

Engagement through Choice = Success

A Student Success Initiative

Prepared by
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INTRODUCTION

The objective of the Maricopa Community College Student Success Initiative is to “To develop, implement and sustain systemic student success strategies across Maricopa Colleges to positively impact student retention, persistence and goal completion.”

In the initial proposal, it was noted that because of the unique mission of Rio Salado College, our student success initiative would likely take a different form from the iStartSmart model being implemented at the other nine colleges. It has been our perception, throughout the planning of the iStartSmart initiative, that the student population served by Rio Salado would not be able to participate in all of the recommended interventions: mandatory orientation, assessment of college readiness, advising, placement into development courses, and placement in a student success course. Rio already has components of the model in place: online student orientation (not mandatory), advising (online, in-person), and comprehensive support services. Therefore, it was the placement into student success and developmental courses that were the most problematic for us.

In order to validate (or repudiate) that the Rio Salado student success initiative did need to be different, we reviewed the course listing for the 189 Rio Salado students identified by the Office of Institutional Effectiveness (7/22/2008). This review was to determine if those students really reflected the established eligibility criteria or if, instead, they were in our corporate and government training programs (ESP) or other restricted programs. The result of this review showed students in courses that appeared contradictory to the eligibility criteria – there were ESP students, there were large numbers of students in courses that had prerequisites (contrary to the “no previous college experience” criteria), there were students in courses related to specific programs (chemical dependency, dental assisting, teacher preparation/professional growth, etc.), and students in courses that were likely related to employment capabilities (Using Word, Microcomputer Set-Up and Maintenance, etc.).

The review confirmed that the established criterion for the iStartSmart model was going to be challenging for us. Further, recognizing that we serve a large number of part-time students who are filling in course deficiencies for degrees from other colleges, we decided we needed to establish Rio-specific criteria for identifying eligible/target students. Therefore, we requested and reviewed a report of courses being taken by all currently enrolled students who have: 1) three failing grades in the last two years, but haven’t repeated the course to improve the grade; or 2) three D’s in the last two years and haven’t repeated the course to improve the grade; or 3) five W’s in the last two years. Again, our research showed that an overwhelming majority of the students were in corporate and government training programs, in courses generally considered prerequisites for health care programs (Anatomy and Physiology) and other very specific/restricted areas (Education, Law Enforcement Technology). This report showed alarmingly low numbers in the focus areas for the iStartSmart initiative: 22 students in CRE101, 15 students in ENG061, 18 students earning D’s in MAT082, 12 earning D’s in MAT102.

Next, we turned to the literature and to current discussions about student success within other organizations. Rio Salado was fortunate to have had a representative at the August 8, 2008 William and Flora Hewlett Foundation and Bill and Melinda Gates Foundation meeting on Development Math and Technology Solutions meeting in Palo Alto, California (notables at the meeting included Vincent Tinto and Uri Threisman). The consensus at this meeting on which solutions would dramatically increase student completion and performance in developmental math, although considered to be applicable to other disciplines as well, revolved around having a course that would take students from pre-algebra through statistics – in a single year, as opposed to the “ladder” of courses currently scheduled on every campus in America. Additionally, a white paper developed specifically for this meeting spoke to a “holistic approach...the use of multiple interventions...a systemic set of recommendations.” The paper also spoke to “procedural fluency and how it differs from conceptual thinking [instructional design].” Further, in reading, “Assessing the Impact of a First-Year Experience Course on Student Outcomes in a Community College” (May-June 2008 issue of *Assessment Update*) we were reminded of our unique nature and student population, “...research on FYE has largely been conducted on four-year residential campuses serving primarily traditional-age, residential students (Watson, 1993).” Continued research indicated that studies related to first year experience efforts typically focus on first semester GPA and/or first-to-second semester persistence, not really on student learning. Finally, we felt we couldn’t ignore the position paper by MCCC’s English Instructional Council (speaking specifically to the elimination zones, but pertinent to student success initiatives, as well):

The research on the efficacy of placement testing is mixed. In a review of research on the predictive validity of placement tests, Armstrong (1999) found that most of the studies relating community college placement test scores to course grades resulted in small or modest relationships (Brown & Niemi 5).

...Similar findings were noted in predicting performance in English courses. Armstrong further cites research that found low predictive validity coefficients for the ASSET writing test and ASSET reading test on predicting English composition grades (Brown & Niemi 6).

Our conclusion, based on looking at data, literature, and our understanding of the students we serve, underscored the importance of having a Rio Salado Student Success initiative designed specifically for the working, adult population we serve.

PROPOSAL

Given that the Rio Salado student population really does not lend itself to the convening of cohorts (per the course listings that were reviewed), we propose a student success program based upon all of the characteristics of our Mission: choice, access, flexibility, customized high quality design, personalized service, and organizational responsiveness. Vincent Tinto espouses remediation that is specific and provided at the point-in-time it is needed (access, flexible, personalized). Uri Threisman encourages compressed learning (customized high quality design, responsiveness). Therefore, the Rio Salado Student Success Committee has proposed an approach to student success that is based on *choice*. The committee has developed a “menu” of tools and activities that can be offered to students based on the working principle that students know their flaws, and if provided with relevant, bite-sized opportunities to remediate their short-comings, they will take full advantage of what they perceive will be of greatest value to them (not necessarily everything that is available) because those opportunities will not displace nor distract them from their original goal and course selection. This approach also allows for differences and preferences in learning styles.

The tools and activities Rio Salado proposes to make available to students for purposes of enhancing and ensuring student success include:

- Online remediation materials through Pearson Education materials to assist students who have writing deficiencies as indicated by Rio's assessments (writing rubric that is used across disciplines). Dr. Betsy Frank, Rio Salado Faculty Chair for English, did a thorough review of the MyCompLab materials for writing and selected those modules that would correspond to the writing areas that need to be improved. The materials are mainly video tutorials, along with drill and practice exercises, that would be extremely time consuming and expensive to produce. *(access, flexibility, high quality design, personalization, responsiveness)*

The goal is to provide these materials on a website so that faculty will refer students who have problems with grammar usage and writing to specific tutorials. This will be a great improvement over the existing Online Writing Lab (OWL).

- Item analysis (correlation between exam question to course content and competencies) in MAT082, MAT092 and MAT102 resulting in recommendations for action, as needed. *(high quality learning design)*

The goal of the item analysis is to determine if the course exams are an accurate reflection of the content and competencies being taught.

- Purchase 50 White Boards (small, electronic tablet devices) to be used in mathematics classes and train the adjunct faculty members how to effectively use the White Board technology (students will not need to purchase any additional hardware or software in order to view the images that will be visible via this technology). *(access, flexibility, personalization)*

The goal is to provide additional and synchronous and/or asynchronous, but non-place bound instruction/examples of mathematical constructs that are often difficult for students to understand without step by step dialogue with an instructor.

- Training in how to effectively use WIMBA (audio technology) for faculty in English, Reading, Mathematics, and career and personal development (we currently have a license that allows for unlimited use of this technology). In order to use this technology, we will also need to purchase inexpensive headsets and microphones for the instructors. As with the White Board technology, the students will not need to purchase any additional hardware or software in order to hear the information presented by the instructor. *(access, flexibility, personalization)*

The goal is to provide additional and synchronous and/or asynchronous, but non-place bound instruction/examples of concepts that are often difficult for students to understand.

- Employ a programmer, short-term (8-10 months), to build predictive modeling programs in each of the discipline areas that identifies students who are at risk of withdrawing/dropping/failing /being purged or will have academic difficulties with their course(s). We have identified key student characteristics and variables that are highly correlated with withdrawing, failing, and/or academic difficulties. This predictive model is 75-80% accurate. However it is currently used only in two English and one Biology course because it takes 80+ hours to develop and program (it is course-specific, it is not an off-the-shelf or "canned" solution). *(personalization, responsiveness)*

The goal is to provide actionable data for early intervention by faculty and staff.

- Develop CPD115 (Creating College Success) and CPD150 (Strategies for College Success) in an online format. *(access, flexibility, high quality design)*

The goal is to provide online options for Rio students for formalized instruction /strategies for success in college.

BUDGET REQUEST

Item/Activity	Brief Description	Amount
Pearson Materials	Modules for writing remediation	\$10,000
Item Analysis	MAT082, MAT092, MAT102	5,000
50 White Boards	Provides visual images	7,500
Training on using White Boards	50 Faculty (stipends) plus coordination of the training and follow-up after the training	8,500
Training on using WIMBA	30 Faculty (stipends) plus coordination of the training and follow-up after the training	5,500
Programmer for Predictive Model		40,000
Development of CPD115 and 150		8,000
TOTAL		\$77,000

EVALUATION

The evaluation of our Student Success pilot will follow the “Plan-Do-Check-Act cycle” utilized by Rio Salado to assess the success of major college initiatives. Our meetings and research to this point, along with this proposal, constitute the “plan” portion of the cycle. The “do” component of the cycle will be the acquisition, organization and the actual implementation of our various interventions. Our “check” will be the outcomes we expect as a result of our interventions. Finally, the “act” will be the decisions, revisions and modifications (continuous improvement) we make to our pilot efforts for purposes of institutionalizing the interventions. Therefore, the evaluation of our initial efforts will be based on the goals that were identified for each of the interventions:

Pearson Education Materials—Monitor the number of hits each module receives; survey students after the initial pilot period to ask what benefits they think they received from working through the module(s); survey the adjunct faculty members to see how many students they referred as well as their perception of benefit to students.

Item analysis—Determine what changes (revisions, re-write), if any, need to occur, with follow-up tracking of those changes to see if they make a difference.

White board training and WIMBA training---Track how many adjunct faculty members use the technology and how often they use it; survey both students and faculty regarding perception of benefit.

Predictive/data mining model—Compare the retention rate in the selected classes to what it was before the data mining and expand the interventions across the discipline(s).

CPD courses—Track students who take the courses for purposes of assessing their progress/success over time.

These measures of success will also be compared and monitored for their effectiveness in terms of Rio2012 goals, the College's Strategic Plan for Innovation, Improvement and Growth. Specifically, this proposal will be assessed by its ability to align with and accomplish goals related to student success and student goal attainment.