



The Great Falls College MSU eLearning Department invites applications from faculty who wish to be considered for one of our eLearning Faculty Fellowships. In order to move instructors toward a more collaborative and interactive student-centered learning environment, the eLearning team has designed a model Sandbox Classroom environment (A124). This prototype classroom provides a training space for faculty, students and staff. The classroom was unveiled during the Board of Regents meeting on the Great Falls College MSU campus in May 2013.

Every innovation needs its early adopters to pave the way for greater utilization. One way this will be supported is through the eLearning Faculty Fellowship Program. Faculty members will be selected to serve as eLearning Faculty Fellows for each semester. The Fellows will teach at least one regularly scheduled course with a course cap of 20 or lower in the Sandbox Classroom during the semester. *Fellows will be expected to use innovative teaching strategies and to incorporate flipped instruction and other student-centered approaches to learning.* Each Fellow will be paid a one-time \$500 stipend. Additional expectations are outlined below.

eLearning Faculty Fellow Expectations

- Faculty interested in teaching in the Sandbox need to contact an Instructional Designer in eLearning to make arrangements.
- At least one regularly scheduled class period must be held in the Sandbox Classroom each week.
- The course grades must be available to students in D2L.
- Faculty Fellows will be required to attend a Sandbox Classroom orientation and technology training session during the week prior to the first week of classes. Date and time TBD.
- Faculty Fellows will report issues and concerns or questions regarding the Sandbox Classroom space and equipment to the eLearning Staff immediately.
- The eLearning Department will complete data analysis to compare the effectiveness of the Sandbox Classroom environment and the student-centered learning approach to that of the traditional classroom.
- Collaboration with other faculty is expected; this includes sharing technology expertise and pedagogical strategies.
- The Fellow must be willing to serve in an informal capacity as a mentor to faculty and future eLearning Fellows.
- The eLearning Instructional Designers will serve as an instructional support resource for the Faculty Fellows.
- In order to receive the \$500 stipend, the faculty fellow must complete the orientation and technology training session, submit the data requested and complete all surveys.

INTRODUCTION OF THE SANDBOX CLASSROOM

It is the mission of Great Falls College MSU eLearning to foster success through “innovative, flexible learning opportunities.” The College values lifelong learning, responsiveness, and student success. This mission and these values are furthered through the creation of flexible learning spaces that foster and encourage innovative instruction.

A sandbox environment, in the programming world, is a place where ideas can be tested without impacting an existing environment. The sandbox concept can be applied to the physical classroom environment by redesigning a classroom into a 21st century learning space to be used by faculty, eLearning, and students. According to Getzels (2008), since form follows function, learning environments should be designed to connect with today’s active learners. Classrooms are needed where, “furniture is mobile, arrangements are changed, the teacher’s desk joins those of the [students] and the learner becomes the center” (in Saphier, p. 40).

The eLearning mission is to “promote and support a globally connected learning environment,” (2012). From this, the eLearning staff developed a vision for a sandbox classroom. This prototype will provide collaborative classroom space for instructors to work with students, and small groups of students to work together. The ability to reconfigure the room easily will allow for greater student engagement. In turn it will improve learning, as shown by Whiteside, Brooks, & Walker (2010) where students exceeded their own performance expectations and outperformed their peers when



learning content in an active learning classroom. This University of Minnesota pilot project (2007) also showed the learning space to have a positive impact on instructor expectations and student perceptions for increased collaboration.

Classrooms should be places where student learning is at the center, collaboration is fostered, and technology integration is seamless and simple. Learners have many different preferences; space needs to be provided that can be easily rearranged in order to meet their diverse needs. The Sandbox in A124 allows for creativity and flow of movement while staying within the parameters of the space and addressing safety issues. The enhancements to the space stimulate conversation, vision, and collaboration in order to exceed the expectations and needs of our students. At a time of limited resources, this modification allows for onsite professional development opportunities locally, a new resource for faculty to explore new teaching and learning theories, and a safe environment to continue life long learning.

EXPLANATION OF SPACE

The classroom space includes brightly painted walls with white board paint in a wide horizontal stripe. The white board paint provides a greater workspace for instructors and students to literally write on the walls to share ideas. It can also be used as a projection space. The stripe is painted below traditional white board dimensions and does not have the tray of a white board to allow for ease of use from a seated position.

Two Epson projectors are wall-mounted in this space as well; one on the north wall and the other on the west wall. These projectors come with interactive pens that can be used in the same way as an interactive whiteboard. The pens are very user-friendly and intuitive with little training required to use them.

Two LCD televisions are mounted on the west wall with a third mounted on the opposite east wall. All three televisions are fitted with Apple TV consoles. These high definition screens allow for the easy viewing of videos and animations. The Apple TV allows students and instructors the ability to connect wirelessly and share what is on their laptops or mobile devices, such as iPads, iPods, or iPhones. As students become more digitally mobile, this structure enhances their ability to interact with classmates from multiple devices.

The control box is mounted on the east wall to accommodate two Mac mini computers. These computers are used operate the two Epson projectors. The projectors are also fitted with Apple TVs.

The room is furnished with 10 rectangular mobile tables and two semicircular mobile tables are in the eLearning office that can also be incorporated into the space. This furniture represents the shift in focus from a traditional set classroom to one that is ever-changing to meet the needs of the group utilizing the space. Because the tables and chairs are all on wheels, the configuration of the room can change at a moment's notice from a lecture setting to small group work, to circular conversations.

FELLOWSHIP AND ROOM USE

The use of the Sandbox classroom is available to Faculty Fellows during any scheduled class time. Arrangements can be made for classes that meet past the 5:00 closing hour for eLearning.

When the room is not being used by the Fellows, faculty will be able to schedule learning labs in this space through the Event Management System and Karen Vosen. Students will be encouraged to reserve and use the space for



collaborative meetings and group projects. Since the space can be easily re-configured, it can be set up for a variety of purposes to accommodate up to **20 participants**.

WHAT IS STUDENT CENTERED LEARNING?

In order for real change to take effect, more than structural change must occur. The eLearning team is encouraging the Fellows to participate in a more student-centered approach to learning. According to Bain (2004), there are seven unifying principles that the “best college teachers” use when they conduct class.

- Create a natural critical learning environment.
 - This means that students “encounter the skills, habits, attitudes and information they are trying to learn embedded in questions and tasks they find fascinating and authentic.” (Bain, pg. 99)
- Get their attention and keep it.
 - They try to get their student’s attention through the use of some provocative question or story.
- Start with the students rather than the discipline.
 - They allow students to struggle with an issue to try and resolve it in order for them to better understand the issue or problem before attempting resolution. (Bain, pg. 110)
- Seeks Commitment
 - They do not try to command the students, but rather ask students for a commitment if they plan to take the class. (Bain, pg. 113)
- Help students learn outside of class.
 - They do in class what they think will help students to learn better between class meetings.
 - This is done through backward planning and deciding what students should know, understand and do by the end of the semester. (Bain, 114)
- Engage students in disciplinary thinking.
 - They help students to think at a higher level and model the process through metacognition. (Bain, pg. 115)
- Create diverse learning experiences.
 - They provided a variety of learning experiences from the very well structured to the messy.
 - “I don’t think there’s much evidence that most people have exclusive learning styles and can’t learn in any way but one, but I do think that we all benefit from variety.” (Bain, 2004)

The greatest finding was teachers that met in a laboratory or studio settings, and allowed students to communicate orally, stimulated thought (Bain, 2004). The Sandbox Classroom provides the appropriate space this type of communication and growth. As eLearning Fellows, it is essential that student learning be the center of the lesson planning and implementation. But just as we would not set students up for failure, the eLearning staff and the Instructional Designers are dedicated to helping not only with the technology in the classroom, but also the instructional process and pedagogical issues that might arise. The space needs to invite conversation, collaboration, and innovation.

More on Student Centered Instruction can be read in the Faculty Focus Articles listed in the References Section.

WHAT IS FLIPPED INSTRUCTION?

One way to creatively implement the use of the Sandbox Classroom is through the Flipped Classroom Model. This model can be constructed to fit a very wide range of subjects and settings. It is essential that the student continues to be the center of the classroom in this model. According to Rotenberg (2010), “the classroom acts as a stimulus for students to reflect on their experience outside the classroom.” The flipped model builds on this and expands the time in the classroom with the instructor to include reflection, communication, and collaboration. Therefore, it also builds



the skills students need to enter the workforce as well as increased understanding of the content area. Also, discussions are more powerful than lecture based classroom meetings according to Rotenberg (2010, pg. 167) in that it requires more coordination of the auditory and visual memory processes. It requires student to perform the knowledge. This helps to move the learning into the long-term memory.

There are a number of ways to make sure that students are prepared for a classroom session that is using the flipped model. Rotenberg (2010, p. 179) recommends several creative ideas including the Admission Ticket. This is some sort of written activity that must be accomplished prior to class, and requires the student to be prepared. ***More on Flipped Classroom instruction can be found by reading the Faculty Focus Articles listed in the References Section.***

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Brooks, D.C. (2010). "Space Matters: The impact of formal learning environments on student learning." *British Journal of Educational Technology*. doi:10.1111/j.1467-8535.2010.01098.x Available online at http://www.oit.umn.edu/prod/groups/oit/@pub/@oit/@web/@evaluationresearch/documents/article/oit_article_248303.pdf

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RESOURCES FOR FLIPPED CLASSROOM:

Honeycutt, B. (2013). Looking for "Flippable" moments in your class. *Faculty Focus*. March 25, 2013. Available online at <http://www.facultyfocus.com/articles/instructional-design/looking-for-flippable-moments-in-your-class/>

RESOURCES FOR STUDENT CENTERED LEARNING:

Flaherty, J. (2013). Millennial Students and Middle-age Faculty: A Learner-centered Approach toward Bridging the Gap. *Faculty Focus*. March 18, 2013. Available online at <http://www.facultyfocus.com/articles/teaching-and-learning/millennial-students-and-middle-aged-faculty->

Weimer, M. (2013). Teacher-centered, learner-centered or all of the above. *Faculty Focus*. January 16, 2013. Available online at <http://www.facultyfocus.com/articles/teaching-professor-blog/teacher-centered-learner-centered-or-all-of-the-above/>

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