In this article, I propose to describe some of the developments that have taken place in public education in American Sāmoa in the past few years. This has really been a period of rapid change and although many challenges remain, there has been considerable progress on several fronts.

One of the fundamental organizational reforms that has taken place lies in the new management approach of the American Sāmoa Department of Education (ASDOE). This can be characterized as a move away from a top-down management style to a more shared-decision-making model. For many years, decisions have been made at the central office and then handed down to school principals who passed them along, in turn, to teachers. Our current director of education, Malaetele Dr. Lui Tuitele, however, has adopted a much more collaborative approach that is designed to be more inclusive. His leadership style is very open and accessible. He welcomes suggestions from educators locally and abroad, as well as from the community-at-large, and encourages individual initiatives. He understands the importance of educational partnerships and other collaborative endeavors in making change happen. Under his directorship, he has encouraged people to work together so that there has been a more widespread participation in educational decision-making processes. He has been very supportive of the initiatives discussed in this article.

This new approach to management has resulted in a deliberate effort to involve teachers and school administrators in important decisions that affect their work at the school. Teachers have, as a result, been closely involved in the process of developing standards for their grade level and in the creation of new assessment measures. For example, in April 2004, Mid-continent Research for Education and Learning (McREL) conducted an external review of our English language arts and mathematics standards. During year one of our contract with Pacific Resources for Education and Learning (PREL), McREL was subcontracted to assist with the development of a pool of test items for ASDOE’s Standards-based Test (SBT). During the 2004–2005 school year, the SBT’s were developed for grades three and ten, in the areas of reading, writing, and mathematics (this was the first time we had ever formally tested writing). PREL assessment staff, Dr. Don Burger and Jennifer Ryan, worked with a pool of ASDOE educators—predominantly teachers, the Office of Curriculum, Instruction and Accountability (OCIA) curriculum specialists, and the Testing Office personnel—in reviewing the test items selected by McREL. They altered items by localizing test items as much...
as possible, using local nouns—places, names, etc.—as well as including other local examples. Next, McREL reviewed the revised test items for validity and reliability and forwarded the revised test for pilot testing in fall 2004. Once the initial pilot was completed, PREL and McREL analyzed the results. ASDOE educators were then given a further opportunity to make recommendations, and a second pilot was conducted in spring 2005, followed by a second analysis of the results. The final version of the Standards-based Test for grades three and ten was administered during spring 2006. The same process will continue throughout the five-year period of developing the Standards-Based Test for grades three through eight and ten in reading, writing, and mathematics. The OCIA feels that it is an important principle to involve teachers, as they are the ones who work with students on a day-to-day basis; and their cooperation is critical in the implementation of new initiatives.

In keeping with this more collaborative model, there is also some interest in giving schools more control over their school budgets. For example, schools are given opportunities to apply for school-community sub-grants geared towards improving students’ academic achievement as indicated in their school improvement plans. School administrators have also participated in several professional development sessions on school budgets in an effort to encourage principals to take more control and be more responsible for their school finances.

Partnership is therefore an important value and commitment in how we approach educational change, whether it is our partnership with the USDOE, PREL, the University of Hawai‘i cohort program, or one of the many local partners in education.

Current ASDOE Curriculum Initiatives

In terms of curriculum change, one of our most important initiatives has been the move away from textbook-driven curricula to a new standards-based system. Essentially, this represents a move from standards in grade-level clusters to standards for each grade level. Previously, we had grouped standards so that students were assessed only at the end of fourth, eighth, and twelfth grades. Presently, our standards are more explicit and targeted to the end of each grade level—first grade, second grade, and so on to twelfth grade. This makes teachers more responsible for ensuring that standards are met at each grade level, rather than the old system, which required a wait of four years before it could be determined whether students had or had not achieved the appropriate standard. Student progress can also be monitored more closely, using the Standards-Based Test discussed earlier.

In making this move, we have been assisted by McREL who have been conducting external reviews of our revised content standards in mathematics and language arts. In April 2004, Dr. John Kendall of McREL presented the results to ASDOE educators in a series of professional development sessions in which central office personnel, principals, and teachers were given the opportunity to provide additional recommendations before the final mathematics and language arts standards were published. These sessions allowed local educators the opportunity to either accept or reject any of the recommendations provided by McREL. In April 2006, the process was repeated in the external review that McREL conducted of our science and social studies standards.

We are now in the process of reviewing our Samoan language standards. An internal review of these standards occurred during the 2005–2006 school year, with a local external review to be conducted during Summer 2006. In addition, during the spring 2006 semester, McREL conducted an external review of our social studies and science standards. The results of this review were presented in a series of professional development sessions by Dr. Kendall to social studies teachers and specialists, and other ASDOE educators.

The No Child Left Behind Act (NCLB) has been the main driving force behind our decision in the ASDOE to move from standards in clusters to standards by grade level in core content areas. It has also been instrumental in the development of our standards-based tests and our decision to begin the work of breaking down our standards by grade level and to start assessing our students in grades three through ten in reading, writing and mathematics. American Sāmoa is not required to comply with all components of the NCLB Act under the time constraints required by the states. Nevertheless, our decision to seek compliance has brought about a strengthening in the partnership between the ASDOE and the US Department of Education (USED).

Several on-site visitations by USED staff to American Sāmoa as well as video-teleconferences, and conference calls have occurred during the past two years. These exchanges have resulted in the development of an accountability plan for our department as well as providing guidance on our work in areas such as English language proficiency standards and assessments.

Development of the New Standards-based Tests

We are currently in the process of developing standards-based tests in reading writing, and mathematics with the assistance of McREL and PREL. We have already made a start with grades three and ten, and we are just now finalizing our tests for grades four and eight. These new criterion-referenced tests, the American Sāmoa Standards-Based Tests (also referred to as the ASCRT), will soon be used to report student progress in the form of territory and school report cards and will most likely replace the Stanford Achievement Test (SAT) which we have previously used to measure student progress. The disadvantage of the SAT
is that it is not necessarily aligned with our standards. It is a norm-referenced test that is used to compare students to each other rather than to see how they measure up to a standard. Our new ASCRT will be aligned with our content standards and should be a much better assessment tool. We are excited by these new assessments—especially as our teachers have played a role in their development. Previously, teachers have been discouraged with the SAT as a measure of student progress, as many of the test items are not aligned with the standards, and lack cultural sensitivity. With the development of the standards-based tests, teachers have been given the opportunity to review and write items that are directly aligned to the standards, and they have been able to revise items to ensure that they are culturally appropriate. Teachers have been empowered in the decision-making process to select standards and assessments that they believe are appropriate, thus, a sense of “buy in” is occurring for the first time. Our partnership with PREL and McREL has been helpful in validating the tests. This is a five-year project, but eventually we should have a complete set of tests for math, reading and writing in grades three through eight and ten, an accomplishment that will place us in compliance with the No Child Left Behind legislation.

**Other Initiatives**

During the 2004–2005 school year, we developed a new introductory course on Samoan language for high school students. Previously, we had offered only one Samoan language course and one Samoan culture course at the high school level. However, two years ago, after administering a Samoan language test to students at the end of eighth grade, OCIA Samoan language specialists, in consultation with high school teachers, realized the need to include, at minimum, two Samoan language courses in high school—one for students who possess limited Samoan reading and writing skills (and/or limited oral language skills), and one for students who are proficient in the Samoan language, but could benefit from a higher level Samoan language course. We continue to offer Samoan culture as an elective in the high school. These Samoan language courses are offered in an effort to ensure that all students graduating from public high schools in American Sāmoa are proficient in the Samoan language—one of ASDOE’s educational goals. Eventually, we aim to have four years of Samoan language courses in high school, just as we do with English.

When high school graduates in American Sāmoa enter the American Sāmoa Community College (ASCC), a high percentage of them do not score high enough to enroll in for-credit English courses. As a result, they must first take preparatory English courses, referred to as English Language Institute (ELI) courses. This occurs for around 80 percent of students entering our local community college. In order to address this problem the ASDOE has been collaborating with ASCC for the past two years to offer ELI courses to juniors and seniors enrolled in our public high schools. It is hoped that by interceding earlier in the students’ education, more students will be qualified to enroll in for-credit English courses and that they will be better prepared to enter directly into the coursework leading to an associate of arts degree.

In terms of our work with teachers, an important development has been the creation of a number of cadres at the school level. Cadres are composed of experienced teachers who are selected by their school principal to act as curriculum leaders in the areas of reading, mathematics, and science in their designated schools. The OCIA content coordinators and specialists coordinate this effort, and serve as leaders on these cadres. During the year a selection of professional development opportunities is provided to cadre members, until members feel comfortable enough to offer professional development at their school site. In the past, schools relied solely on the OCIA for professional development, but with the cadres we have been able to target on-site professional development to the needs of each school. Cadre members receive special training for their role. They work in collaboration with the administration and teachers to offer on-site workshops. They also mentor other teachers, as determined by their school principal.

In a similar initiative, through a Reading First grant, we have hired five reading coaches to monitor and provide support to teachers and administrators in twenty-two of our public elementary schools in regards to Reading First activities. These coaches receive extensive training from off-island consultants, who visit American Sāmoa several times each year. They participate in weekly meetings and training conducted by our local Reading First administration staff. Stateside meetings and conferences also provide opportunities for coaches to learn how to more effectively monitor Reading First programs in the schools.

Another professional development project that the ASDOE started during the 2005–2006 school year concerns the creation of a Samoan language institute. It is imperative, if we are to strengthen our Samoan language curriculum in the elementary and high school, that we provide intensive training in this area to our teachers. These six- to eight-week courses are offered after school and are geared towards developing teachers’ content knowledge as well as their understanding of instructional methods in Samoan language and culture. The project is coordinated by the Teacher Quality Office with support from OCIA Samoan language specialists.

The American Sāmoa Department of Education offers considerable onsite support for teachers. There are regular visits from members of the Instructional Management Team (IMT) as well as site visits from coordinators of the University of Hawai‘i cohort program who provide field-
based support in the mentoring of student teachers. The IMT is made up of program, assistant, and deputy directors including the director of education. These educators are responsible for ensuring that schools provide instructional programs that are in accordance with the ASDOE’s vision, mission, and goals. OCIA content area specialists and coordinators also accompany the IMT on school visits. These visitors help to facilitate school improvement efforts by offering feedback and working directly with teachers. The OCIA as well as school administrators are able to use feedback provided through these visitations, to tailor professional development opportunities to meet individual needs.

**Future Plans**

In addition to the above initiatives, either in place or under development, the ASDOE is strongly considering a number of new proposals to meet the needs of our students. In particular, there is a recognized need to develop English language proficiency (ELP) standards, as many of our children come to school with limited proficiency in English. This is an initiative that the USDOE has asked us to consider. We have already established content standards but the limited English proficiency of our students requires that we make a special effort to establish ELP standards as well. This would be achieved more effectively with better data on where our students are in terms of their knowledge of English. We continue to use informal assessments, but we are seriously considering developing our own ELP assessment measures once our ELP standards are in place. This would help us to determine students’ levels of competence and identify more appropriate approaches to instruction. For example, what English Language Learner (ELL) model works best for our students? Should we adopt a bilingual model? What other models are available? We want to improve students’ acquisition of English, but not at the expense of losing our Samoan language. We aim to make a careful assessment of these different models and proceed cautiously by implementing various pilot schemes to find out what works best in practice. Our goal, therefore, is to ensure that all students are proficient in English and Samoan by the time they leave high school.

With regard to Samoan studies, we plan to devote extra effort to the development of Samoan language curriculum materials including trade books. Although we have curriculum guides for teaching Samoan studies in the elementary grades and Samoan language and culture in the high schools, the availability of trade books is limited. OCIA Samoan curriculum coordinator and specialists continue to review and purchase available resources that conform to our standards. However, there is a manifest need to develop additional Samoan language materials at all grade levels. In summer 2006, a committee of educators from the ASDOE plan to review the current standards and curriculum, and make recommendations for the development of additional resources needed in this area.

In addition to these developments, we propose to make some revisions to the Samoan history course in high school, and we are considering placing a Samoan or Pacific history course in the elementary schools. There used to be a Pacific history course in the elementary school, but it was replaced by an American history course over ten years ago. In order for our children to identify with others in the world—particularly the USA—they must first understand who they are, as well as have an understanding of the Pacific region which surrounds them. Without this knowledge, our students could likely travel to the U.S. mainland, without an understanding of their own heritage. It is important, then, that students develop a strong sense of their Samoan identity to form a basis on which to build a more extended sense of who they are and their relationship to the rest of the world. The high school Samoan history course is currently being updated in recognition of these needs.

It is widely recognized in the community that there has been an erosion of students’ understanding of Samoan language and culture. There is a widespread fear that if we do not act now, we are in danger of losing something that cannot easily be replaced. It used to be the case that people expected the schools to teach English and that Samoan language and cultural understanding were best promoted at home. But this view has undergone change. This situation suggests an important role for the ASDOE in helping our community understand the complex issues regarding language instruction—that it is not simply a matter of the division of labor with schools teaching English and Samoan being learnt at home. As we consider the move to a more bilingual model in the schools, we need to engage the cooperation of parents and help them understand how language is acquired. Another thing we can do is to develop materials in Samoan. Libraries are full of books in English, but it is very difficult to find anything in Samoan.

It cannot be denied that some teachers are resistant to the idea of teaching Samoan language and culture. They do not feel as comfortable with the subject as they feel they should. One reason for this is the relative dearth of curriculum resources. In most subjects, such as English and social studies, the teachers can consult the textbooks, which often provide guidance on how to teach a lesson. In addition, such established curricula are often backed up with a great deal of supporting materials and a wide selection of ideas about what and how to teach a particular concept or process. Unfortunately, teachers are hampered by the lack of materials for Samoan language instruction. What can the schools do? One useful idea is to reach out to our local community resources, as well as to the larger Samoan community on the US mainland, Hawai’i, New Zealand, and in neighboring
Sāmoa. There is a rich diversity of knowledge and resources that is produced by our extended Samoan community, though it is very dispersed and may require some adaptation to make it available for instruction. For example, there are a number of Samoan language newspapers. Samoan poetry and other writings are produced in many places in addition to American Sāmoa. These resources could offer an invaluable basis for instructional materials in Samoan, especially if they were employed thoughtfully in the classroom and adapted to the standards.

Samoan is traditionally an oral language, and this raises the issue of the conventions of Samoan as a written language, especially as Samoan increasingly becomes a language of study in the schools. As new terms and usages continue to develop—for example, in technology and the sciences—who is responsible for translating this new vocabulary into the Samoan language? Not infrequently, American Sāmoa and Sāmoa have determined different translations for the same words. A welcome development would be if the Samoan community would unite and perhaps decide which Samoan language council should be responsible for translating new terms into the Samoan language.

The educational challenges that face the Samoan language and culture are considerable. An important step, however, has been taken in creating a Samoan language institute in response to teachers’ requests for support in teaching Samoan language and culture. We have just completed our first language institute. Informal feedback from the first group of teachers has been very encouraging. In fact, some of the teachers from the institute have been selected to review our Samoan standards and curriculum during the summer months. In addition, these teachers have also taken the initiative to form a Samoan teacher’s organization, whose first activity involved visiting the neighboring island of Upolu in Sāmoa, for professional development purposes (i.e., school visits and Samoan language workshops).

It is our hope that the current initiatives undertaken by our American Sāmoa Department of Education will move us closer to achieving our vision, mission, and goals. Collaborating with our educational partners both locally and abroad will help guide our work and ensure that our students are afforded the best educational opportunities possible through our public school system.
This paper discusses the ongoing prototype of the Software Collaboration Model designed to meet the needs of both public and higher education. The model is based on instructional design principles and proposes that both public and higher education institutions can benefit. In order to meet the challenges posed by these changes, creative approaches to teaching that foster partnerships in engineering education are required. In this paper, one such approach is presented: online roleplay simulations. Engineering education is undergoing continuous change. Drivers for this change come from a number of sources, as shown in figure 1. Universities act as a pipeline between high school and the profession, and while they can impact on both, they are also influenced by them. For example, the issues with the K-12 (Kindergarten to Year 12) pipeline have been well documented (Olds, 2005; Sorby, 2005). *Australasian Journal of Engineering Education. Vol 13 No 1. The first three Ouchi it is the same form of control that has are the 'hard' S's-elements managed effectively proven effective in Type J organizations. Ouchi, by both Japanese and American executives. The however, may be overstating the similarities be- other four are the 'soft' S's. They are managed tween Type Z and Type J organizations. For more effectively by Japanese executives and less example, it puzzles me how Type Z organizations effectively by American executives. In Pascale and can develop managers who specialize in the com- Athos's view, this is the principal reason why pany, not a