



**Innovative pedagogies series:
Wow: The power of objects in
object-based learning and
teaching**

Dr Kirsten Hardie, Associate Professor
Arts University Bournemouth

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Introduction

As an academic working in the higher education (HE) Art and Design sector, I have developed a number of successful distinct and diverse pedagogical practices that have been regarded as innovative by students and colleagues (as evidenced by the award of a National Teaching Fellowship in 2004) and as discussed in publications (e.g. Hardie 2009b; Hardie 2015). I offer this report as consideration of one particular strand of my many pedagogical approaches. I discuss key student-centred learning activities that I have developed using object-based learning (OBL) approaches.

Traditionally, design objects encased and showcased in museums have provided a key resource for Design undergraduates to learn about Design and its related history and contexts. In many instances objects may be seen but not touched. Likewise books, websites and digital databases present objects for study: rich resources, however, the physical handling of an item is denied.

Design objects can provide unique and effective learning experiences when placed physically in the hands of learners in the context of the university studio that is away from the confines of the traditional museum. The use of design objects can create different experiences and learning and teaching approaches to the more conventional museum trip and can enable students to develop their engagement with objects. Here I show the power of particular design objects to facilitate learning: how artefacts can surprise, intrigue and absorb learners; how learners' wonder at, or pleasure in, an object. The 'wow' of an item can create rich, important and fun learning.

This discussion relates to my learning and teaching work with BA (Hons) Graphic Design students at the Arts University Bournemouth (AUB) and my particular OBL pedagogical approaches that use design objects as powerful tools for learning. I draw from and contribute to established work regarding OBL and consider how objects support, enhance and advance learning in a variety of contexts. This report relates to my established discussion of OBL, for example the chapter, 'Engaging learners through engaging designs that enrich and energise learning and teaching', in *Engaging the senses: Object-based learning in higher education* (Chatterjee and Hannan 2015, pp. 21-42.) and other publications (Hardie 2009a; Hardie 2002; Hardie 2008).

This report examines my use of design objects, notably from the Arts University Bournemouth's registered museum: the Museum of Design in Plastics (MoDiP) – a museum that I created and have developed its use as a dynamic learning and teaching resource ever since. There exist a number of university museums that present unique collections of objects to support and inform learning and teaching and research and scholarship. My practice invites reconsideration of the value of particular objects and university museum collections by suggesting how they can be used to facilitate important and enjoyable learning. I share three key pedagogical case studies that highlight the distinct and original activities that I have created to enable and advance OBL.

Innovating in object-based learning and teaching

As a Graphic Design historian and cultural theorist, I use mass produced design objects to support and advance BA (Hons) Graphic Design students' learning; to develop their theoretical and practical skills and knowledge of their discipline and wider related contexts, themes and issues. Working with learners who are visually orientated and visual thinkers, and predominantly makers who 'learn by doing', I create experiential learning activities (Kolb 1984) to ensure active learning. As Bonwell (n.d.) identifies "active learning involves students in doing things and thinking about the things they are doing" (p. 2). I aim to support students' different, preferred learning styles (Honey and Mumford 1986) often through the use of objects and different OBL activities. My rationale for using objects lies firmly in the belief that students' hands-on engagement with objects can inform and inspire their thinking and design making; and that objects can energise learning and teaching. I agree with Schultz (2012) who states that "interaction with artefacts deepens students' learning" (p. 185).

As Chatterjee (2010) observes "Objects can be employed in a variety of ways to enhance and disseminate subject-specific knowledge, to facilitate the acquisition of communication, team working, practical, observational and drawing skills, and for inspiration" (p. 180). I use OBL to advance such learning and also to develop students' visual literacy (their ability to read objects and make and take meaning from objects); design awareness and knowledge; their critical analytical skills and their aesthetic judgement. I use objects to develop learners' knowledge and competent and sophisticated understanding of key issues, theories and contexts of design and culture (for example branding, style, ethics and consumerism etc.). I use objects to develop students' skills and confidence in research.

Object-based learning and teaching case studies

I engage students throughout their course in a variety of activities that focus upon and utilise objects. I display objects in their studio and encourage their use of the university' museum collections. Quickly, learners become accustomed to the use of objects and embrace the opportunities to engage with and learn from items. Here I discuss case study examples to illustrate the distinct and different ways that I use objects to facilitate learning. The examples are offered so that they may be adopted and adapted by others across and beyond discipline boundaries.

Case study one: The Power of Wow

Within the early stages of their course I ask first year students to select an object of their choice and place it in front of all their peers so that the example will elicit an instantaneous, authentic and audible response from the group: a *wow* (2008). Any object can be selected as long as it is considered to have the power to provoke a *wow*. Students are asked not to present or explain their chosen item: "the student's voice is communicated by objects. Neither students nor teacher talk. Silence is only to be broken by the exclamation of 'Wow! A genuine utterance of this single word ultimately confirms the success of the students' work." (Hardie 2008, p. 139). Discussion takes place after the *wow*.

The 'Power of Wow!' exercise is positioned as the culmination of the students' introductory studies to visual culture and semiotics. Their design discourse and visual literacy studies are tested through their exploration of how objects can speak: theory is put into practice (Hardie 2008, p. 140).

The activity encourages design analysis and critical reflection: learners are invited to consider the impact that designs can have; the messages that they can communicate, and how objects can be interpreted. Students are encouraged to think creatively; to explore their own experiences and responses to objects; and to select, preferably, an original and unusual example. Graphic Design students' "understanding of visual language is critical to their creative practice" and "this specific learning activity augments and amplifies their thinking in how they read and respond to design" (Hardie 2008, p. 141).

Remarkably, every year an astonishing assortment of examples is presented (approximately 70 items on average); many objects surprise all. Many objects are personal, for example an x-ray or a photograph that reveals an individual's private life or particular experience – these may prompt an *oh* or *aaagh* accordingly – and on occasion a *wow*. Some objects, such as a rare Pokémon trading card, may provoke an *ooooh* from those in the know. It is often the unusual object that secures the *wow*.

Case study two: A Matter of Taste

Engaging with objects and object analysis: experiential and active group learning

During the first term of their course I ask students to work in groups of five to six people and analyse a number of objects: *A Matter of Taste* activity. As a two-hour session that is non-assessed (usually a cohort of between 55 and 85) the activity usually takes place annually at an early stage in the curriculum. Prior to this activity, a variety of sessions introduce students to design concepts and contexts and key theoretical approaches to the understanding of visual culture. These sessions consider consumerism, popular culture and semiotics and aim to:

develop students' knowledge and understanding of, and the ability to use, the language and approaches that are used to define, decode and decipher how we communicate and read and judge the visual across a variety of contexts (AUB 2012).

The activity happens within the Graphics studio that provides a spacious area for large group work and importantly offers a familiar site that is beyond the traditional space of the museum. It allows the University's museum objects to be released from their cabinets and to populate tables that are positioned in a cabaret style room layout (a spatial configuration different to usual sessions) which helps to facilitate small group interaction and discussion. Students handle the objects as they pass to and from each table.

As I discuss in my previous report on this activity (Hardie 2015) I request that all students write a detailed consideration of the objects that includes related sketches, photographs and quotations. All groups are asked to complete an object identification form for each item: for example, what is its function, age and target audience? Who designed and manufactured it? Is it ergonomically designed? What does the object communicate and what values do you think it has? (E.g. financial, social, historical or cultural). This is standard practice in design studies. So, as Sudjic (2008) observed "[...] there is something to understand about objects beyond the obvious issues of function and purpose" (p. 49) this area of consideration is one that I develop in this activity, with a particular lens focused on the notion of aesthetics - taste.

I invite students to appraise the objects in relation to notions of taste that they have studied earlier in the curriculum; to explore what they *feel* about the object and if they find the object appealing and in what ways? The students' discussion of their subjective response, their personal preferences and prior experiences, is encouraged and then their informed, more objective, interpretation of the object is developed (Hardie 2015). Learners are encouraged to research the item and its related contexts and associations: to work in teams and, importantly, to discuss, debate and evaluate their ideas, opinions and the facts. As Kolb and Kolb (2005) confirm, discussions are important experiential learning experiences. However, I am mindful, as Gibbs observes, that "an unstructured discussion can often turn into a rambling sequence of anecdotes" (Gibbs 2008, p. 48). I therefore, carefully advise learners regarding the requirements of discussions as I recognise that student-led unstructured discussion of objects, where teacher instruction and intervention/interjection is not involved, may be considered as a higher risk activity for a teacher (according to Bonwell's 'classification of instructional strategies by levels of instructor risk' (n.d., p. 7).

Students are encouraged to interpret the objects: "interpretation is the process for constructing meaning. Interpretation is part of the process of understanding" (Hooper-Greenhill 1999, p. 50). As individuals' responses and connections with objects can differ significantly, the discussions regarding personal preferences, likes and dislikes, is explored. Working with museum staff who are often invited to join the

session, learners are encouraged to reflect upon their perceptions and those of others so that they may position and potentially reframe their consideration of design examples.

The selection of objects is vast and includes both historical and contemporary examples, 'iconic' designs and pedestrian anonymous examples too. The range, type and number of objects selected for this activity is critical (Hardie 2015). Too few items and attention may not be sustained; too many and students may feel overwhelmed. Old and redundant designs offer consideration of technological developments, consumer markets and notions of planned obsolescence. For example, a small c.1940s 'Clem' travel iron (A.B. Metal Products Limited) (Fig. 1), although "ludicrously weighty", has been deemed handy and appealing, while the 1930s Purma Special camera (design attributed to Raymond Loewy) has been judged as "stylish and desirable" (Fig.2). Students are quizzical of a 1970s Goblin teasmade and have determined its worth as an "extravagant luxury" and "an outrageous multifunctional design to have in a bedroom" but "strangely appealing". (Fig. 3).



FIGURE 1: A SMALL BLUE 'CLEM' TRAVELLING IRON MANUFACTURED BY A.B. METAL PRODUCTS LIMITED, C. 1940s. MODIP OBJECT NUMBER: 005338). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH. WWW.MODIP.AC.UK



FIGURE 2: PURMA SPECIAL CAMERA. DESIGNED BY RAYMOND LOEWY FOR PURMA CAMERAS LTD IN THE 1930s. (MODIP OBJECT NUMBER: 003086). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH. WWW.MODIP.AC.UK



FIGURE 3: GOBLIN TEASMADE, MANUFACTURED BY GOBLIN, 1970s. (MODIP OBJECT NUMBER: 0-2417). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH. WWW.MODIP.AC.UK

A key approach I take is to present learners with objects that they may be unfamiliar with: designs whose function may not be readily evident. Such designs can generate discussions and encourage detective work. Learners are invited to solve the puzzle of their function, age and construction. Through group discussion, observation, analysis, and then research, the object's identification is deduced - hopefully. For example, a mid-20th century multicoloured, mottled plastic darning mushroom (Fig. 4) may not be immediately identifiable and learners may be baffled by its appearance. While suggestions as to the identification of the

object are proposed, for example, a torch or a pretty pestle that has lost its mortar, it is through a Google image search that students solve the riddle and then further searches identify its function and context of use.



FIGURE 4: A MULTICOLOURED, MOTTLED DARNING MUSHROOM, MANUFACTURER UNKNOWN, C. 1940-1959. (MODiP OBJECT NUMBER: 006390SA). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH. WWW.MODIP.AC.UK

The provocative forms and questionable function of objects that are often deemed as kitsch serve well in students' contemplation of notions of taste and their consideration of their own design preferences. For example, the study of decorative toilet brushes (Hardie 2015), a design area that offers provocative consideration, can generate significant debate as learners question the validity of their design and indeed initially consider the relevance and legitimacy of the very presence of their forms in the context of their learning environment. As Chris Rose observed "if objects are seen away from their functional setting we are likely to study them more closely" (cited by Reynolds and Speight 2008, p. 188); thus the intrusion of a toilet brush in a classroom sets powerful opportunity for discussion: for example, an acrylic toilet brush and holder with fish and shells decoration proves to be a particularly provocative focus (Fig. 5).



FIGURE 5: TOILET BRUSH. MANUFACTURER UNKNOWN, C. 2004. (MODiP OBJECT NUMBER: 004588). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH. WWW.MODIP.AC.UK

As Reynolds and Speight (2008) identified, in a consideration of HE students' use of museum objects:

An awareness of context is important for students in order to understand the purpose and function of an object and also to make connections between prior knowledge and new information presented to them in the gallery. (Reynolds and Speight 2008, p. 189).

Like Reynolds and Speight (2008), I have found that some students request information to help them identify, locate and make sense of particular items that they have not encountered before. For example, students' engagement with a small curved, ornately carved ivory tusk (Fig. 6), the use of iridescent beetle wings in a piece of 19th century embroidery (Fig. 7), earrings fashioned from fish scales (Fig. 8), and a 1930s moleskin cape (Fig. 9) generate, invariably, a number of questions: Where did they come from? Who did they belong to? What are they worth? Why? Identification of the material that the object is made from and the key contextual information that I provide - the object's provenance (its backstory) - can enrich the learning and further intrigue learners. Discussions develop and further questions are explored as students wish to know more. Their inquisitiveness can lead them on to further research; to examine the laws regarding ivory and where to find fish scales and beetle wings. As Csikszentmihalyi and Hermanson (1999) observe "after the individual's curiosity is aroused, the exhibit must engage sustained interest in order for learning to take place" (p. 153) thus the element of intrigue generated by an exhibit adds to the object's appeal and encourages students' investigation and critical analysis of design.



FIGURE 6: A SMALL, CARVED IVORY TUSK, CARVED ON EITHER SIDE WITH ANIMAL MOTIFS. MANUFACTURER AND DATE UNKNOWN. (MODIP OBJECT NUMBER: 000043). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH.

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FIGURE 7: SMALL SECTION EMBROIDERY USING 10 PIECES OF BEETLE WING AND GOLD THREAD INTERWOVEN INTO MESH BACKGROUND MATERIAL. PLANT FORM DESIGN 19TH CENTURY. (MODIP OBJECT NUMBER: 001058). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH.

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FIGURE 8: EARRING MADE OF FISH SCALES, HANDMADE IN BARBADOS, C. 2000. IMAGE: K. HARDIE



FIGURE 9: SHORT, MOLESKIN CAPE, c.1930s, MANUFACTURED FOR DERRY & TOMS. (MODIP OBJECT NUMBER: 001117). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH. WWW.MODIP.AC.UK



FIGURE 10: A PAIR OF MEN'S 'YOUNG COLONY' LEATHER PLATFORM SHOES, c. 1970s. (MODIP OBJECT NUMBER: 001384). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH. WWW.MODIP.AC.UK



FIGURE 11: A PAIR OF FUR SAMI BOOTS, PROBABLY MADE IN FINLAND, c. 1990s. (MODIP OBJECT NUMBER: 0_2683). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH. WWW.MODIP.AC.UK

I utilise a range of items from across a variety of contexts, countries and cultures. For example 1970s (UK) platform shoes (Fig. 10) and Scandinavian Sami boots made from reindeer fur (Fig. 11) offer the gateway to discussion and further research regarding contexts of use, fashion, self-image and cultural identity. Knowledge and understanding of design and culture must go beyond a national or Eurocentric focus. Objects can provide valuable vehicles on the route to an understanding and appreciation of social and cultural attitudes and practice. I introduce learners to objects that have specific cultural meaning and some items that are potentially so significantly culture-specific that learners may be unacquainted with their design and function. For example, I distribute across a whole first year group Chinese joss paper Hell banknotes, clothing and electrical goods – all made of paper. I offer no immediate identification or explanation of their existence and the learners' instant reactions evidence their amazement. A paper laptop (Fig. 12), a paper hairdryer (Fig. 13), paper male and female garments and paper toiletries, all which mimic real items, elicit an audible *wow*, a variety of *mmms* and a fair number of *what are they?* exclamations. Learners examine the items to make sense of their design and query why familiar items are made in paper form.

Mindful of cultural sensitivities, wherever possible I check with students from Asia that the appearance of the items in the context of the university studio is acceptable to them as the items on show have significant religious meaning, association and value: the paper goods are funeral items, death goods that are traditionally offered to deceased loved ones and used in the worship of ancestors. The items are for the afterlife.

Learners are keen to know more and the items command a certain hush as their function and context of use is explained. Respect for these objects that hold particular and sensitive meaning for some is emphasised. Where relevant, students will discuss their knowledge and experience of their specific use of the objects. For items that are meant to be burnt the colourful and delicate pieces command significant attention and provide powerful opportunity to consider cultural activities.



FIGURE 12: PAPER LAPTOP CHINESE FUNERAL ITEM. MANUFACTURER UNKNOWN, MADE IN CHINA OR HONG KONG, c.2004. (MODIP OBJECT NUMBER: 005729). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH. WWW.MODIP.AC.UK

FIGURE 13: PAPER PERSONAL GROOMING BOXED SET, CHINESE FUNERAL ITEM. MANUFACTURER UNKNOWN, MADE IN CHINA OR HONG KONG, c. 2004. (MODIP OBJECT NUMBER: 005728). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH. WWW.MODIP.AC.UK



The use of contemporary packaging helps introduce students to packaging design, branding, consumerism and visual research. Readily available, easily and cheaply selected, packaging presents design surfaces and physical shapes that students can handle, scrutinize and interrogate (Fig. 14). Drawing from my PhD that focused upon packaging design, I use a variety of historical and contemporary international examples that engage students (research-informed teaching). For example, milk packaging offers comparative study of the evolution of how milk is contained, transported, branded, purchased and consumed. Cravendale® brand's distinct one litre white PET milk container (Arla Foods UK Limited), designed in 2012 (winner of Dairy Innovation Awards 2013, best dairy packaging innovation category), evidences ease of use (a comfortable high-waisted grip) and enables consideration of ergonomic design and branding.



FIGURE 14: BA (HONS) GRAPHIC DESIGN STUDENTS, ARTS UNIVERSITY BOURNEMOUTH, ANALYSING MUSEUM OF DESIGN IN PLASTIC PACKAGING EXAMPLES, 2013. IMAGE: K. HARDIE.

Likewise, the award-winning teardrop-shaped method brand hand wash bottle (2003) (Fig. 15) and the ergonomic curves of the unique method brand dish soap “bowling-pin shaped” (Handy 2010) container (2001) (Fig. 16), both designed by award-winning designer Karim Rashid, arrest learners’ attention. A comparative study of traditional and historical washing-up liquid bottles, such as the Szezy brand (Lever Brothers Limited) (Fig. 17) and more recent examples, such as the method dish soap (2003), that dispenses its cleaning liquid from the container’s base, enables learners to consider generic shapes that identify a product category and the visual language and innovative designs used by brands to differentiate their products from their competitors.

The handling of the packaging goes beyond the images presented in books and websites and offers learners the opportunity to scrutinise the object and consider their own responses in a way that they perhaps would not in the context of a supermarket or kitchen environment. For example, the detailed illustrations of the Yorkshire countryside that wrap around the exterior surfaces of the contemporary brand Yorkshire Tea packaging (Fig. 18) enable students to undertake semiotic analysis of the designs and to examine the use of visual language and narrative in branding. In 2014-15 a final year investigative study (dissertation) focused on the visual language of tea packaging and the student’s interrogation of the Yorkshire Tea box’s imagery resulted in significant primary research and an interview with illustrator Andrew Hutchinson. Thus, from first to final year students, packaging design’s form and function can help learners to critically analyse and reflect upon design, research further, and then develop their creative practice in packaging design. Such activity can be identified as “reflection in action” (Schön 1983): students reflect, evaluate and take action, and make decisions during the activity.



FIGURE 15: METHOD 'WATERFALL' HAND WASH PACKAGING. DESIGNED BY KARIM RASHID IN 2005 AND MANUFACTURED BY METHOD. IMAGE COURTESY OF METHOD AND LEXIS AGENCY, LONDON.



FIGURE 16: METHOD DISH SOAP PACKAGING. DESIGNED BY KARIM RASHID IN 2002 FOR METHOD. IMAGE: K. HARDIE WITH PERMISSION FOR USE AGREED BY METHOD AND LEXIS AGENCY, LONDON.



FIGURE 17: SQUEZY WASHING UP LIQUID. MANUFACTURED BY BXL CASCELLOID DIVISION FOR LEVER BROTHERS LIMITED, 1975. DESIGNER UNKNOWN. (MODiP OBJECT NUMBER: 006186). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH. WWW.MODIP.AC.UK



FIGURE 18: TAYLORS OF HARROGATE YORKSHIRE TEA PACKAGING, TAYLORS OF HARROGATE, 2015. PERMISSION FOR USE OF IMAGE AGREED WITH TAYLORS OF HARROGATE AND LEXIS AGENCY, LONDON. IMAGE: K. HARDIE

Students' feedback regarding this activity, secured via a questionnaire, evidences the success of this activity and enables me to develop my approach accordingly too. While one student out of 130 responses reported the activity as "boring", overall responses have been positive. Responses include "it enabled me to see a different view and way of learning" (2014); "Very helpful, [sic] can learn more by visually seeing it and handling it, allows me to understand more than a photograph" and; "[...] simply learning through listening

doesn't do much for me, senses need to be stimulated" (2014); "Good to interact with these [objects], own opinions and other people's thoughts." In my published discussion of students' responses to this activity (Hardie 2015) I consider how learners interpret, position and relate to this OBL activity. That students requested "more touchy feely objects" and "anything interactive to stimulate learning" identifies their understanding of the value of OBL. Their evaluations provide critical help to the development of my practice.

Case study three: For the Love of Graphics exhibition

I create opportunities for learners to take ownership of their learning; to liberate them from the traditional experiences and expectations of the lecture, seminar and tutorial. I create and facilitate learning that releases the pressures of assessment - where individuals can explore freely, take risks, and shape their learning to suit their interests and learning preferences. I agree with Kolb and Kolb (2005) in that

making space for students to take control of and responsibility for their learning can greatly enhance their ability to learn from experience (Kolb and Kolb 2005, p. 209).

For example, for the past five years I have developed the *For the Love of Graphics* exhibition: an OBL experiential learning activity. At the start of their second term, first year students (approximately 80 in number) are set the challenge to create and curate a unique exhibition in their studio. Each student is asked to select a graphic design artefact or collection of items that they love which can be showcased in an exhibition. All are requested to research their item and produce a short piece of text (50-100 words) to identify the item/s: to justify their rationale for the object/s selection and to inform others of its provenance and context. All students are invited to contribute to the exhibition's content and to its overall design. The activity is not assessed. The annual exhibition coincides with Valentine's Day - to maximise the connotations of love - and it is open to the entire university. It exists for one day only.

As Beckman (2012) advocates:

Curating an exhibition as part of a class can be an exciting opportunity for faculty who want to deviate from the standard routine of papers and exams as modes of learning. (Beckman 2012, p. 323).

This exhibition, a shared activity, aims to encourage all to explore and reflect upon their discipline; to consider their particular design interests and preferences and to share their personal passion for their subject. The activity aims to develop learners' experience of decision making; reflection; and research; and to develop their skills in teamwork; time management; curatorship; and design. Importantly the activity provides students with the opportunity to explore design objects and how they may be presented to audiences; to explore and experience the management of space and display; and to design the layout and identity of a distinct exhibition - all important activities for designers to practice.

Each year the exhibition presents a lively learning experience where students, as a true "community of practice" (Lave and Wenger 1991; Wenger 2008), create a unique exhibition. The students select a rich array of cherished exhibits - for example contemporary and historical posters, tickets, music graphics, logos etc. The range, scale/size of exhibits provides an extensive and impressive show of graphic design. Students often draw upon their prior learning and cultural heritage to secure ideas for their chosen object/s. Some include the work of international designers - their research secures the donation of designs from individuals and companies. This primary research and important networking is particularly rewarding and provides a dynamic showcase of a collection of graphic design not in existence in this way elsewhere. The students' pride in securing such design work is heartening. Their pride in their discipline is considerable.

The exhibition activity engages learners in creative active learning, a fun, yet challenging, live brief that involves levels of risk taking and experimentation that in many ways is not made possible in other parts of the curriculum. As a student-centred and student-led activity, learners have the freedom to refashion their usual learning space (with light guidance from me) and present an exhibition for scrutiny by others (Fig. 19). The opportunity for students to showcase design preferences and share their design knowledge and creative skills can anchor a strong group culture. The activity can develop students' confidence, and enable them to

learn with and from others. Each year's exhibition meets and indeed surpasses expectations and is unique in content, design and identity.

The use of objects enables learners to communicate visually and the exhibits' text encourages the development of reflective writing without the challenge of a lengthy essay. Thus, the tensions of writing that design students often report as troublesome (as discussed by Orr, Blythman, Mullin (2006); Cunliffe-Charlesworth (2008)), are lessened. The exhibition is a powerful vehicle for OBL as students consider their relationship with designs and position these objects as revered exhibits (Fig. 20).

Student evaluation (80 questionnaire responses in 2015) of the exhibition evidences their support of this activity. When asked to list the things that they liked about the activity comments included "high level of work/design"; "everyone working together"; "enjoyed contacting designers/new awareness"; "grouping together as the whole year"; "broadened my perspective on what design is"; "various viewpoints of design work....it's just wonderful." The response "freedom" was pleasing to receive and matched one of my key aims for the activity. Likewise students reported their enjoyment of the organisational aspects of the activity and many commented that they felt that they had learnt more about their discipline. Students observed "[It] opened my eyes to other areas of graphic design, and allowed me to appreciate them a lot more".

In response to the question "What knowledge and/or skills do you feel you developed as a result of the activity?" students answered: "organisation skills"; "design awareness/copyright"; "Teamwork, communication, research, time management; decision making" were popular responses. The identification of "passion" was heartening to read. Students' response to the question "What value do you feel the exhibition offered you?" included: "I feel like I gained a lot of understanding in how exhibitions go as well as enhanced research".

Overall this year's responses match closely to those offered previously. It is pleasing that the activity is considered by students to develop their knowledge, skills and competencies. Pleasingly, many students offered suggestions on how the exhibition can be developed in the future, for example "use even more space"; "develop more aggressive advertising" and "work with more professional designers." The reflective comments and forward thinking emphasise the students' engagement with the activity.

Potentially, comparable subject-focused exhibitions can be developed within any discipline as an activity to encourage learners to work collaboratively and explore and share their interests in their specialism. This could be particularly interesting for disciplines that traditionally do not engage students in group design exhibition work.



FIGURE 19: THE FOR LOVE OF GRAPHICS EXHIBITION, ARTS UNIVERSITY BOURNEMOUTH, 2013.

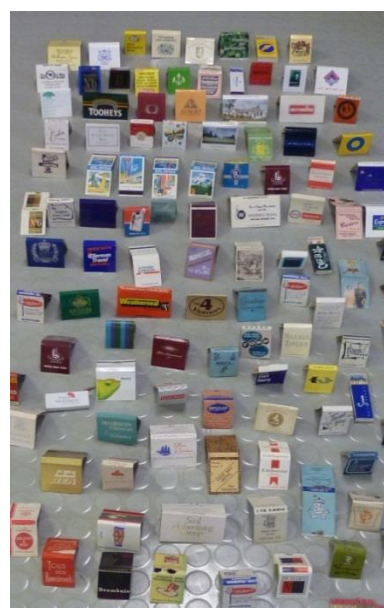


FIGURE 20: EXHIBITS FROM THE FOR LOVE OF LEARNING EXHIBITION, ARTS UNIVERSITY BOURNEMOUTH, 2013

Innovative pedagogical approach and impact

Object-based learning is a pedagogical approach used increasingly by many academics across HE, often by specialists in design history, design theory, contextual studies, or museum studies. A number of studies have focused on the use of objects in museums and OBL for example, Chatterjee and Hannan (2015); Chatterjee and Duhs (2010); Cook, Reynolds and Speight (2012); Reading (2008); Hooper-Greenhill (1999 and 2002); Hennigar Smith (1999); Jandl and Gold (2012); Chatterjee (2010 and 2013); Lambert (2013); Boddington, Boys and Speight (2013); Chatterjee (2008); Duhs (2010); and Prown in Clark and Brody (2009, pp. 224-5).

The duration and extent to which I have used, and continue to use, objects in hands-on learning and teaching in diverse and dynamic ways may be identified as particularly distinct and original. My use of objects has evidenced significant achievements: I founded my home institution's design collection and have worked to ensure its development through to registered museum status and beyond; it is my constant use of objects in a variety of activities to support active and experiential learning that underscores key strands of my distinct, and what may be considered to be, innovative pedagogical practice.

My diverse use of a wide range of various commonplace and also unusual objects from MoDiP (and my personal items) can be considered to be distinct and innovative. While traditional museums and university collections may showcase classic designs of revered designers and manufacturers, my use of anonymous and prosaic items balanced with the study of notable iconic designs (Lees-Maffei (2014); Lidwell and Manacsa (2011)), offers original study. Students' delight and disdain when engaging with objects that are not usually considered or preferred in Design Studies provides provocative learning (Hardie 2015). I take my pedagogical approach beyond the traditional Design History/Museum Studies/Design Studies approaches and thus challenge established proprieties.

How my OBL practice developed and how it has evolved.



FIGURE 21: OFFICE SHELF, ARTS UNIVERSITY BOURNEMOUTH, 2015. IMAGE: K. HARDIE.

My OBL pedagogical practice originated from my passion for design. From a family of collectors, design objects feature prominently in much that I do personally and professionally. I surround myself with objects (for example my university office shelves are home to many a find) (Fig. 21). As a teenager I amassed diverse collections including plastic items, an obligatory hoard of snowstorms and anything from the 1950s. Subsequently the collections became more unique. Consequently, as a Design History student the passion for design was fuelled and fed as objects became the decisive reason for, and focus of, study.

As a student I used the design items of the Design Collection (now the Betty Smithers Design Collection) at North Staffordshire Polytechnic (now Staffordshire University). "The collection was established in the early 1980s to complement the teaching of what was then the History of Art and Design Department" (Betty Smithers Design Collection) and offered an intriguing array of predominantly 20th century popular culture items. The handling and study of physical objects - touched and scrutinised from all angles - in the context of a university classroom away from, and very different to, the traditional museum environment and images in books and large projections in lectures, provided important experiences. OBL was liberating and memorable and had lasting impact.

Following postgraduate study, and inspired by the Staffordshire Collection, a hoard of personal design objects became important resources as I started my career as a Design History/Cultural theorist Contextual Studies lecturer. Their use in my practice offered a reassuring and successful approach to engaging students in the study of Design and related contexts. The students' enthusiasm for OBL and their delight in particular objects led to my development of an institutional collection of items for learning and teaching use. Thus in 1987, working collaboratively with students, I established the preliminary design collection at Bournemouth and Poole College of Art and Design (now AUB). Initially Graphic Design artefacts were amassed: contemporary and historical packaging and advertising examples, music (rave) flyers and printed ephemera were gathered and avid contributions from students came forth as they recognised the value of such objects in their Design studies. In 1988 the Design Collection was established as more diverse objects, such as hair dryers, kettles and toasters were collected for use in teaching activities across a range of disciplines (Hardie 2002). The collection was created to enhance student learning and provide access to international, historical and contemporary design examples from c. 1880 to the present day. The exhibits aimed to

develop student critical awareness and understanding of design, manufacturing processes, materials, style, marketing and consumerism within relevant historical, social, cultural, political and economic contexts.' (MoDiP).

The Design Collection became a registered museum in 2001. In 2007 the Museum of Design in Plastics (MoDiP) was established as AUB focused upon the specialist plastics collection which had become a particularly significant and unique aspect of the museum.

Today MoDiP is

[...] the only accredited museum in the UK with a focus on plastics and it is the UK's leading resource for the study and interpretation of design in plastics. (MoDiP).

MoDiP's mission is to

increase understanding and appreciation of the use and significance of plastics in design during the 20th and 21st century. (MoDiP).

The museum's core focus and collection of plastics is complemented by the Studio Collection which includes non-plastic objects across a range of areas. Using MoDiP as a key resource, I have developed a number of OBL activities over the years.

Initially (1987-1991) I developed a *Design Crimes* mock trial role-play activity where selected designs were examined, interrogated, cross examined and found either guilty or not guilty of the charge of being flawed or failed design. The large group activity, comprising judges etc., provided the arena where students could examine and debate playfully their design judgements. Design objects took to the stand and students' research served as evidence.



FIGURE 22: SOUVENIR BOOMERANG SHAPED CLOTHES BRUSH THAT ENCASES A MUSIC BOX. (MODiP OBJECT NUMBER: 003621). IMAGE © MUSEUM OF DESIGN IN PLASTICS, ARTS UNIVERSITY BOURNEMOUTH. WWW.MODIP.AC.UK.

Many objects have been placed on trial; regularly selected by students. For example an Australian boomerang-shaped clothes brush that initially received scathing criticism for being a worthless souvenir, secured significant admiration when it was found to play 'Waltzing Matilda' with the turn of a key on its base (Fig. 22). The novelty item was judged as "genius" by students as they delighted in its surprising multifunctional form. Its popularity has meant it has made return visits to activities, while other designs have been found guilty, for example hard to open milk containers and disposable razors.

The use of objects in my *On Trial* activity has provided valuable opportunity for students to debate and to develop a variety of skills (communication, research etc.). Notably my *On Trial* activities have changed and developed and the focus has moved from the scrutiny of objects to the contemplation and interrogation of wider design issues, for example ethics and copyright (see Hardie 2009a). Objects, however, remain critical to the trial events and feature as exhibits used in defence and prosecution cases: they are important to the authenticity of the activity and provide vital focus.

My OBL pedagogical practice has been shared with colleagues across the HE sector in a variety of ways, for example workshops for colleagues at AUB; conference papers (for example, Higher Education Academy, Art, Design and Media/Centre for Excellence in Teaching and Learning through Design symposium 'Collecting Experiences: enriching design students' learning in the museum', 2009 (see Hardie 2009); museum displays (for example, co-curator 'Design Dialogues' exhibition, Russell-Cotes Arts Gallery and Museum, Bournemouth, 2005); Higher Education Academy-funded national workshops for colleagues across the sector (for example, 'Object Power: the use of museum artefacts in creative object-based learning and teaching in HE', 2013 workshop (Lambert 2013) and publications (Hardie in Chatterjee and Hannan 2015). Thus I have been able to disseminate my work; test my activities and reflect upon my pedagogical approaches and subsequently develop better and new ideas and activities, through consideration of student feedback and peer evaluation.

My work with the Ephemera Society supports students' OBL and discipline research. My study of objects (notably flock; kitsch and packaging) enthuses my teaching and I am inspired by objects across a range of contexts including exhibitions, museums, boot sales and supermarkets.

How this practice is situated theoretically

My OBL pedagogic approaches sit in relation to, and embrace, a variety of theoretical pedagogical perspectives and contexts. Object-based learning can facilitate valuable and enjoyable learning and teaching opportunities as Hooper-Greenhill observed

Objects can be particularly stimulating in relation to learning processes when handled and studied closely. Objects can act to ground abstract experiences, can enable recall of knowledge, and can arouse curiosity. (*Hooper-Greenhill 1999, p. 21*).

Objects can engage students and create powerful learning experiences. Like Chatterjee and Hannan's (2015) considerations of OBL, Hennigar Smith (1999, p. 80) observes "the power of objects to educate" and I concur. Students, working as a "community of practice" (Lave and Wenger 1991; Wenger 2008), can advance their learning working collaboratively with 'live' objects (primary sources) that are handled and interrogated 360°; objects can engage multiple senses and can offer meaningful and memorable learning experiences. OBL can inform, inspire and enrich student learning and can encourage and develop deep learning.

My OBL activities encourage and enable students to learn by doing: experiential learning. Students' design analysis and evaluation of objects and their further reflection, synthesis and application of the knowledge and understanding that they have developed through the OBL activities to their own design work can be identified as experiential learning. Gibbs (2008) in his discussion of experiential learning considers:

Openness to experience is necessary for learners to have the evidence upon which to reflect. It is therefore crucial to establish an appropriate emotional tone for learners: one which is safe and supportive, and which encourages learners to value their own experience and to trust themselves to draw conclusions from it. (*Gibbs 2008, p.19*).

I therefore aim to ensure that activities are open, supportive and fun to help develop learners' critical reflection and their consideration of design issues. I try to avoid leading or shaping students' responses and reflections. I encourage open discussion in a positive learning context.

My OBL practice aims to ensure student-centred learning where I operate as facilitator and the objects are powerful catalysts for learning. I aim to liberate learning so that students take responsibility for their learning and student-centred learning is achieved. As McCabe and O'Connor (2014) state:

A student-centred approach to learning encourages students to have more responsibility for their learning and is a process that relies heavily on professional confidence to 'let-go' of traditional teaching responsibilities. (*McCabe and O'Connor 2014, p. 350*)

As I discuss in my previous consideration of OBL (Hardie 2015) students engage in active learning (Biggs 2003) when working independently and in groups on OBL activities. Active learning "requires students to do meaningful learning activities and think about what they are doing" (Bonwell n.d., p. 7) and ensures that "the core elements of active learning are student activity and engagement in the learning process." (Prince 2004, p. 1). Thus my activities as discussed can be identified as enabling active learning.

My OBL pedagogical practice, as discussed previously and illustrated in the case studies considered, creates enquiry-based learning (EBL) opportunities. The activities facilitate EBL (see Kahn and O'Rourke 2005) active learning that addresses key needs while offering an entertaining experience. Students' enquiry is central to their learning. With OBL I set students key challenges - conundrums - as discussed in the case studies. Students are set a problem that they aim to solve, for example when they are asked to create an exhibition and critically examine and judge objects regarding design flaws etc. In this way problem-based learning is secured. In their engagement with objects, learners consider examples from a variety of perspectives and draw upon their own prior learning and wider experiences to make and take meaning. In this way their learning relates to constructivist theories of learning (Biggs 2003). As Biggs states

Knowledge then is constructed by the students' learning activities, their approaches to learning. What people construct from a learning encounter depends on their motives and intentions, on what they know already and how they use prior knowledge. Meaning is therefore personal - what the learner has to do is the important thing. (*Biggs 2003, p. 13*).

Reading (2008) observes

students learn to understand by observing, engaging and interpreting the world and that they construct their own meanings of the world from these interpretations and interactions. (*Reading 2008, p. 4*).

In summary, my pedagogical practice utilises a variety of approaches that ensure that learning is rich, varied, deep and meaningful. The activities offer a variety of learning experiences that relate to and evidence key theoretical perspectives and understanding. I learn from pedagogical theories and related scholarship to ensure that I maximise the value and quality of my practice.

Ideas and advice on OBL pedagogic practice

I offer the following considerations, advice and tips regarding the development of OBL in pedagogical practice:

1. the use of objects in small group work at the start of a course can offer a valuable ice-breaker activity as learners focus on items while developing their social interactions with their peers;
2. opportunities for learners to engage physically with celebrated design classics can provide important and memorable opportunities for them to study key designs and important aspects of their discipline;
3. surprise students in their learning; surpass learners' expectations of using objects by creating innovative activities and using unusual items;
4. the use of objects not specifically related to the learners' discipline can open up their wider understanding, and engagement, with a variety of themes, issues and contexts;
5. use objects to develop lively critical discussion, focused critical analysis, reflective thinking and powerful debates. Encourage students to interrogate objects publicly; aim to develop learners' deep learning through the use of objects;
6. fun and provocative objects can engender learners' curiosity and sustained interest in their studies. Objects can be used to explain and illustrate complex theories in an enjoyable and memorable way;
7. engage and stimulate learners' senses through a variety of objects; maximise the opportunity for learners to touch items;
8. the use of prosaic objects can offer surprising focus as students reframe their engagement with items in the context of the classroom;
9. encourage student ownership of OBL activities; enable and encourage students to be independent learners through their development and testing of their own experiences, reflections, ideas, investigations, judgements etc.;
10. provide opportunities for learners to determine what objects they wish to study and how they wish to do this; let learners create and lead their own OBL activities;
11. invite students to bring in their own object of desire so that they may discuss this with colleagues;
12. invite learners to identify objects of interest in their specialism and to discuss these with their peers so that a wider awareness and understanding of their discipline may be developed and so that different perspectives and experiences may be secured;
13. invite students to sketch and photograph objects; to develop an object log (journal) or blog that captures their responses to design and documents and discusses their research findings;
14. encourage students to take a detective-like approach in their study of objects;
15. use museum and university collections to inspire learning; work with museum colleagues;
16. ensure a mix of objects which are representative of a range of cultures, contexts and issues;
17. consider new and established OBL literature: continue to learn from others;
18. be creative, think differently;
19. Enjoy!

Conclusion

I use physical mass-produced design objects to facilitate student-centred, enquiry-based and experiential and active learning. Objects, often ordinary or unconventional items, become the focus and vehicle to develop learners' study of their discipline and their wider consideration of a host of cross-disciplinary issues, concerns and perspectives. I use OBL to develop enjoyable and deep learning. I use objects to develop specific learning in both individual and group learning activities: for example the consideration of design problems (such as copyright; sustainability; ergonomics) through students' analysis of a number of disparate artefacts (for example club flyers, vacuum cleaners and shoes); the exploration of design judgement and notions of taste/aesthetics through their examination of variety of historical and contemporary comparative items; the development of students' engagement with semiotics through their reading of individual items (for example the decoding of washing-up liquid bottles); and the support and development of student dissertation research through the use of collections of items.

My creative use of objects, many items that traditionally would not be showcased in a museum, and the activities that I have created for learners to develop their education, skills and experiences, are rich and many and have proved to be very successful. Feedback repeatedly emphasises the success of the activities as students' comments reflect their enjoyment, and importantly, the value of the learning experiences. My practice evidences Schultz's (2012) observation that "interaction with artefacts deepens students' learning" (p. 185).

My work offers fresh perspective and evidence that can make important contribution to established bodies of knowledge. I encourage all, whatever discipline, to develop creative OBL activities.

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Contact us

+44 (0)1904 717500 enquiries@heacademy.ac.uk
Innovation Way, York Science Park, Heslington, York, YO10 5BR
Twitter: @HEAcademy www.heacademy.ac.uk

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