pharmacy) and 4 (Psychology, Psychiatry and Neuroscience) in Main Panel A and to Sub-panels 8 (Chemistry), 10 (Mathematical Sciences), 11 (Computer Science and Informatics) and 12 (Engineering) in Main Panel B, as well as to Sub-panels 14 (Geography and Environmental Studies), 15 (Archaeology), 16 (Economics and Econometrics), 18 (Law), 19 (Politics and International Studies), 21 (Sociology), 23 (Education) and 24 (Sport and Exercise Sciences, Leisure and Tourism) in Main Panel C.

25. The sub-panel gave advice on 61 outputs submitted to other sub-panels. These included outputs cross-referred from, and jointly assessed with, Sub-panels 26 (Modern Languages and Linguistics), 27 (English Language and Literature), 32 (Art and Design: History, Practice and Theory), and 33 (Music, Drama, Dance, Performing Arts, Film and Screen Studies) within Main Panel D. Outputs were also cross-referred from Sub-panel 3 (Allied Health Professions, Dentistry, Nursing and Pharmacy) in Main Panel A and from Sub-panels 17 (Business and Management Studies), 19 (Politics and International Studies), and 23 (Education) in Main Panel C.

26. Comparing REF 2021 with REF 2014, there was a significant decrease in the volume of outputs cross-referred from this sub-panel to other sub-panels. This suggests that

submissions to this sub-panel in 2021 were more clearly focused on subject areas within the remit of UOA 34. We did not see a repeat of the cases in REF 2014 where large proportions of a number of submissions were cross-referred elsewhere. In general, cross-referral requests were made appropriately and proportionately which, as suggested earlier, this may be a factor explaining the small decrease in the number of unit submissions to this sub-panel. There was no difference in the quality profile of work cross-referred to or from this sub-panel.

Interdisciplinary research and disciplinary trends

27. Interdisciplinary research (IDR) is well established and valued in fields covered by UOA 34, many of which have strong interdisciplinary roots and approaches. We found many strong examples of work combining arts, social science and humanities theories, methods and approaches. We also had sizeable submissions in interdisciplinary fields such as Gender Studies and Race, Ethnicity and Postcolonial Studies. As in REF 2014, we received submissions spanning a wide range of sub-fields within Communication, Media and Cultural Studies and Library and Information Management. Given the inherently interdisciplinary nature of these fields and the consolidation of submissions attributable to the changes after REF 2014, it is likely that some of the areas, less well-represented within the remit of UOA 34 this time - including data science, digital humanities and information systems - may have been submitted to other sub-panels.
28. Despite the interdisciplinary strength of submissions to UOA 34, the sub-panel noted that as the field has grown, an increasing volume of work is located in specific sub-fields, sometimes with a narrow or limited theoretical or methodological focus. While this was not necessarily detrimental to the quality of research, efforts to broaden the scope of work across (or beyond) fields represented by UOA 34 were often evident in the strongest submissions. The sub-panel also welcomed research that - even if a research topic was highly specific - was clearly articulated on a broader plain, and in so doing, indicated why and how the work was significant.
29. A significant volume of work that could be categorised as IDR drew upon disciplines outside the remit of UOA 34 (such as Politics, History, Psychology, Psycho-analytic Studies or Health Sciences) with a central focus on communication, culture and/or media. This confirms the extent to which communication, culture and media are considered important areas of study in a wide range of disciplines. The best work of this kind combined approaches from fields where communication, culture and/or media was not only the subject of the research, but where the research also drew upon the Communication, Cultural Studies and/or Media Studies literatures.
30. The range and quality of methodological approaches of work submitted to the sub-panel was extensive, with useful and innovative developments in participatory or co-produced research methods, and some excellent examples of methodological reflexivity and breadth (combining, e.g., quantitative and qualitative approaches). We also welcomed submissions that clearly addressed ethical considerations in research methods. In some cases, however, the methods used to gather evidence, data or content were poorly articulated or opaque.
31. Much of the work submitted was UK-based and the sub-panel identified strengths in regionally-focused work. We also received research about, or located in, a wide range of geographies as well as comparative international studies. World-leading work in

this category drew from literatures outside the UK rather than relying on approaches developed in UK/anglosphere and often extended beyond the use of English-language sources. In national, regional and international studies, we identified strengths in research engaging with questions of in/equality and marginalisation, with the best work being attentive to epistemological concerns.

32. Covid-19 statements were provided in relation to 10 outputs and were taken into account in our assessment where provided.

Impact

33. The sub-panel received 149 impact case studies. The number of impact case studies per submission ranged from two to six, with the average number being 2.57 reflecting the high proportion of submissions with fewer than 20 FTE. The average FTE per case study ranged from 2.50 in the smallest submission to over 12 FTE in the larger submissions, with an average of 8.75 FTE for each impact case study submitted to UOA 34.

34. The table below shows the average impact sub-profiles, weighted by FTE, for UOA 34.

Table 8: UOA average impact sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
47.6	40.3	9.9	2.2	0.0

35. The sub-panel benefitted from the expertise of four research user members who attended all meetings where impact was discussed and contributed to all aspects of the impact assessment. The sub-panel drew upon the expertise of user members across a range of sectors including the creative industries, media and communications regulation, education and government policy.
36. Impact case studies submitted to the sub-panel demonstrated a wide range of different types of impact at local, regional, national and international levels. The sub-panel noted a clear improvement in the quality of case studies since REF 2014, with evidence of better understanding of, and support for, research impact. Impact case studies were of consistently high quality, with 88% judged to be internationally excellent or world-leading, with many impact case studies demonstrating a commitment to positive social change (or preventing harm) across our field.
37. The range of impact across the submissions to this sub-panel was impressive and included:
38. **Educational impact:** achieving transformation across disciplines and educational institutions (including other HEIs as well as schools), for example, in relation to decolonisation or sexual violence and harassment.
39. **Cultural impact:** engaging with community groups, media and creative industries and the heritage sector to develop, enhance and/or transform artworks, performances, exhibitions, events, film and broadcast media, and collections and archives, often with an explicit emphasis on diversity, inclusion, equity and social justice.
40. **Policy making:** providing advice to local, national and international authorities (e.g. government departments, law enforcement agencies), non-governmental organisations

and creative and cultural industry bodies, including regulators, on a range of matters, such as children's rights in digital environments.

41. **Health and wellbeing:** Improving health and wellbeing through cultural activities, for example, in relation to youth advocacy; improving access to information and challenging media misinformation, including in relation to public health advice; developing media technologies in health and social care settings.
42. **Impact on civil society and public understanding:** engaging with communities to co-produce knowledge and develop a range of skills and resources; engaging with, and impacting significantly on, communities that are often marginalised within, or excluded from, civil society initiatives; addressing intersectional inequalities across a range of contexts.
43. **Impact on media and cultural organisations and practices:** informing regulatory policies in various fields, such as broadcasting and journalism; shaping professional practice through advice, research input, and training and education.
44. **Economic prosperity:** innovative research had a range of positive economic impacts, for example, improving resilience of media and creative companies; working with local or regional authorities and agencies, businesses, tourism, heritage and/or festivals to expand audiences and engagement.
45. The range of beneficiaries identified in impact case studies was impressive and outstanding impact was identified in case studies across a wide range of scale and breadth: those focusing on numerically small and marginalised communities were as capable of demonstrating outstanding impact as those working with a large number of partners and spanning different locations and sectors.
46. Impact case studies varied in duration with outstanding impact being identified in focused and time-limited work, and in long-term collaborations that demonstrated considerable investment over time.
47. Overall, the strongest case studies:
 - Presented clear evidence linked to the claims, with this evidence being used to describe or demonstrate tangible change.
 - Demonstrated a clear relationship between the underpinning research (including practice research) and the impact and benefits claimed by cross-referring and explaining, rather than listing, projects or events in which impact occurred.
 - Built and articulated testimonies and other corroborating information into the narrative of the case study.
 - Demonstrated sustained partnerships with beneficiaries, leading to systemic (not cosmetic) change. The sub-panel saw these collaborations as making a positive contribution to (and in no way detracting from) the impacts being claimed, so long as contributions made by collaborating individuals or institutions were clearly acknowledged.
48. The sub-panel also noted areas where case studies might have been strengthened:
 - Some case studies used public engagement or dissemination as a proxy for, rather than a pathway to, impact.
 - Some case studies focused on evidence of esteem or recognition rather than impact – especially when focussed on the activities of one person.

- In some instances, the presentation of a range of impacts detracted from the coherence of the case study, where the connections between the impacts and the research were disparate or unclear.
 - Occasionally, contributions of external partners were not clearly articulated making it difficult to judge who had been responsible for the underpinning research and/or impact claimed.
49. The sub-panel also welcomed a degree of reflexivity in describing the challenges of creating or demonstrating impact. For example, statements acknowledging limitations around gathering evidence, particularly feedback or testimonies from seldom-heard groups, and where alternative ways of evidencing impact had been offered to aid the assessment process were welcomed by the sub-panel.

Covid-19

50. Of the 149 impact case studies submitted, 14 were accompanied by a Covid-19 statement. These frequently detailed disruption to international travel and cancellations and postponements to planned impact activities or events, and some outlined creative ways in which some projects adapted to alternative forms of delivery online.

Environment

51. The table below shows the average environment sub-profiles, weighted by FTE, for UOA 34.

Table 9: UOA average environment sub-profile

% 4*	% 3*	% 2*	% 1*	% Unclassified
41.5	38.4	18.2	1.9	0.0

52. The quality of research submitted to UOA 34 is underpinned by strong research environments, with 80% of the strategies, policies, practices and achievements described in the environment statements being judged as world-leading or internationally excellent. The sub-panel noted the high quality of support for research, backed by specific policies and practices, research training and interdisciplinary work. The sub-panel was impressed by the richness of many research environments; the often creative and innovative use of research funding by submitting units; and extensive evidence of collaborations and contributions to shaping our field internationally. UK scholars/institutions are clearly recognised as world-leading and often punch above their weight in our field.
53. The disciplines within the remit of sub-panel 34 are a growth area for many HEIs, many, for example experiencing increased student recruitment in our field. As a consequence, we saw submissions from new or expanding units, or units in transition.
54. Perhaps as a result of these developments, there was less improvement in the overall profiles for environment than for outputs and impact. The sub-panel was aware that units in our subject areas often have been under pressure to increase student numbers (in response to high demand) and this, in turn, may have negatively impacted research environments. We welcomed instances where such expansion was accompanied by considerable investment in staffing, support for research and/or facilities - including for

practice. In the strongest submissions, the relationship between teaching, investment and research was clearly articulated.

55. Policies and practices around equality, diversity and inclusion (EDI) were taken very seriously by the sub-panel. The sub-panel welcomed a broad commitment to EDI in many environment statements, but noted that this was not always carried through to clear and effective policies and practices. As outlined below, the strongest environment statements were alert to the EDI implications of all aspects of the research environment, including intersectional analysis, and considered a range of protected characteristics, with concrete evidence of the successful implementation of policies to create positive change.

i. Unit context and structure, research and impact strategy

56. The sub-panel noted many strong, well-articulated research strategies across the submissions. Those grounded in verifiable evidence, with details of clear and specific policies and practices were particularly welcomed. Many examples of good practice in research ethics, open access, EDI (such as decolonising research and the curriculum) and collaborative approaches to research and research impact were noted.

ii. People

57. There were many examples of strong support for researchers. The sub-panel particularly welcomed submissions by units that had clear and supportive policies in place around research time for staff; research leave schemes; specific measures to support and develop ECRs; support for research bid writing; and encouraging collaboration within the unit and beyond. We welcomed submissions that explicitly detailed how those policies were enacted and embedded into the life and culture of the unit, with evidence provided of the scale and scope of those benefitting from them.
58. The sub-panel noted an increase in the number and proportion of doctoral degrees awarded by submitting units. The total number of doctoral degrees awarded in the REF 2021 census period was 1,630.30, a significant increase from 962 in REF 2014. This was a proportional as well as a numerical increase, with the yearly average increasing by 28.6%, from 186.76 in 2014 to 240.25 in 2021.
59. We also noted many examples of strong support for research students making a positive contribution to the vitality and sustainability of the research environment. Strong submissions clearly identified sources of financial support for PhD researchers (from internal schemes, Doctoral Training Partnerships or other competitive external schemes); sources of support for PhD research (e.g., access to internal funds for conference attendance); opportunities for training in research skills; wellbeing support; career development; and the integration of PhD researchers into the wider research community.
60. We found many examples of positive policies and practices around EDI, which, in some cases, had a transformational effect, demonstrably and materially improving access, representation and the research ethos of the unit. The sub-panel recognises, however, that work in this area is often at an early stage. Many units need to do more to embed EDI into their research environment and to ensure that work is recognised and supported at unit level (e.g., in relation to workloads).
- 61 The strongest submissions provided concrete evidence of the genuine provision for EDI (policy and practice) particularly for characteristics beyond gender. These demonstrated how EDI commitments (sometimes more fully articulated in the institutional statement) were embedded in practice at unit level, for instance, in relation to access to funds and time; support, recognition and reward for those generating impact from research;

mentoring, training and promotion; availability of part-time or flexible working; recruitment and funding of PhD students.

iii. Income, infrastructure and facilities

62. Whilst the sub-panel noted an increase in the total volume of research income awarded to submitting units from £66,507,000 in REF 2014 to £96,564,349 in REF 2021, there was, however, only a marginal increase in annual funding levels from £13,301,400 (over 5 years) in REF 2014 to £13,794,907 (over 7 years) in REF 2021. However, the limitations to useful comparisons between the REF 4b data for 2014 and REF 2021 include the lack of inflation-adjustment to the figures, the differing time periods for the two assessment processes and the changes in the staff submission rules which have changed the basis for the denominator in the income per fte calculations. Research income came from a wide range of sources, with UK Research Councils/UKRI representing the largest source and EU government bodies the second largest funder. Other significant sources of income included charities (UK, EU and international) and UK government, health and local authorities. The sub-panel noted the importance of this funding to sustain and support a wide range of research activity and impact, and its role in producing diverse, innovative and high-quality outputs.

63. The sub-panel noted various forms of infrastructural support for research evidenced across the submissions. This included buildings and physical infrastructure, technical support, and administrative and financial support (for areas such as impact or research bids). This was best articulated by units that were able to demonstrate how the infrastructure facilitated and enabled research – including practice research - within the unit.

iv. Collaboration and contribution to the research base, economy and society

64. The strongest environment statements identified mechanisms for supporting all staff to contribute and collaborate internally and externally, rather than simply listing or describing activities.

65. The sub-panel was impressed by the rich variety of local, national and international collaborations which had led to meaningful impact, extending across a range of thematic areas, and was achieved through engagement with diverse research users. These included:

- Contributions to our fields in relation to public policy, audience collaborations and networks.
- Strong connections with local user-communities such as the use of facilities for community radio stations and other media.
- Significant contributions to society and social justice, particularly embedded in research-led activism at local, regional and national levels.
- Strong media and cultural industry links to promote innovation and policy development.
- Collaborative activity with local arts and cultural organisations and collaboration with national arts bodies, particularly in the production of practice research.
- Pedagogic impact through involvement with inter/national subject associations and roles within schools, educational and cultural institutions.
- Wider contributions to culture and society through the impact of international projects, public engagement and roles within cultural institutions.

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66. There was consistent and impressive evidence of the many ways in which researchers contribute to, and shape, their disciplines and fields through working with international associations and recognised journals, editorial and subject association commitments, interdisciplinary networks and contributions to learned societies.
 67. The strongest environment statements gave evidence of genuine collaboration and meaningful exchange within and across disciplines and fields, sectors, regions and/or nations, providing a clear sense of the ways in which UK-based researchers and units punch well above their weight in shaping our field globally.



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