

An Ohlone Story

Developing Two Prototype Learning Spaces: Told From a Qualitative Perspective

Overview

When we speak of an agenda of improvement, we are not saying our current practices are failing. It is not about judging right or wrong ways, what we are envisioning is a college community that moves together on a continuous journey of discovery. We call this kind of institution a Learning College. It is about having the wisdom to examine objectively the effectiveness of our college and the courage to explore new ways of carrying out the art and science of learning.” (Dr. Doug Treadway, State of the College Spring 2006 Speech)

The two prototype learning spaces on the Ohlone College Fremont campus were created to provide a venue for faculty and students to (a) experiment with innovative teaching and learning strategies, (b) explore technology enhanced curriculums, and (c) gain a better understanding of how environmental design elements such as color, lighting, air quality, space flexibility, and other learning ecosystem elements influence the learning experiences of the participants during the Fall 2006 semester.

Faculty and administrators actively engaged in designing the new prototype spaces by visiting innovative learning spaces on various college and university campuses around the nation. In addition, Ohlone’s Learning College Task Force facilitators acquired ideas from dialogue with faculty, staff, and students about their visions of the new learning spaces. As a result, the Task Force formulated the following statements to guide the design for the prototype learning spaces:

- Students engage with students.
- Students engage with faculty.
- Faculty engage with faculty.
- Students operate in teams and groups of varying size.
- Students work in learning communities
- Students compare, contrast, analyze, and debate concepts and information.
- Students and faculty construct information and knowledge.
- Students and faculty present reports and project results
- Project audio and visual images in digital, film, and printed formats
- Connect with outside information sources
- Communicate with outside resource people
- Students can participate from other locations
- Students with disabilities can participate easily
- Capture learning activities for future reference
- Work in informal learning spaces nearby
- Work in virtual learning space, “24-7”
- Flexibility in use of space, furniture, materials and technology

The college also incorporated into the design of the prototype learning spaces findings from the Stanford Center for Innovations in Learning (SCIL) as exhibited at Stanford’s Wallenberg Hall. SCIL’s learning environment features state-of-the art classrooms and learning spaces designed to improve the education process for students of all ages. This innovative learning environment includes flexible spaces that can be reconfigured to create high performance learning environments as well as spaces for informal collaboration outside of the learning space. Technology assisted learning environments inside and outside of the learning spaces enables students to recall lectures, hear specific conversations through replay technology, and retrieve notes from whiteboards located in the learning spaces from home or other off campus locations.

Relationship to College Values

(The qualitative data provided for this story were obtained from student and faculty interviews and documents collected during the Fall 2006 Semester)

We provide life long learning opportunities for students, college personnel and the community.

The development of the two prototype learning spaces on the fourth floor of building one provided an array of learning opportunities for students, faculty, staff and college administrators. The prototype learning spaces allowed faculty and students to experiment with different space configurations, with new technology tools and to try out innovative active and collaborative learning strategies. Faculty and support staff were concurrently teachers and learners as they adapted to the structural changes within the prototype learning ecosystem. The prototype learning spaces also provided learning opportunities for college administrators to assess the current technology support structure and professional development needs of faculty and staff.

- *Is there someone who can show me how this stuff works in this classroom, and where the pencil sharpener is? (faculty document review)*

We promote diversity, inclusiveness and openness to differing viewpoints

Changing an institution's vision of the learning ecosystem from an instruction based model to a student centered model requires an organizational structure that promotes diversity, inclusiveness and openness to differing viewpoints. The college's core values and goals provide the structure to create this type of culture and allow for various viewpoints about the prototype to become learning opportunities of the various mental models about teaching and learning that existed amongst faculty and students and other campus personnel.

- *The space is certainly unorthodox. Different than everything else we are used to. You know the small desk where you are cramped in-you have no room. These chairs provide a much more comfortable learning environment and the fact that they are mobile and you can swirl around it's great (student interview).*
- *You know I have been talking with another individual about the set-up in the room and I wrote you that email because it's been a struggle. I think for some course levels the set-up of the room would be superb- I mean the kind of natural sort of groups that arise when you have people sitting at one table and how that can create an instant collaborative environment. For the course level I am teaching right now in here, it's a struggle (faculty document review)*
- *This space had a HUGE impact on student interaction. I played around with the table arrangements and settled on one large seminar table format. This truly promoted student participation, and strongly encouraged them to address each other directly rather than me as the intermediary (faculty interview)*
- *This type of learning space is 10 times better than the old classrooms on campus (student interview)*

We maintain high standards in our constant pursuit of excellence

The prototype learning spaces provide the college the opportunity to assess a new learning environment and discover new ways of teaching and learning. This faculty voice is reflective of many of the faculty at Ohlone who seek out opportunities to enhance their teaching strategies and improve the learning environment for greater student success.

- *I am kind of in between two teaching styles. So one of the things I have been trying to do is learn more about these active and collaborative methods and enhance my classes. I know that current research studies have shown people learn much better interactively. That is why I take my students out into the field. I am just learning how to do more interactive stuff in the classroom using technology (faculty interview).*

We practice innovation and actively encourage risk-taking and entrepreneurship

The President and the College Council made an institutional commitment of \$1 million of bond funding for classroom redevelopment. Loss of Building 7 required the creation of more classrooms. 1402 and 1406, former classrooms that were converted to administrative use, were earmarked to be re-established as classrooms. The institution committed to using the remodel of 1402 and 1406 as an opportunity to implement the learning space concepts it had been developing. These two rooms would become prototypes for the new classrooms at the Newark Center and for the remodel of other classrooms on the Fremont Campus.

- *I am paranoid about teaching in this new room. I have been teaching for 30 years and I am so use to the students all facing the same direction and the room set-up either in a lecture hall or with tablet arm-desk in rows, this setting in so different and with all this technology in the room it scares me and I am not sure I can adapt (faculty document review).*
- *We think with technology- it's a part of us. We have grown-up with it and are comfortable with devices like this (pulling out his cell phone). It's like taking notes; it takes me longer to write on paper than it does to take notes on a laptop. My writing looks like chicken scratch in order to read what I write, I am concentrating on doing that, you know on writing rather than what the teacher is saying. It's so much easier to be able to take notes on a laptop and still pay attention what is being said in the class (student interview).*

We demonstrate stewardship for our human, financial, physical and environmental resources.

Human centered design elements and environmental principles were consciously incorporated into the prototype learning spaces. Environmental elements such as air quality, color, ergonomics, lighting and textures were strategically designed within the learning spaces. For example full spectrum and cove lighting was added in addition to the natural light to help reduce eye strain, reduce stress and increase personal energy.

- *This learning space is better because it is more comfortable especially the chairs. I like the way you can swivel around and see the person talking and also you can see all the whiteboards (student survey).*
- *I like the lighting the brightness is energizing (student survey).*
- *The environment matters. Like this kind of environment is more relaxing with these chairs and the colors on the wall it makes a difference (student interview).*
- *Nice space and I walked in the first day not having seen it before- it was bright it was clean it had kind of a sophistication to it that the other classroom on campus do not have (faculty interview).*

Contribution to Achieving College Goals

Learning College Model

Ohlone's strategic planning has been integrated with the development and implementation of a Federal Department of Education Title III Strengthening Institutions Grant, both of which follow the principles of the Learning College Model. The Learning College Model focuses on learning, of students, faculty and staff, as the primary outcome of the institution. This has spawned active dialogue about learning and numerous projects aimed at fostering innovation in teaching and learning. One thread of the college's dialogue on learning has involved exploration of learning space design. Another driver of this dialogue and research has been the planning for the construction of the college's second campus in Newark, a \$120 million Center for Health Science and Technology scheduled to open in January 2008.

Focused dialogue on learning spaces began in March of 2004 when the college conducted an Innovation Forum entitled, "The Future of Teaching and Learning at Ohlone College. There was an excellent turnout with 42 Ohlone faculty and staff along with five consultants from MBT and Stegeman and Kastner, architecture and project management companies for the Newark Center development. A major outcome of the Forum was the beginning of a teaching and learning vision and plan for the Newark Center with the

following themes: commitment to student success, flexibility, a broader definition of technology, instructional technology within the classrooms, mobile computing and communication technology, experimentation and innovation, and accessibility. These themes were woven into the Educational Master Plan for the Newark Campus, which can be reviewed at:

<http://www.ohlone.edu/org/academicaffairs/docs/20031210educmstrplannewark.pdf>

The Findings of the Innovation Forum are attached.

As a follow up to the Innovation Forum, the college invited Dr. Susan Fry, a consultant on learning space design, to review college facilities and made recommendations. The Fremont Campus offers the most challenge yet the greatest potential for transformation. In touring both the exterior and interior campus, along with informal interviews, common themes prevailed. These themes can impact both the learning and the well-being of the occupants:

- Lack of orientation: While the new student building will add to creating a campus center, the overall campus requires a stronger sense of relatedness. This can be accomplished through landscaping and color coding, such as a subtle variation on a palette.
- Weak identification system: great signage guides identifying and unifying a campus.
- Security issues: The dark exterior stairwells need to be opened up. This would solve both the moisture and safety issues.
- Underutilized space: many of the “balcony” spaces are opportunities for the expanded classroom.
- Air quality: dampness and odor in exterior stairwells resolved by opening.
- Lighting: exterior lighting may be dictated by energy concerns, but rarely over lighted.

Demonstration of the Meeting of One or More of the Accreditation Standards

II.A. Instructional Programs

These classrooms provide great flexibility in using a wide variety of teaching and learning methods. The follow are brief stories about faculty and when they felt especially effective teaching in the new rooms.

- *I set up the room into 5 groups. We were doing a jigsaw. Each group prepared their findings on the movable dry erase boards. They rotated around the groups to teach each other. When they groups arrived at each table cluster the student who belonged to that original group taught their material to the other students. We then moved the tables into one large seminar table format and addressed a series of discussion questions designed to force them to apply what we just learned via the jigsaw activity. I took photos of the dry erase boards for the students with the copy cam.*
- *It was a lesson which introduced an online concordancer which allows students to access a corpus of language from authentic texts. The activity involved a comparison between the information that could be gleaned from several online dictionaries compared to that from the concordancer. We worked in small groups with the laptops, and each group recorded their findings on the huddle boards to share out. The room set up and technology allowed for rich interactions within and between groups!*
- *Using the whiteboards and engaging the whole class. We were able to "see" what others were thinking. Set the stage for the class. Gave me insight on what was student important not just teacher important.*

III..B. Physical Resources

As part of the Newark Center planning process, and supported by the Learning College Task Force, several teams from the college visited Wallenberg Hall operated by the Stanford Center for Innovation in Learning. Staff from SCIL also visited Ohlone and met with the Learning College Task Force. During one of these dialogue sessions between SCIL and Ohlone, one of the SCIL instructional designers said he starts the planning process by asking the users to, "Give me some verbs!" Technology, furniture and other resources are merely tools to support what students and faculty want to do. With this in mind, a list of “verb statements” were created as guideline for the development of new and refurbished learning

spaces at Ohlone College to support the Learning College Model with a focus on active and collaborative learning and individual student success. These characteristics are detailed earlier in this story.

The demolition of Building 7 as part of the Student Services Center construction project required the creation of more classrooms. 1402 and 1406, former classrooms that were converted to administrative use, were earmarked to be re-established as classrooms. The institution committed to using the remodel of 1402 and 1406 as an opportunity to implement the learning space concepts it had been developing. These two rooms would become prototypes for the new classrooms at the Newark Center and for the remodel of other classrooms on the Fremont Campus.

Expression of Accreditation Themes

Institutional Commitments

The allocation of \$1 million of bond funding to support the upgrade of classrooms, a significant portion of which went to developing the 1402-1406 prototype classrooms demonstrates a high level of institutional commitment to designing spaces that maximize student learning.

Organization

Findings from this study related to instructional technology support revealed that the prototype learning spaces required a different support service structure than the college had originally planned for. Some of the equipment was not functioning correctly so we had to call the vendor several times to make adjustments. This created a challenging environment for the faculty who had prepared a learning activity using the projector only to arrive in class and discover it was not working.

You caught me on a bad day because my computer would not work with the walk-and-talk and it never got resolved. I could not project my PowerPoint. The support guys came and messed around with it but could not get it to work. Fortunately I had a video to show which I do not often do (Faculty Interview).

As the semester proceeded, the technology support structure functioned reactively to various events and activities that were emerging. Adaptations to the changing support structures were occurring, but adaptation was not keeping up with the pace the faculty needed.

We now NEED a process established and communicated to all faculty working in these rooms on how to leave the room at the end of the day and a support person available to be a part of the instructional team for that room. This is what I had in Hyman Hall with the support staff there. Please, let's move forward with getting this done. I'm happy to help in any way I can, but this can't continue as we are now approaching the halfway mark of the semester (Faculty Interview).

Awareness of the challenges Ohlone's academic technology support staff encountered in servicing these technologically advanced, high performance spaces has been an important finding related to this study. The learning process associated with supporting these two learning spaces suggests the need for faculty and staff roles to be reassessed and redefined. Worth noting are the actions of the College President to initiate changes to the college's academic technology support model. In time, changes to the academic technology support structure and assistance with professional development activities facilitated the learning ecosystem's adaptation to the prototype learning spaces.

Dialogue As described above, the adoption of the Learning College Model and the planning for the new campus in Newark and plans for remodeling Fremont Campus learning spaces have generated and been enhanced by active dialogue about the relationship between learning and the spaces in which it takes place.

Student Learning Outcomes A commitment to enhancing student learning outcomes was a major goal of the work on these two rooms. The best testament to the success of this comes from the students themselves. Please view the Video of faculty and student reactions to the learning environment.