

# The Aravaipa Learning Community Adventure

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## Introduction

The goal of the Aravaipa Learning Community (ALC) was to increase retention of at-risk students through their participation in an integrated studies program that combined math and social sciences. This learning community was offered in the fall semesters from 2001 through 2007 and, due to personnel changes, is currently on hold. It is also important to note that during this time frame other offerings were included as part of the learning community curriculum.

The first year the program included an orientation-to-college course, and a subsequent year included a computer sciences course. Although an English course was not specifically included, the ALC incorporated writing objectives in its curriculum. In addition, participants were introduced to other fields of study through guest presentations that were integrated with the math and social science objectives.

During the six years of our adventure, the average retention rate of participants during their first semester was 83%. The highest retention was 100% in 2005. This is compared to a Central Arizona College retention rate of 69% in 2001. We are pleased to share our experiences and focus this contribution on what we have learned about what works well and what does not work so well in terms of learning communities for at-risk students.

## Background

The initiative grew out of the first learning community at Aravaipa, which Shay Cardell, our full-time math professor, and Flint Anderson, who was the student services manager at that time, spearheaded. The other full-time professor who recognized the worth of their vision and agreed to participate was Maren Wilson, the social sciences professor. Having a social science class combined with the developmental math class enabled the students to get credit in a university transfer class during their first semester at the college. The first learning community also included a personal development class. For the learning community students, we waived the reading prerequisite, and the students who needed reading took it that first semester. Class schedules were arranged to enable students to attend the reading class on the same day as the learning community class.

We were fortunate to have the full backing of the campus dean and the college student services dean. A Title V grant enabled us to begin, and we received grant monies for several years. Faculty from the Signal Peak campus, who had taught learning community classes previously, provided us with insights that helped us avoid some problems in beginning a learning community at our campus. The math professor involved in the project and a student services manager researched the learning community concept. Because of her expertise in collaborative learning, the math professor was able to adapt teaching methods and curriculum sequences for integrating math with each social science offering.

The library/learning center employees also provided assistance to the initiative. During most of the learning community classes, an in-class tutor was available. Student government officers and representatives and Phi Theta Kappa members contributed to student retention. They gave presentations to classes on the benefits of participating in their organizations and scheduled speakers from other campuses on topics and issues of importance to the learning community students. Student organizations sponsored a variety of service events and recreational activities in which faculty, staff, and students in the learning communities have participated. A Work-Study student videotaped our learning community students and we developed a promotional CD. The following year the student services manager and the social sciences instructor visited the area high schools and provided complimentary copies to recruit students to the program.

## **How the Initiative Works**

Student retention can be enhanced by integrating math and social sciences for more meaningful content, by more fully incorporating the resources of the college in the classroom setting, and by introducing the class to other departments. This paper discusses some of the resources used within a single class setting. The specific class exemplified is one that has incorporated two or more levels of developmental math and social sciences and has been taught by Shay Cardell, professor of mathematics, and Maren Wilson, professor of anthropology/social sciences. All of the students were enrolled in concurrent offerings of developmental math and a social science. The social science offerings varied over the years and included courses such as Indians of the Southwest, Archaeology, and Cultural/Historical Geography. An overwhelming majority of the participants were first-year Hispanic students. Some returning students were advised into the learning community because they had experienced problems in succeeding in earlier classes. Although a four-hour class duration makes it easier to use some of the strategies discussed in this paper, it is possible for individual instructors in three-credit-hour classes to also use these strategies to increase the likelihood of students completing their class and enrolling in classes the following semester.

## **Using Tutoring Services**

Many professors, particularly adjunct professors, are not aware of the full range of tutoring services available at their institutions or that could be available through working with the directors of such services. Lead faculty and learning resource librarians can initiate help in this arena. Using tutors occasionally or regularly in the classroom with first-year students provides students with a positive learning experience, which makes it more likely they will seek tutors as needed in future classes. For example, tutors with computer experience along with students in the class who learned computer skills quickly have helped the other students in the math/geography class learn how to create Web sites.

The Learning Resource Center at Central Arizona College also subscribes to PLATO, a tutoring program for a variety of disciplines, including geography. The students spend a two-hour period in class working on PLATO, after which they complete their work on their own time. A stand-alone reading class also

used PLATO. Adjunct faculty used PLATO with English classes. One tutor used PLATO in assisting a community member in English literacy. The individual had “dropped out” of college because of personal and reading difficulties. A year after the tutoring, that student enrolled at the college, and she now is working on an associate degree.

In addition to helping students successfully finish a particular class, familiarizing the students with the services of the Learning Resource Center also helps retention. Additional class time in the Library/Learning Resource Center involves doing nonempirical research, such as finding books on project topics in the Horizon Book Catalog online, learning how to browse effectively in the stacks, and using scholarly online resources, such as InfoTrac. Students become acquainted with the library staff and feel more comfortable seeking their aid in following semesters.

Tutors were trained in the learning college concept, which has continued to benefit the campus overall, not just the students in the ALC. For example, an experienced tutor went to an auto body classroom to locate a student she was tutoring in reading. That led to a conversation with a community member taking the auto class for fun. Though that student had not planned to take any academic courses, he changed his mind upon becoming aware of the tutoring resources available to him. A reading student who has special needs received intensive tutoring per arrangements with the reading instructor. After successfully completing the first developmental reading class, the student continued to see the tutor during the summer to prepare for a reading class in the fall semester. The supportive relationship with the student that was established by the tutor and the instructor was a key factor in the student’s decision to continue with summer tutoring. Another factor was the flexibility the tutoring supervisor had in scheduling additional tutoring hours when classes were not in session.

## **Using Advising Services**

Many community colleges face the problem of students registering for the following semester in a timely manner. One way to ameliorate the problem is to incorporate registration within the learning community. In the ALC, one person

from student services and three faculty members advised and registered students for the next semester during the early enrollment period. The social science professor and the English professor have brought in the student services manager and other faculty members to register students in their other stand-alone classes. What began as a practice at Aravaipa in only the learning community has now been implemented in other classes. Other colleges might try preregistration in required classes, such as beginning-level English classes.

Involving someone with counseling experience in the first learning community was a great aid in student retention. Student Services Director Flint Anderson taught the personal development class. He helped students explore their personal and cultural values on a daily basis and then identified and addressed their counseling needs. Based on the positive results, we would recommend that other institutions explore such an arrangement whenever possible. In addition, we also used the expertise of an employee from another campus to resolve some relational problems within a learning community that had developed because of generational differences within the student population.

The development of a two-year curriculum plan for the most common majors at the Aravaipa campus also aided student retention. In developing the plans, faculty made a concerted effort to ensure that required classes were not scheduled against each other. As a result, students have been able to enroll in the classes they needed in a logical sequence.

### **Linking to Other Classes or Professors**

We have also found that students in learning communities are more successful when faculty collaborate to make content connections between classes. For example, many at-risk students need to take a reading class. Having a specific reading class linked to a learning community class provides the opportunity for collaboration between faculty, resulting in richer connections among all three classes. Making connections with other instructors is also important. Science faculty have provided occasional lectures, demonstrations, and labs to the math and social science professors' team-taught class. In doing so, students have become acquainted with future instructors in a friendly setting and have become excited about taking science classes with these instructors.

Collaborative teaching continues to grow outside of the learning community. For example, an adjunct English professor and an adjunct art professor combined their classes on one day for a learning activity. During one semester, students in an Indians of the Southwest class were especially interested in the high incidence of diabetes among the O'odham and other Indian peoples. The professor arranged for the nutrition professor at another campus to speak to the Aravaipa class via instructional TV. In addition to the learning benefit, students were less distressed about the prospect of taking an iTV class later in order to complete their degree requirements.

### **Using Knowledgeable and Skilled College Personnel**

Often college employees have knowledge and skills in areas outside of their specific job positions. For example, students in the learning community class, math/social science class, and other social science classes have benefited from the unique perspective of the dean of our campus, James Lamb (now retired), an enrolled member of the Southern Cherokee Nation. He provided students with insights into the history and culture of the Southern Cherokee Nation in a combination of lecture, discussion, and demonstration of material culture. In another yearly presentation, he provided students with a glimpse of Scottish culture, as he is also half Scottish. Not only have the students learned about the culture of these peoples, they also have become acquainted with the dean of their campus in a friendly setting. They later feel more comfortable talking with him about other scholastic matters of importance to them. Jim Lamb has also made presentations to other classes taught at the Aravaipa campus and to community members.

Dr. Temenoujka Fuller, the full-time math tutor supervisor at the Signal Peak campus, came to Aravaipa to give a presentation on her country of birth, as did a visiting professor from China. Barrington Campbell, the tutoring director at the Signal Peak campus, spoke on his home country of Jamaica, and Diana Curtis, a tutor at the Signal Peak campus, spoke about her hiking and cross-cultural experiences in Cornwall and Ireland.

Our campus librarian Larry Sheret (currently a librarian at Western State College in Colorado) has given a presentation to learning community students on measuring the height of buildings, mountains, and other objects. Sheret also

hosted several “star parties,” at which students from various classes and members of the surrounding towns could observe the night sky and get a taste of what they would learn in an astronomy class.

## **Linking to Community Resources**

Our efforts to improve retention have also benefitted from a variety of community resources provided for little or no charge. Local copper miners have made presentations about mining history. Arizona Game and Fish biologists have led students on field trips and provided class lectures. A University of Arizona researcher provided a tree ring research demonstration, and archaeologists from the Center for Desert Archaeology have conducted both in-class and on-site presentations to our students. A professional counselor has provided guest lectures to introductory psychology students. Anthropology students have attended ancient technologies workshops, pottery workshops, textile workshops, and zoo archaeology labs at the Arizona State Museum. Additional field trips have visited Hohokam archaeology sites and various museums in Tucson, Phoenix, and elsewhere across the state.

We have found that class content becomes more real to the students when community resources are used. In addition, some students have become interested in specific majors because of these presentations, workshops, and field trips. The use of community resources has extended beyond the ALC as student organizations and other faculty have also begun to utilize community resources. Through these efforts, faculty, staff, and administrators have developed a campus culture that boosts students’ attitudes and skills.

## **Attributes and Problems in Development and Implementation**

One major problem was resistance to the learning community concept by other faculty and classified staff. Having the backing of the student services manager was critical to the success of registering students for the learning community. Since 2001, three people have held that position, and all three have been supportive of the learning community and of integrating their services with other classes.

Another problem for the learning community involved compensation. Grant monies initially provided salaries that were reasonably commensurate with the

work. The structure of the learning community requires that faculty coteach from 10 a.m.–3 p.m. with one hour for lunch. When the grant funding ended, in order for the instructors to have adequate compensation for fully integrated instruction, two sections each of math and social sciences were scheduled back to back; all the students met concurrently, however, except when the instructors split in order for the math instructor to focus on one developmental math level.

Because of the demands of his position, the student services director was not able to continue teaching. His personal development course was a valuable component of the first learning community. Institutions facing a similar situation might look at linking a course to the learning community; thus, the time requirement for student services personnel would be reduced.

We have also found that additional faculty at the Aravaipa campus have expanded the use of the library/learning center and student services resources into their classes and both full- and part-time faculty have integrated some class units or lessons.

At the Aravaipa campus, students and faculty eat at the same cafeteria. Students and faculty often enjoy lunch together. This is especially true of the learning community. In addition, to facilitate service for the learning community students, we call the cafeteria prior to lunch to turn in the students' lunch orders so that the students can get their lunch in a timely manner.

Successful learning communities are not static. Because the student composition is different each year, what we do each year is different. We have to be extremely flexible, as we often have to change what we initially plan to do. For example, weather, schedules of guest presenters, or technology glitches mean we must be able to make meaningful changes quickly in ways that promote student learning.

## **Applicability**

The initiative has applicability at other institutions. Other colleges are also providing registration services in classes, for example. Our recommendation for colleges considering in-class registration is to select required courses, such as English, math, or reading classes. Another recommendation when trying to implement in-class registration is to work with faculty who demonstrate a desire to address issues of student retention and who are willing to work with student

services to increase student retention. It is possible to do registration and still have students engaged in learning activities.

To promote more collaborative teaching, colleges could highlight learning communities to other faculty, including adjunct faculty. One way this has been accomplished at Aravaipa is through a CD that a tutor and learning community students made of the ALC. This has generated interest among other faculty. Having other faculty as guest presenters also helps them to become more receptive to using a variety of college resources in their own classrooms.

Providing information college-wide on interests and skills of college personnel would enable faculty to make more use of such expertise in their classrooms. For example, a classified staff member may have a degree in history, may be a skilled weaver, or may have done volunteer work in another country.

## **Lessons Learned**

For other colleges considering an initiative similar to this one, we recommend that the faculty meet the summer preceding the first year of implementation to determine how they are going to coteach, what their common objectives and goals will be, how they will assess student learning, and other teaching issues. As new faculty come on board, we recommend that they meet with the current faculty during the summer before they coteach. Our experience with new faculty who seemed knowledgeable of the process, but who joined the learning community project without going through prior meetings, led to less desirable outcomes.

In fall 2007, we offered an additional math level, but we will not do so in the future. We had to divide into separate sections more often that year so that the math instructor could focus on one math level at a time. Consequently, the social sciences instructor was not present during math instruction to provide another set of eyes to observe and mitigate learning difficulties. Most importantly, we prefer to keep our instruction fully integrated, and that was not possible with three math levels, even though the learning community was still successful overall.

## Future Status

Because the math instructor retired in May 2008, we did not offer a fall 2008 learning community. However, the new math division chair is committed to real-world math applications in teaching and has expressed interest in coteaching with the social sciences instructor. Because the math chair is new, it is unlikely the learning community will be taught again until fall 2010. However, because of its past success, integrated instruction does remain a viable concept at our college.

Although some colleges have a stronger commitment to this method of teaching as exemplified by students being able to be in learning communities throughout their whole college experience, our college has a commitment on a smaller scale. The time demands of teaching an integrated curriculum are great, and some faculty do not believe that the monetary compensation is adequate. Additionally, not all faculty are willing to give up their autonomy in the classroom.

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