

Research and Technology Support Resources

Introduction

We have compiled a range of resources, on and off campus, that team leaders can use to aid team collaboration or to help team members accelerate their learning curve on certain research skills that the project may require. We encourage you to explore these resources, or invite your team members to take responsibility for setting up an infrastructure that works for the team. To help you navigate this list, we've divided it into four sections:

- [Online Collaboration Tools](#)
- [Research Support](#)
- [Duke University Libraries](#)
- [Online Research Resources](#)

Online Collaboration Tools

Duke provides access to a range of free, or reduced-cost, software programs that can help teams communicate, collaborate, or organize and analyze data. Other programs are offered for free online to all users. Some of the most popular programs are listed below. If you don't see what you need, before buying a program, check with [Duke OIT](#) to see if Duke offers the software for free or at a reduced-cost.

Communication

[Slack \(https://slack.com\)](https://slack.com)

Slack is a communication platform that enables teams to discuss project work all in one place.

[WebEx \(https://webex.duke.edu/\)](https://webex.duke.edu/)

WebEx is an online, web-based conferencing tool that includes audio, screen sharing, and file sharing. WebEx is free for Duke users.

[Skype \(https://www.skype.com/en/\)](https://www.skype.com/en/)

Skype offers free chat, video and talk features.

[Sypma Listserve \(https://lists.duke.edu/sympa\)](https://lists.duke.edu/sympa)

Create and manage list serves for your team, for free.

File Sharing and Management

[Box \(https://box.duke.edu/\)](https://box.duke.edu/)

Box is a cloud-based storage and collaboration service for all Duke University faculty, staff, and students. With Box, users can access, store, and share content securely with Duke and non-Duke users.

[Google Docs \(http://www.google.com/docs/about/\)](http://www.google.com/docs/about/)

Google Docs allows users to create, edit, and share documents through one accessible site. Multiple

users can also work together in the same document at the same time.

[Zotero](https://www.zotero.org/) (<https://www.zotero.org/>)

Zotero is a free, open-source tool that can be used to create a collaborative reference library of research sources.

Project Management and Collaboration Spaces

[Asana](https://asana.com/) (<https://asana.com/>)

Asana is a web and mobile application designed to help users plan and manage projects online without the use of email. In each task users can add notes, comments, attachments, and tags. Users can follow projects and tasks and when the state of a project or task changes, followers get updates about the changes in their inboxes. A basic version of Asana is free for teams of up to 15 people.

[Basecamp](https://basecamp.com/) (<https://basecamp.com/>)

Basecamp is an online project management tool that includes file sharing, scheduling, task management and tracking, and communication tools. The basic version, “Basecamp Personal,” is free.

[Trello](https://trello.com/) (<https://trello.com/>)

Trello is an online project management tool that includes file sharing, scheduling, task management and tracking, and communication tools. The basic version is free.

[Microsoft Teams](https://oit.duke.edu/what-we-do/applications/office-365-microsoft-teams) (<https://oit.duke.edu/what-we-do/applications/office-365-microsoft-teams>)

Microsoft Teams supports group-based chats, file sharing, online meetings, and is fully integrated with Office 365 programs. Microsoft Teams is free for Duke users.

[Air Table](https://airtable.com) (<https://airtable.com>)

Airtable is an online collaboration tool that combines aspects of spreadsheets and databases. Airtable can store information in an easy-to-use spreadsheet and can act as a database for task management, project planning, and tracking inventory. The basic version is free.

[MeisterTask Pro](https://software.duke.edu/node/456) (<https://software.duke.edu/node/456>)

MeisterTask Pro is a collaborative, online task management tool. This service is free for Duke users.

[Open Science Framework](https://osf.io/institutions/duke/) (<https://osf.io/institutions/duke/>)

Open Science Framework is a free, open platform for research file management, collaboration, and task management.

Other

[Sites@duke](https://sites.duke.edu/) (<https://sites.duke.edu/>)

Duke’s WordPress service provides an easy way for Duke faculty, staff, and students to set up a website or blog using predefined design templates (themes) and plugins. There is no charge to users. Many Bass Connections teams create their own site to inform others about their work and/or to share information amongst themselves about their project.

[Doodle \(http://doodle.com/\)](http://doodle.com/)

Doodle is a free online tool to help schedule group meetings without a lot of email traffic.

[Qualtrics \(https://oit.duke.edu/what-we-do/applications/qualtrics\)](https://oit.duke.edu/what-we-do/applications/qualtrics)

Survey software that can be used to create surveys, polls, and questionnaires.

Research Support

Depending on the requirements of your project and the background of your team members, some or all of the team may need some support getting up to speed on the research methods that the team will use, as well as on the project topic. In fact, survey feedback from both faculty and students who participated on previous Bass Connections teams shows that the more a team can do to accelerate the learning curve on the front end, the better for all parties.

While each team's focus is different, we've provided a list of resources below that cover basic research and lab skills. We'd encourage you to consider whether these, or other resources that you are aware of, can be provided to students before, or during, the project to accelerate the team's progress and ensure that all students have a solid baseline of understanding.

[ModU \(https://modu.ssri.duke.edu/\)](https://modu.ssri.duke.edu/)

ModU, produced by the Duke Social Science Research Institute (SSRI), provides short video modules, featuring experts from Duke, on basic methodological skills including survey methodology, research ethics, causal inference, social network analysis, and writing and research tips. Team leaders can use this site to create custom playlists to provide students with background on research methodologies. Although framed in the context of the social sciences, the topics covered in these videos are broadly applicable across fields.

[The Connection Bar @ SSRI \(https://ssri.duke.edu/connection/connection-bar\)](https://ssri.duke.edu/connection/connection-bar)

SSRI's Connection Bar, open 10 a.m. to 6 p.m. on weekdays during the academic year, is staffed by advanced graduate students and postdoctoral scholars with expertise in using both quantitative and qualitative methods and tools. Students, faculty, and staff, can drop by to get assistance with a research project, schedule an appointment via email, or chat online with a consultant to get quick answers to their questions. You can also request for a consultant to visit a group meeting. A list of help topics covered by SSRI can be found here: <https://connect.ssri.duke.edu/education/help-topics>.

[ResearchMobile @ SSRI \(https://ssri.duke.edu/about/facilities/researchmobile\)](https://ssri.duke.edu/about/facilities/researchmobile)

The Duke University ResearchMobile is a mobile research laboratory funded by a grant from the National Science Foundation. The 37-ft. air-conditioned trailer is equipped with four soundproofed cubicles, each capable of holding up to two participants for studying either individuals or dyads. Each cubicle has a writing surface, computer, monitor, and two cameras for audio-video recording. In addition, equipment is available for measuring physiological responses such as heart rate, blood pressure, respiration, and galvanic skin response.

Faculty members and other researchers who are interested in using the ResearchMobile should contact Patty Van Cappellen, Faculty Director of the Interdisciplinary Behavioral Research Center (IBRC), patty.vancappellen@duke.edu.

Duke University Libraries

Duke's libraries are also available to support Bass Connections project teams. Librarians provide expert guidance in locating and using information for all phases of research projects, including helping your team map out its project, identify and incorporate tools and approaches, locate resources to meet its project goals, and communicate your results to wider audiences. A description of services offered by the library can be found below.

For more information, or to ask about specific help for your project team, contact asklib@duke.edu.

Collect and Organize Your Research

We can assist your team as you locate or create materials (from searching [databases](#) to finding datasets) and [manage citations](#). We also advise teams on ways to collectively manage their research for current and long-term use. Our [content and language specialists](#) can help you identify sources and support for research outside your team's areas of familiarity or expertise. Schedule an individual or group consultation by contacting asklib@duke.edu.

Analyze and Visualize Data

Specializing in [data visualization](#), data analysis, [data management](#), [mapping \(GIS\)](#), and research computing, consultants in the Libraries' [Center for Data and Visualization Sciences](#) consult on a diverse set of data-driven research methods and tools and also provide both in class and [workshop-based training](#). Visit our lab to receive hands-on advice and assistance in using specialized [computers and software](#), from [ArcGIS](#) to Rstudio. [Locate data resources](#), prepare data for analysis, use a statistical package, visualize your results, and manage your data for future use. Consult with us at askdata@duke.edu or visit us online at <http://library.duke.edu/data>.

Locate Project and Event Space

We offer a range of technology-enabled and team-centered workspaces, for ad hoc or persistent use:

- Small groups (4-8 people): <http://library.duke.edu/using/room-reservations>
- Larger groups (18-30 people), ongoing meetings, or special events: <https://library.duke.edu/using/room-reservations/places-for-events>

The Edge at Bostock Library also provides a collaborative space for interdisciplinary, data-driven, digitally reliant or team-based research, and includes a digital studio, team space, and presentation rooms. Research and visualization experts are on-hand at The Edge to provide support to teams. Teams can also access a range of data software on site.

Learn on the Fly

We offer [regular workshops](#) on a range of research tools and practices as well as just-in-time training on all aspects of the research lifecycle. Request customized individual or group training via your library liaison (listed above). Some examples of topics include:

- Citation management (Endnote, Refworks, Mendeley and Zotero)
- Data management best practices (metadata, archiving, repositories)
- Copyright and fair use in research
- Introduction to data visualization and communicating research

Publish and Archive Your Research

Extend the reach of your research! We can suggest an appropriate venue or platform for online publishing (websites, journals, repositories); [advise on copyright, open access and fair use](#); and help develop plans to promote the longevity and impact of your work. Read about our services and link to more information on our website, <http://library.duke.edu/research/publish-archive>. You can also send us questions or set up a consultation at scholarworks@duke.edu.

Online Research Resources

LinkedIn Learning (<https://oit.duke.edu/what-we-do/applications/linkedin-learning>)

LinkedIn Learning is an online training library that includes over 13,000 short, video-based courses. Duke students, faculty and staff can access LinkedIn Learning for free. To log in with your NetID, go to: <https://oit.duke.edu/what-we-do/applications/linkedin-learning>.

Topics of interests to Bass Connections teams may include:

- [Academic Research Foundations: Quantitative](#)
- [SPSS Statistics Essential Training](#)
- [Learning NVivo](#)
- [Project Management Foundations](#)
- [Managing and Analyzing Data in Excel](#)

YouTube (<https://www.youtube.com/>)

YouTube offers videos on any topic that you can imagine. While not all videos on YouTube are high-quality, we have pulled out several quality videos below that may be useful to teams.

Videos on Research Methods

Research Methods in Social Sciences. This YouTube channel by Professor Graham Gibbs from the University of Huddersfield includes many videos covering a range of research topics and methods including: surveys and sampling, reliability and validity, interview practices, grounded theory, case studies, question types, questionnaire design, and research ethics.

<https://www.youtube.com/channel/UCafkV40656nWz9Jc129ZCFA>

Introduction to Research Methodology (14 minutes). This short video provides a high-level overview of the research process and research methods. It would be most informative for individuals with minimal research experience. <https://www.youtube.com/watch?v=1LGuNn9Q0bl>

Developing a Quantitative Research Plan: Choosing a Research Design (46 minutes). This video reviews different quantitative research methods (including surveys, observations, comparative, and experimental) and when to use which methods. <https://www.youtube.com/watch?v=UywO2XuFuBA>

Videos on Statistics

Introduction to Statistics. This playlist from the Khan Academy includes many videos covering a range of statistical methods such as variance, standard deviation, distributions, confidence tests, hypothesis testing, etc.

<https://www.youtube.com/playlist?list=PLGcvh64d5a4HfGkm8O4SlqbrS5HFaaM3B>

Statistics Learning Center. This channel offers numerous videos covering statistical methods such as variation, sampling error, confidence intervals, hypothesis testing, and p-values. The videos are geared towards individuals who are newer to statistics.

<https://www.youtube.com/channel/UCG32MfGLit1pcqCRXyy9cAg>

Introduction to Statistics: What are they, and how do I know which one to choose? (40 minutes).

This video reviews different statistical methods and which methods to use when conducting research. This video is recommended for individuals with a basic understanding of statistical methods.

<https://www.youtube.com/watch?v=HpyRybBEDQ0>

Videos on Basic Lab Skills

Fisher Science Education. This channel includes 22 short videos on laboratory skills for beginners including how to use a pipette, prepare gels and buffers, and properly clean a flask.

<https://www.youtube.com/user/FisherScienceEd/videos>

Basic Biotechnology Techniques. This playlist includes 30 short video tutorials for beginners on how to use basic laboratory equipment such as a micropipette, a pH meter, an electronic balance, as well as how to perform laboratory procedures such as making an agarose gel, gram staining, and dilution.

<https://www.youtube.com/playlist?list=PLrAEgIY86I6wYIgx3iE-KvyaRFzwwuixr>

General Background Topics

Khan Academy. Depending on the topic of your project, the Khan Academy may have videos that can provide participants with basic information in your field of research. A complete list of the topics covered by the Khan Academy can be found here:

<https://www.youtube.com/user/khanacademy/playlists>