

# Alternative Learning Environment

## Overview:

The Alternative Learning Environment will serve students by using technology to deliver a direct, personalized experience that will focus on specific areas of remediation for each student, bringing them to proficiency in the shortest possible time, and enabling the service of more students by a smaller, well-trained and well-equipped staff.

The technology platform for this high level of service will assess student needs on a granular level, generating a remediation profile for each student which then acts as a prescription for learning. For example, a student in our current system may demonstrate a deficiency in the area(s) covered by the Math level 1 course. They will be required to take the entire Math level 1 course before moving on, whether they need to learn 90% or 50% of the material. This is inefficient, time consuming, and could potentially result in frustration and other roadblocks for students. In the Alternative Learning Environment, a student will be assessed using a tool that can recognize more specific areas of need within the Math level 1 course, resulting in a targeted learning plan. Areas of proficiency will not be included, and students will be allowed to demonstrate proficiency on a granular level as they learn the requisite skills.

Using this backbone, students will have access to a variety of different services, training materials and small seminars to help them achieve their learning objectives. Student participation with these resources will be tracked, and able to generate FTES. In general, all of the services in the Alternative Learning Environment should be available via self-service, through well-designed environmental cues, easily accessible and smart web-based instructional materials, and a software system that guides students through the process. All of this will be powered and coordinated by real-time analytics and data.

## Environment:

Open room, with standing desk tables near entrance. 2-3 flexible seminar spaces in rear of building, one with thin-client computers. Computer pods available for use with learning software, equipped with multimedia-headphones. Flexibly-furnished tutoring area. Signs indicating the purpose for different areas, and large screen in entry detailing upcoming seminar times and open appointment slots.

The workers in this room are wearing color-coded polo shirts, each color indicating their role. Workers also bear name tags indicating their role. Workers should rarely be sitting at desks, but rather roaming around, helping students and providing guidance.

High top tables, stools, and staff who are on foot keep things moving, and avoid scenarios where students have to approach someone at a desk to request help. The workflow of the center, from the time a student enters until they leave, is managed through active direction and the "handing off" of students as they go from one task to the next. Customer service is a high priority, as is making students feel valued so they leave with a knowledge of what they need to accomplish and how they will do it.

## Personnel:

The Alternative Learning Environment staff are well-trained and equipped to guide students through the process of assessing and addressing their remediation needs. The following types/roles should be considered:

**Greeter / Triage (Staff):** One or two, near the entrance, greet students, and use tablet devices to quickly access student records. They use this data to direct students to the appropriate services, create appointments, or provide direction on the Alternative Learning Environment. These should be staff positions, and should be available whenever the center is open.

**Faculty / Assessment Specialist (Faculty):** The Alternative Learning Environment faculty will divide their time between creating content for personalized instruction (videos, instructional modules, sample questions), teaching seminars, and assisting in the drop-in labs.

**Counselor / Student Guide (Faculty):** The counselors will meet with students to help transform individual assessment results into personal learning plans that include timetables for completing learning modules as well as next steps, and enrollment issues. They will also lead regularly scheduled orientation seminars for the center.

**Tutor / Learning Aides (Supplemental Instruction?):** Managed under usual tutoring guidelines, these tutors are scheduled through the central scheduling software and integrated into the workflow of the lab.

**Lab Aides (Staff):** These helpers are up and walking the lab, helping with technical issues and some high level content questions. They are trained to help, and carry a triage tablet so they can easily pull up student records and personal learning plans.

**Internet Helpers:** To facilitate off-site working and student participation, a couple of staff should be assigned a multi-role position in order to help students who are working remotely, whether the request is technical or instructional in nature. Live chat help may be a possibility here.

Lab personnel will hold regular “huddles” to review analytics data and schedule, and to re-assess student needs and areas of focus. These meetings should be weekly, and have a short and medium-term focus, as well as provide feedback into overall operations.

## Software:

The software package (or packages) is an important piece of this center. There are three major functions:

**Scheduling:** This centralized scheduling system must keep track of our personal assets and their availability, and make scheduling slots available in a variety of ways so that students and Alternative Learning Environment staff and faculty can easily and quickly schedule appointments, whether they are in the lab or in some other location. SARSGrid might have the capabilities we need, but the scheduling data needs to be accessible and displayed in real time in a variety of ways. The scheduling software should also be capable of allowing on-the-fly registration and seat management for the seminars on various subject areas, as well as displaying a schedule of these events.

**Student Management / Analytics / Tracking:** This software will track participation in appointments, seminars and other functions of the center. It will make progress reporting available to appropriate people, via a flexible, web-based interface, and will gather data for reporting attendance to the state.

**Learning Management:** This software will (ideally) manage both subject areas. It will provide a means of assessing student knowledge, and providing a personalized plan of remediation for each student, based on a specific set of SLOs which are further broken down into specific learning areas. Post assessment, students will use the same software to log in and access learning materials, including practice problems, video, and written information targeting specific learning outcomes. When students feel they are ready, they can assess their knowledge in specific areas. It is also important that students are able to access the learning software and modules from remote locations, to facilitate flexibility in terms of students completing the work.

The three software pieces should be able to interact with one another, so that student progress, appointments, and time spent in learning modules all become part of a centralized student profile that is accessible to the Alternative Learning Environment staff, allowing them to help students through the process of remediation with a focus on high success and completion rates. The software pieces should have a built-in ability to communicate via email and text message, so that students can be sent appointment reminders, seminar announcements, or be reminded to continue in their work if they fall off the remediation schedule.

## **Hardware:**

Throughout the lab, the focus should be on thin-client or tablet computing where possible. All software and interfaces should be web-based to promote easy updating and flexible delivery. Public displays should be electronic whenever possible, and signage should be clean and consistent throughout to make communication clear and effective. Printed paper signage should be avoided, as well as extra flyers and paper-based information that will distract from the main goal of the center.

Wireless networking should be widely available, both to support “roaming” help and also to facilitate BYOD applications.

## **Learning Modalities:**

**Individual, Self-Paced Modules** - Can be accessed anywhere, from virtually any device. These will be made available to students based on their intake assessment results, on a granular level. These modules will contain multimedia resources, as well as reading assignments and interactive problem sets. Students will receive hourly credit for each module completed, and will also have access to a closing assessment exam which will determine if they are ready to move on to for-credit classes in the discipline.

**Short Seminar Format** - Dynamic, interactive seminars will be offered throughout the day and evening, as well as on Saturdays, covering specific content areas. These will not be lectures, but rather highly interactive and will involve students in problem solving and example exercises. Technology will be used to actively involve students in the learning process. Topics will correlate directly with the granular subject areas in the learning modules to facilitate student participation

and integration with the overall learning plan for each student. The scheduling software will have the ability to notify students when a seminar is available for an area required in their learning plan, with easy access to registration via any device. The Alternative Learning Environment will have two small, open lab areas to facilitate these seminars. One will be equipped with computer workstations and the other without. Both will feature large, interactive displays.

**Tutoring** - An area will be made available for tutoring with trained, scheduled tutors. The scheduling software will be set up and equipped to manage the tutoring appointments, and also to record the data for tutoring with students. The data from these appointments will also be used to drive the scheduling of seminars and the development of additional learning materials for the individual, self-paced work.

In summary, the three modalities of learning in the Alternative Learning Environment will combine, and guided by the learning management software they will provide each student with a just-in-time, personalized route to success in the areas where they are deficient. By avoiding needless repetition of subject matter that students have already mastered, the student, faculty and staff time will be maximized, leading to a higher success rate and a shorter path to completion for students. The use of a common, web-enabled format for the personalized instruction modules also allows students to work remotely, freeing up seats in the lab for students who have a greater need for personal interaction.

### **User Narrative:**

Sarah is referred to the Alternative Learning Environment based on her score on the BC Assessment Test. She enters through the front door. The room is open, and full of people moving around. On the wall, near the entrance, a large, interactive screen displays a schedule of upcoming seminars (including available seats) and available appointment slots for orientations, tutoring appointments, and advisor appointments. A staff member stationed near the display welcomes Sarah, and asks how they can help. Sarah informs the staff member that this is her first time to the center, and that she didn't know where to get started.

The Greeter asks Sarah to enter her student ID into the tablet computer they are holding. When entered, the tablet displays Sarah's assessment test results indicating a need for basic math remediation. The staff member hands Sarah a clearly printed orientation card, containing brief instructions on getting started, center hours, and the web address for the Alternative Learning Environment learning site, which can be accessed from any internet-connected device. The staff member briefly explains the layout of the Center, and directs Sarah to a couple of standing tables near the entrance with computers on them.

"If you have about 30 minutes, the first step is to take our short diagnostic test. It will let us know what areas you need help with, and will allow our software to create a personalized learning plan for you. Once you finish, you can set up an appointment with our learning advisors or you can just get started on the learning modules. The software will help you with each step. If you don't have time right now, then you can also log in from any computer using the web address on your card."

"Thanks. How will I know when I'm finished so I can enroll in a regular Math class?"

"When you have completed all of the learning modules, or have attended seminars for the areas outlined in your personal learning plan, you will take an exit exam covering what you need to know

to move on to for-credit math classes. The exit exam will need to be taken here in the Center, but you have some flexibility in how you complete the work. If you need help beyond the computer modules and the seminars, then we also have tutoring appointments available.”

As they talk, another student walks up to the board, selects an open tutoring slot by touching it on the board, and makes the appointment by entering their student ID. As they do, the slot changes color to indicate that it is taken. The next day, the student receives an email and a text message, reminding them that they have a tutoring appointment in one hour. The student confirms their intent to attend by replying to the text message on their phone.

Sarah decides to go ahead and take the diagnostic test. She feels nervous about taking a test unprepared, but the staff member assures her that it isn't something to worry about since it is designed to help figure out what areas she needs help with. After Sarah completes the test, she is presented with the results immediately. The results screen is easy to understand, and she sees that she can come back and look at it any time she wants. When she finishes with the results, a second staff member walks up carrying a tablet computer. The staff member is logged into the staff area of the Center software, and was notified when Sarah finished her diagnostic test.

“How did it go?”, she asks.

“Fine, I guess. I sorta knew I was going to have trouble with some of it. Now what do I do?”

“Not to worry - we will help you get up to speed as quickly as possible. Let me show you around the Center's Student Menu. If you click the “Student Menu” button, it will take you there right now. After today, whenever you log in, this is where it will take you.”

The staff member proceeds to give Sarah a 15 minute overview of the Alternative Learning Environment site, how to use it to access her personal learning plan and complete instructional modules online, and also how to view upcoming seminars that fit with her learning plan. As they talk, Sarah updates her contact information in her personal profile, including taking a picture of herself and adding it to her profile. The software is very simple to use, and before they finish, Sarah has registered for a seminar on the first area of her learning plan.

Sarah leaves the center feeling good about her interactions. She has the card, and a printed copy of her personalized learning plan. Looking at it, she feels like it's something that she can do in time to register for a math class next semester.

The next week, she receives a text message on her phone reminding her of the seminar she had registered for in the Alternative Learning Environment. She replies to the message indicating that she will be there. When she arrives for the seminar, she can see on the interactive display that the seminar is in Learning Lab #2. There is a different Greeter this time, but they are just as friendly and helpful as the first. Sarah asks where she can find the lab, and the greeter points to an area near the rear of the building, with tables arranged in a semi-circle around a screen that is descending from the ceiling. Sara can see the sign from where she is standing: Learning Lab #2. Looking around the room, Sarah sees other similar signs: Tutoring, Learning Lab #1, Advisors, Math Lab, English Lab. The staff are easy to identify, because they are wearing similar Alternative Learning Environment polo shirts. Math helpers are wearing dark blue, English are in gray, and all of the other staff are in light blue. The signs and lab areas are color-coded to match.

Sarah finds her way to the Learning Lab. At the entrance, she sees a tablet kiosk that says "Touch Here to Sign In". She touches the screen, and enters her student ID and password. The screen says "Thank you.", and she finds a seat at a table. The room doesn't feel like a classroom. Instead of rows of desks, there are tables arranged in two half-circles around the screen, which has descended from the ceiling. There aren't too many students here, with seating for less than 20. At 3:00 sharp, the teacher gets started, wearing his dark blue polo. The seminar doesn't feel like a normal class, either. The 45 minutes are over before Sarah knows it, being filled with videos, rapid fire questions from the teacher, and illustrations of the concepts that Sarah can understand. The teacher closes by using a tablet to put example problems on the screen, and having the students walk him through the solution to each one. Students participate in the seminar using tablets of their own. The pace is quick and students are engaged by their own active participation. Sarah participates, too, testing her ideas against the sample problems. When the class ends, Sarah thanks the teacher and leaves the Center feeling good because she finally understands the concept.

Later that evening, Sarah logs in to the Center web site, and sees a check mark next to the content block that was covered in the seminar. She decides to test out her knowledge, and clicks on the online learning module for that block. Sarah answers some sample questions in this area, and smiles with the positive feedback. Sarah decides to try out the next area in her learning plan. Sara watches a couple of short videos on the topic, and looks at some explanations. To her surprise, when she gets to the sample problems, they actually make sense. Building on some of what she learned in the seminar, she was able to use the new information in this module to figure out how to work this new type of problem.

Later in the semester, Sarah finishes the last module on her personalized learning plan. She ended up doing much of the work in the online modules, but also liked the two seminars she attended. She also attended scheduled two tutoring appointments to help her understand modules that were a little more difficult for her to master. The tutor was patient and helpful, using the same type of sign-in tablet to track their time together.

After finishing her last module, Sarah returns to the main page of her student menu on the Center's Site. It is full of check marks, along with the dates she finished each module. At the top of the screen, Sarah sees a new button that says, "Begin Exit Exam". The button is disabled, and under the button Sarah reads the following:

The exit exam must be taken on a computer in the Alternative Learning Environment. Plan on about an hour to complete the exam. Results will be made available immediately. Upon successful completion of the exam, you will be cleared to register for the appropriate Math class.

Another button on the screen allows her to take a practice exam, giving her feedback on the questions she missed and allowing her to review related materials.

Sarah decides to take the exam the next day, in time for spring registration. When Sarah shows up at the Center the next day, she feels ready. Logging into a computer in the Open Lab, Sarah sees her home screen. This time, the button is green. When she clicks it, the Open Lab attendant receives a notification that Sarah is starting the Exit exam, along with her picture and the workstation she is using. The attendant walks to the workstation.

"Good Luck on the exam. Would you like some scratch paper?"

“Thanks. Yes, please”

Sarah smiles, and gets to work. Less than an hour later, she reviews her results. She misses only a few problems, but feels good about the test. The message at the bottom lets her know that she will receive notification when she is able to register for her Math class.