

Facilities, Equipment, and Other Resources

Instructions: Identify the facilities to be used at each performance site listed and, as appropriate, indicate their capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Use "Other" to describe the facilities at any other performance sites listed and at sites for field studies.

Laboratory:

Clinical:

Animal:

Computer: All personnel involved in this project have access to the University's state of the art computer facilities, offering users high-speed Internet access as well as access to the latest technological developments in academic computing. This includes access to Internet, email, and all necessary word processing and data analysis software. Technical support and training opportunities are available, if needed.

Office: Personnel involved in this project (Principal Investigators and graduate students) at MSU have offices that are located in close proximity to each other, allowing ease in scheduling and meeting. Conference rooms are also easily available in the office building, including conference rooms equipped for video conferencing. Support for the PI is provided by staff in the Office of the Dean and the College's Research office, as well as the University's Sponsored Program Administration. Personnel in these offices provide guidance to research faculty and staff concerning financial and operational matters, including assisting with the development of budgets and monitoring of expenses.

Other: MSU is a large research institution with over 36,000 undergraduate students and over 10,000 graduate students. The University's library collection includes nearly 7 million volumes. Many journals are available via online databases, allowing easy access for researchers. Principal Investigators have ready access to appropriate scholarly and technological resources.

Statistical Consultant: Dr. Frank Lawrence, a senior statistician in the MSU Center for Statistical Training and Consulting (CSTAT), spends up to 50% of his time on College of Education related proposals and grants. Dr. Lawrence has impressive statistical credentials that include HLM, SEM, growth models, generalized linear models, and working with complex survey data in social science settings. Dr. Lawrence is available to assist faculty with the appropriate design and methodology for research projects and can assist faculty in writing the methodological sections of grant proposals and journal articles. He may also be written into grant proposals as senior personnel.

CEPSE/COE Design Studio: The CEPSE/COE Design Studio is a faculty resource for the research, design, assessment, and implementation of strategies and concepts in online and hybrid teaching and learning. Its purpose is to provide research and technology support for faculty who wish to explore new conceptual arrangements and pedagogical strategies. In addition, the Design Studio manages several technology-rich classrooms that function as working laboratories for the design and refinement of technology-integrated pedagogical strategies. A central focus of the Studio is on synchronous hybrid teaching and learning, in which online and face-to-face students interact with each other in the same class sessions in a way that maximizes the educational value for both groups. The Studio is directed by Dr. John Bell and supported by graduate research assistants in the Educational Technology and Educational Technology PhD program at Michigan State University. Dr. Bell is a member of the College of Education faculty and also serves as co-coordinator for the Hybrid Doctoral Program in Educational Psychology and Educational Technology.

The Design Studio is formally attached to the Department of Counseling, Educational Psychology, and Special Education (CEPSE), and also serves as a technology development and research unit for the entire College of Education (COE) at Michigan State University.

Key **learning resources** of the Studio include:

- Design, implementation, and research related to technological and pedagogical innovations in education, including content delivery, synchronous and asynchronous online interactions, content-focused interactives, simulations, and games, .
- Hybrid and online course technologies and pedagogy support, including both “vertical” and “horizontal” hybrid strategies.

Key **technological resources** of the Studio include:

- Video capture, editing, and production; including high definition video, chroma key studio and compositing (aka, green screen video), picture-in-picture production, acoustic and lighting controlled studio for still and video capture, and live and archived web broadcast.
- Animated audio (e.g., Khan Academy style) presentation capture and production.
- Web and mobile technologies (including HTML5) development and pedagogy support.
- Web-based data collection, data management, and application development and support.

The Studio also **facilitates dialogue and collaboration** among College of Education faculty through:

- Round tables focused on special topics
- Guest speakers
- Special interest groups

MAJOR EQUIPMENT: List the most important items available for this project and, as appropriate identifying the location and pertinent capabilities of the items.

OTHER RESOURCES: Provide any information describing the other resources available to the project. Identify support services such as consultant, secretarial, machine shop, and electronics shop, and the extent to which they will be available for the project. Include an explanation of any consortium/contractual arrangements with other organizations.