



Nevada System of Higher Education

Remedial Transformation Project

November 2012

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NSHE REMEDIAL TRANSFORMATION PROJECT

November 2012

Overview of NSHE Project. This report provides a summary of the significant changes that have occurred and are still occurring in remedial education across all NSHE instructional institutions. New courses, instructional methodologies, and placement strategies are being designed to transform and improve remedial education, increasing student learning outcomes and chance for academic success. Regular updates to the Board of Regents have been provided over the past two years describing this process and faculty decisions for change in delivery of remedial instruction. This report summarizes those updates and gives a complete picture of the current remedial education initiatives underway, including course structure and data. This effort to improve student learning based on national and local research and data is still a work in progress, demonstrating excellence and commitment on the part of NSHE faculty. Individual institutional reports and data are provided by each college and university.

Mathematics and English faculty from all seven NSHE institutions have worked together to share ideas, study data, and select institutional strategies to improve remedial education for NSHE students. Few topics have drawn as much attention across the United States as remedial education. The idea that so many high school graduates enter college unprepared in mathematics, English, and reading has captured the attention of state legislators, governors, school board members, and the general public. But higher education faculty have struggled for years to meet the learning needs of these students who enter postsecondary education unprepared. In Nevada, the primary burden for remedial instruction falls on the NSHE four community colleges. Students who meet the admission requirements of the two universities are less likely to need remedial coursework, and the State Legislature and Board of Regents have not allocated state funding for remedial instruction at the University of Nevada, Las Vegas (UNLV) and the University of Nevada, Reno (UNR) since Fall 2006. However, since students may be admitted to the universities on the basis of their high school GPA and completion of required courses, not on their ACT and SAT scores, many lack the necessary competency on the basis of test scores. Therefore, all seven institutions are deeply involved in meeting student needs for remediation.

The inception of this project was based on questions raised about the likelihood that students who enrolled in remedial courses could be successful, not only in completing remedial courses, but in completing the entry-level discipline course for college credit. Those questions led to an examination of longitudinal data on students who enrolled in remedial courses beginning in Fall 2007. That data indicated that students who placed more than two levels below the first college-course were unlikely to ever enroll in a gateway course. Two NSHE task forces were

created: the Remedial Mathematics Steering Committee and the Remedial English Steering Committee. These committees have met regularly since 2010 by video and in workshops supported by the Education Commission of the States, Complete College America, and the College Board.

From the beginning, institutions were encouraged to approach change through experimental pilot projects, the testing of new models and a continuous examination of data as they proceeded. Each institution shaped their current remedial program on the basis of the data on their own students' success, and there is no mandate for standardized instructional methodology across all institutions. This commitment to evidence-based change and faculty-driven improvements has been key to the success of this project. In each institution's update, there are many different models. However, there are a number of shared themes or approaches.

- Course redesign to enable students to complete remedial instruction and an entry-level course within two semesters;
- Curricular alignment between remedial courses and entry-level courses;
- Inclusion of reading instruction for students for whom reading is a barrier in mathematics and English;
- More accurate student placement through multiple criteria;
- Different pathways defined for students based on their level of deficiency and major or course of study;
- Conversion of remedial courses at the lowest levels to self-funded skills-based laboratories; and
- Partnerships with school districts to offer early testing and to improve college readiness of high school graduates.

These changes are still in progress. Changing curriculum and examining the resulting student success data requires a minimum of two semesters. In the campus reports, there are changes already in place, changes scheduled to begin in Fall 2013, and work in progress to scale up successful pilot projects to be available for everyone. Space for labs is often an issue when computer-assisted instruction becomes more widespread. Instituting best practices requires in many institutions additional resources for more sections and more instructors. This evidence-based change has become a part of the culture of remedial instruction within NSHE institutions and will hopefully provide continuing improvement in the coming years.

This work occurred within the context of a number of changing variables that have or may impact student performance in relation to college readiness and the shape of remedial education. All institutions are working with Nevada's school districts and the State Department

of Education on early testing and remediation initiatives, definition of college-readiness, and the impact of the adoption of Common Core State Standards. In most cases, NSHE institutions have worked jointly by region with K-12. CSN, UNLV, and NSC have worked with the Clark County School District, and UNR and TMCC are working with Washoe County School District. Recent action by the Board of Regents approved a high school degree as an admission requirement for the community colleges. Adoption of a new funding formula opened the door for rewarding student success in completing college gateway courses as part of a performance pool. The work to date ensures that NSHE colleges and universities are well positioned to support student success and increase institutional success in producing graduates and program completers.

SUMMARY OF REMEDIAL MATHEMATICS INITIATIVES

One of the greatest hurdles for many entering college students is their lack of skills and knowledge in mathematics, whether recent high school graduates or returning adults. It was clear from the beginning of this project that different pathways had to be found if more of Nevada's students were to be successful and receive certificates and degrees.

The most common remedial courses in mathematics within NSHE are MATH 91 Basic Mathematics, MATH 93 Pre-Algebra, MATH 95 Elementary Algebra, MATH 96 Intermediate Algebra, and MATH 97 Elementary and Intermediate Algebra (combination of MATH 95 and Math 96, usually for 5 credits). At all institutions, these courses have been redefined in some way. Some colleges have stopped offering the lowest level in favor of self-paced laboratory learning to accomplish proficiency in basic skills more quickly. Pathways for liberal arts majors have been created directly from MATH 95 to the liberal arts required mathematics course.

At the community colleges, MATH 91 and MATH 93, whose content falls below the federal Ability to Benefit level for financial aid, are generally being changed in significant ways. The universities do not offer these courses. Students who enter MATH 91 or MATH 93 in traditional format face four semesters of remedial instruction prior to college work. Data indicate that at all institutions very few students stay enrolled and succeed if placed in these courses. Therefore, some redesign is being tried at all institutions. Computer-based, laboratory only opportunities to gain basic skills, referral to adult basic education programs, and inclusion of skills work into higher level courses are being piloted.

As recommended by Complete College America, the community colleges are creating three tracks for students based on their choice of major and entering level of competency. An Applied Track in mathematics leads to specific technical certificates or degrees, and generally requires little or no remediation. Mathematics content may be embedded in other technical

courses or may be in courses specifically designed for the needs of the workforce degree (example: MATH 104 at CSN). A Traditional Track enrolls students in remedial courses that can be completed in a reasonable time, leading to enrollment in a college-level course. Students at the lowest level are given the opportunity to gain basic mathematics skills through laboratories or computer-based models. A third track places students who are close to being ready for college-level mathematics in the college-level course, but with extra class time and support.

Data on the percentage of students who started in remedial mathematics (MATH 95, MATH 96, or MATH 97) in Fall 2011 and were enrolled in a college-level course by Fall 2012 is provided for each institution and provides a baseline to measure the effectiveness of new initiatives, most of which were not in place in this past year. In looking at these numbers, it is important to understand also that some of the students who were placed in remedial instruction, even if successful in remedial courses, have withdrawn from the institution one year later and are no longer enrolled in any courses. To improve this percentage of students who persevere and complete the beginning college-level mathematics course in one year has been the guiding principle of this project.

REMEDIAL MATH		
Institution	Enrollment in Remedial Math (MATH 95, 96 or 97)	Percent Enrolled in College-level Math through
	Fall 2011	Fall 2012**
UNLV	1678	32.1%
UNR	1174	66.1%
NSC	157	65.0%
CSN*	2872	51.6%
GBC	359	41.8%
TMCC	1406	44.9%
WNC	478	51.0%

*MATH 198, also included in the remedial math column, was only offered in Summer 2012.

** Data includes students enrolled in Spring or Summer 2012.

Source: Data Provided by institutions.

University of Nevada, Las Vegas

UNLV offered MATH 95 and MATH 96, with placement determined by SAT, ACT, or department test scores. Under the scope of this project, they piloted both courses as “coaching courses” with lectures two days a week and lab work three days a week. This lab is built on the Emporium model in which students work exclusively on online homework and problems with a “coach” available to assist them. Additionally, they are piloting MATH 95 and MATH 96 in a

seven week format so a student can complete both courses in one semester. They offer MATH 97 for five credits, but see a number of advantages for students in the seven-week format. A common test for all sections of MATH 95 and MATH 96 ensures learning outcomes are in place to allow a student to progress satisfactorily.

Key to UNLV's course redesign is the Coaching/Emporium Lab that gives students an environment where support is available immediately as they solve online problems. Students are required to attend three days a week in addition to two days of lecture. Space issues have prevented the universal availability of this assistance, but plans are underway to gain the needed space. This is not the same as the tutoring center that is also available for students.

Twenty percent of the 1,004 students who started in MATH 95 in Fall 2011 were enrolled in or completed a college-level mathematics course by Fall 2012. One-third of these MATH 95 students are no longer enrolled at UNLV. Forty-seven percent of the 674 students who started MATH 96 were enrolled in or completed a college-level mathematics course by Fall 2012.

University of Nevada, Reno

In the last academic year, UNR piloted two sections of stretch MATH 120 each semester, allowing students who met certain ACT, SAT, or Accuplacer scores and would otherwise have placed in MATH 96 to go directly into a small class section of MATH 120. These sections added additional contact hours of three or four hours weekly. Success rates for the four-hour format led to stretch MATH 120 classes being offered this Fall. For Fall 2013, this stretch course will be adopted and placed in the catalog with a one-hour developmental co-requisite.

Beginning this semester, UNR is piloting stretch MATH 126 College Algebra as a small section class with five contact hours per week for students who meet higher scores in the range for MATH 96 placement. If data indicate the success of this model, this Stretch MATH 126 will be placed in the catalog for Fall 2013 with a two-hour developmental co-requisite.

UNR added MATH 95 to their curriculum to serve those students who need Elementary Algebra and have historically had great difficulty completing MATH 96. Depending on their major, students who successfully complete MATH 95 will move directly into MATH 120 or MATH 96. Additionally, high school GPA is being used as part of the placement process, combined with test scores.

UNR offers "Late Start" mathematics classes to allow students in MATH 96 or entry-level mathematics classes to start a class late and move at an accelerated pace with necessary tutoring and time commitment. These classes begin after the first exam grades are returned to

students in the regular mathematics classes so that students have the option of retreating into a “Late Start” class to redo the class from the beginning or change to a different class to meet their mathematics requirement and still stay on track to timely completion of their degree. UNR also guarantees availability of seats in remedial and 100-level mathematics classes to all eligible students so that they can move forward quickly to meet degree requirements.

Data on the success rate of students who started in MATH 96 in Fall 2011 and were enrolled in or completed a college-level mathematics course by Fall 2012 shows 66 percent. There were 1,174 MATH 96 students, and 309 took or are taking MATH 120 Fundamentals of College Mathematics, and 467 took or are taking MATH 126 Pre-Calculus.

Nevada State College

In Fall 2012 after extensive examination of research and data, NSC redesigned its three remedial courses into six accelerated modules, rather than courses. This allows the discrete identification and delivery of precisely those fundamental mathematics concepts that students are lacking. Each module is five weeks long, so that students have the ability to complete all six modules in two semesters, if they place at the lowest level, MATH 93, or in 10 or 20 weeks if they place at higher levels for MATH 95 or MATH 96. A student moves forward as they demonstrate mastery of each module. If they are not successful within the five weeks, they can repeat that module immediately, and then continue forward.

Other anticipated changes at NSC include changes in the placement method to include quiz scores, redesigned textbooks, and use of online videos. An incentive program has been developed to give successful students textbook vouchers which are valid for only one semester, and thus to provide an additional reason to enroll in the next semester.

Three-hundred and one students were enrolled in mathematics remediation modules in Fall 2011. As of Fall 2012, 122 students had subsequently enrolled in or completed college level mathematics (41 percent).

College of Southern Nevada

This Fall, CSN adopted seven-week intensive MATH 95 and MATH 96 courses to enable students to move through these two courses in one semester if they choose. This model replaces MATH 97 and allows students to get credit for each course as it is completed, rather than having to complete both for a passing grade in MATH 97. In these courses, CSN used

MyMathLabPlus software from Pearson Education, including the e-book, online homework, and assessments.

Beginning Fall 2013, students will be able to take the liberal arts college mathematics course (MATH 120) after completion of MATH 95 at CSN. Until next Fall, students can demonstrate mastery of the material in MATH 95 through testing and move directly into MATH 120. A new MATH 104 Applied Math for students in specific AAS and AGS degrees has been created to supplement the already existing MATH 116 Technical Math. CSN encourages all students to prepare for the Accuplacer placement test by using materials available online.

In summer of 2012, CSN launched a pilot project where students met in a computerized classroom for eight hours a week for four weeks (MATH 198) and then were tested for readiness for MATH 120. Seventy-nine percent of these students tested directly into MATH 120.

For Fall 2011, MATH 95, MATH 96 and MATH 97, there were 2,872 students enrolled Fall 2011, and 1,482 or 52 percent had successfully enrolled in or completed college-level mathematics by Fall 2012. Students enrolled in MATH 96 had a success rate of 78 percent.

Great Basin College

GBC now offers 22 percent of all remedial mathematics instruction through online courses, and are using the new Learning Management System from Canvas. They have three pilot programs underway. First, students with a C or better in MATH 95 and also a C or better in English may progress to MATH 120 without having to complete MATH 96. Secondly, a pilot course CMP 90Z has been offered four times and seems successful in providing a direct pathway to MATH 116 Technical Mathematics. Third, through a federal grant the content of MATH 116 is being embedded within the college's diesel and welding/blueprint courses. All three pilot projects are assessed for potential widespread adoption. GBC does offer MATH 97, a combination of MATH 95 and MATH 96, and also compressed versions (five weeks each) of MATH 95 and MATH 96 during the winter holiday break. Current data at GBC is leading to a consideration of a pathway from MATH 95 to MATH 120 and reinstatement of MATH 124 College Algebra to replace MATH 96.

For student placement, GBC uses test scores combined with consideration of high school transcripts, highest mathematics course completed, elapsed time since last mathematics course, and a personal interview with the student by a faculty member, if needed or requested.

In Fall 2012, 320 students enrolled in MATH 95 and MATH 96, 130 or 41 percent had progressed to college level.

Truckee Meadows Community College

TMCC created a Math Skills Center that replaces MATH 91 and MATH 93. Students use ALEKS, a web-based assessment and learning system, and also engage in small group and individualized instruction. Early data indicate that this Center allows students to be more successful than the two courses alone did. Fall 2012 is the first semester that the majority of students from the Math Skills Center will enter college-level mathematics courses and with that data institutions can measure the Center's success.

MATH 95 and MATH 96 are now being offered in one semester for seven weeks each, thus allowing students to complete both in one semester. Data supported the advantages of this model over MATH 97 at TMCC. Consideration is being given to other combinations in one semester, like MATH 96/MATH 120 and MATH 96/MATH 126. Additionally, several stretch courses are being offered this semester or in Spring 2013 as pilot projects. MATH 95 has been offered as a stretch course paired with additional topics that allow students to move directly into MATH 120. MATH 120 and MATH 126 will each be offered in a similar fashion in spring 2013. A pathway for career and technology program students has also been created.

Part of TMCC's work to improve student success centers on an examination of online remedial mathematics classes. For now, they are not offering MATH 95 online, but are focusing on improving success rates in MATH 96 online sections by setting requirements for enrollment. These include GPA, success in past mathematics classes, and math, reading, and writing scores. Instructors are experimenting with different teaching methodologies for these sections.

In summer 2012, a Math Academy as part of the Summer Bridge Program was piloted to enhance basic skills and prepare students to enter MATH 95 in the Fall. Data on the Academy participants will be used to assess the success of this model for recent high school graduates.

A total of 1,406 students were enrolled in MATH 95 or MATH 96 in Fall 2011. Forty-five percent or 631 students in that cohort had progressed to complete or enroll in a college-level mathematics course by this Fall.

Western Nevada College

WNC put in place three new pathways for students who place into remedial mathematics, in addition to their existing MATH 92 that is taught as a week-long boot camp for those who need a quick refresher in algebra. First, students can now proceed directly from MATH 95 to MATH 120 if they have a grade of B- or better in MATH 95. Additionally, test scores for direct enrollment in MATH 120 have been adjusted to recognize higher scores on Elementary Algebra section of Accuplacer.

Secondly, a new computer-based, self-paced course, MATH 98, has been created as a pilot project. It gives students a review of pre-algebra, basic algebra and intermediate algebra. At the end of the course, the student re-takes Accuplacer and that new score is used to determine the next mathematics course. Data on student success in this course are being collected to determine future directions.

Third, accelerated 8-week courses will be offered in pairs within one semester to enable students to move more quickly in completing college mathematics requirements. MATH 95/96 and MATH 95/120 are planned currently, depending on the student's course of study.

A total of 478 students were enrolled in MATH 95 or MATH 96 in Fall 2011. Of this number, 244 or 51 percent successfully enrolled in or completed a college-level mathematics course.

SUMMARY OF REMEDIAL ENGLISH INITIATIVES

The most common remedial courses in English within NSHE are ENG 92 College Preparatory English I, ENG 95 Basic Writing II, and ENG 98 Preparatory Composition. The challenge in mathematics of students being required to complete as many as four remedial courses was not present in English. But improved student success after starting any remedial English was identified as a critical issue, and at all institutions, English remedial courses have been re-examined and redefined in some way to improve student success.

A separate track for students who need English as a Second Language instruction is in place throughout NSHE, but learning outcomes are identical in terms of writing and composition skills.

Data on the percentage of students who started in remedial ENG 98 Preparatory Composition or in stretch courses at the 100 level in place of ENG 98 in Fall 2011 and were enrolled in or had completed a college-entry-level English course by Fall 2012 is provided for each institution and

provides a baseline to measure the effectiveness of new initiatives, most of which were not in place in this past year. In looking at these numbers, just as it is in mathematics, it is important to understand that some of the students who placed into remedial instruction, even if successful in remedial courses, have withdrawn from the institution one year later and are no longer enrolled in any courses. To improve this percentage of students who persevere and complete the beginning college-level English course in one year has been a guiding principle of this project.

REMEDIAL ENGLISH		
Institution	Enrollment in Remedial English	Percent Enrolled in College-level English through
	(92, 95, or 98) Fall 2011	Fall 2012*
UNLV	284	66.9%
UNR	382	75.4%
NSC	N/A	N/A
CSN	571	66.0%
GBC	198	50.5%
TMCC	978	58.9%
WNC	506	41.7%

***Data includes students enrolled in Spring or Summer 2012.**

Source: Data Provided by institutions.

University of Nevada, Las Vegas

UNLV currently offers two options for students not ready for the traditional ENG 101 course. ENG 98 Preparatory Composition is offered in face-to-face and online formats with a common curriculum and a common examination along with a portfolio of revised essays. The exam and rubric for evaluating essays are based on work completed by UNLV, NSC, and CSN in conjunction with Clark County School District to set college-readiness standards in composition.

The second option is ENG 101E and 101F, an extended or stretch two-semester option for those students who require additional support to achieve the learning outcomes of ENG 101. These courses have been extremely successful, and UNLV continues to pilot a variety of course delivery formats and times, including online courses and potential partnering with discipline courses.

Placement into the appropriate course is based on standardized test scores (ACT and SAT now required for college admission). Students may appeal this placement through submission of a

portfolio of four writing samples, including a timed essay. This additional option has been successful in helping students into the appropriate class. Additionally, on the first day of composition classes, students are asked to write a diagnostic essay. This essay is evaluated and students may be advised through email before the close of registration that it would be wise to choose a different class.

Data from Fall 2011 indicate that 284 students were enrolled in ENG 98. Of these students, 190 or 67 percent had successfully enrolled in or completed a college-level course (ENG 101 or 101F) by Fall 2012.

University of Nevada, Reno

Students in need of English remediation enroll in ENG 98 at UNR, and on completion of that course, may proceed into ENG 101 in the next semester. For those students whose test results indicate placement in ENG 101, but a need for additional support, UNR created ENG 100i/105/106. ENG 105 Critical Reading (one credit) and ENG 106 Editing for Style (one credit) are taken concurrently with ENG 100i, thus giving students five hours weekly of instruction. Faculty are looking at the potential success of online instruction using this model for part of all of the three courses.

Placement is based on ACT or SAT scores. Two other options for placement determinations can be available to students if needed: a portfolio submission or a timed placement essay. Beginning last summer, students had to have their placement in English determined by August 1, and with that date set, freshmen can be guaranteed enrollment in the appropriate level English course. Additionally, UNR is currently working with TMCC and Washoe County School District to better articulate remedial instruction across all three institutions, including a pilot project in which TMCC supervises the teaching of ENG 98 in the high schools.

In Fall 2011, 382 students were enrolled in ENG 98. Of these, 288 or 75 percent have enrolled in or completed ENG 101 by the Fall 2012 semester.

Nevada State College

Technically, NSC does not offer a course in English that is entirely remedial. However, they have ENG 100, a five credit course that includes the content of ENG 101, but adds more time, more support, and more peer-review sessions for students who might struggle in the regular ENG 101 course. Learning outcomes for ENG 100 and ENG 101 are identical, and students can proceed directly to ENG 102 from ENG 100. Students who place too low on the Accuplacer

exam are referred to CSN to complete the appropriate English remedial course and can then retake the Accuplacer exam. Any student who wants to appeal their placement based on the Accuplacer exam may do so by taking WritePlacer, a prompt-driven essay exam given by Accuplacer. If students fail to reach the desired placement through their WritePlacer essays, they may also get another appeal by taking a departmental essay exam, with scoring done by NSC faculty.

All students at NSC are able to enroll in the appropriate English course in their first semester. For those students taking the Accuplacer exams, the college provides resources to help them prepare to demonstrate their best writing skills.

One-hundred and thirty students enrolled in ENG 100 in Fall 2011. Seventy or 54 percent of these students had enrolled in or completed ENG 102 by Fall 2012. However, for NSC, the completion of ENG 100 is itself the completion of a college-level course. It makes sense for the measure of student success to be completion of ENG 100.

College of Southern Nevada

CSN created a “stretch” course ENG 100 (five credits) that gives students more contact time, more frequent writing experiences, and more timely feedback than ENG 101. Learning outcomes are identical to ENG 101, but students whose writing indicates they are almost ready for ENG 101, but need this extra assistance are placed into ENG 100. Completion of ENG 100 and ENG 101 enables the student to move to ENG 102.

Traditional English remedial courses offered at CSN are ENG 92 and ENG 98. Placement is based on ACT/SAT scores if available, but most often placement is based on a writing essay examination. This is scored by the faculty using a carefully-constructed rubric. Consideration is being given to the inclusion of a reading assessment in this exam to identify students who also need to be enrolled in a remedial reading course. ENG 98 is often offered in an eight-week format in order to permit the completion of both ENG 98 and ENG 101 in the same semester. Courses are offered at multiple times of the day to meet student needs. Courses are offered in an online format as well.

Data on student success as defined by enrollment in or completion of a college-level course within three semesters shows that of the 571 students in ENG 98 in Fall 2011, 64 percent or 368 succeeded. Of the 111 students who were enrolled in ENG 92 in Fall 2011, 40 percent or 44 progressed.

Great Basin College

ENG 74 Writing on the Job and ENG 95 Basic Writing are the two remedial English courses offered at GBC. Just for students in a career and technical education program, the requirement is completion of ENG 74 if remediation is needed. Placement decisions have been based on Accuplacer test scores, and students were encouraged to spend time in test preparation. As a result of Complete College America recommendations, a writing sample and examination of the student's high school transcript are being added to the placement decision process.

A pilot project is beginning this Fall to allow the enrollment of some students in ENG 101 who would otherwise be placed in ENG 95 if their Accuplacer scores are 80-85 (borderline and close to ENG 101 placement). These students are required to keep regular appointments at the Academic Success Center for writing tutoring and will be encouraged to enroll immediately in ENG 102 in the spring semester. Data will be collected on this pilot project this academic year to decide whether to go forward with this model.

A Reading Apprenticeship strategy is being developed for use with students in freshmen-level and remedial classes, in addition to the existing reading course for students who score low on the Accuplacer reading section. GBC offers ENG 95 online with considerable success. Student support in this course is given online and at all campuses in person. In the past, students' use of tutoring has been encouraged, but future plans call for requiring the use of tutoring services during the semester.

Data on students enrolled in ENG 95 in Fall 2011 indicate that 51 percent are successful in enrolling in or completing ENG 101 by Fall 2012.

Truckee Meadows Community College

TMCC created a number of courses and instructional technologies in order to serve students in the best way possible. Currently, plans are in place for new placement score and course requirements for Spring 2013. A new English Skills Center under the direction of Adult Basic Education was created to address the needs of students who are below Ability to Benefit levels and are not ready to enter either of the remedial courses offered (ENG 95 or ENG 98). Students are assigned to this Center and given the opportunity to retake the Accuplacer exam after completion of a specially tailored program in reading and writing. Depending on their Accuplacer score, students will be required to take ENG 95/READ 95 in a block, required to take ENG 98/READ 135 in a block, placed in ENG 98 or ENG 97 (tech students), or in ENG 101. Upon the successful completion of the ENG 95/Read 95, students may retake the Accuplacer and potential go directly to ENG 101 if their scores are high enough.

Placement at TMCC is based on ACT/SAT scores if available, Accuplacer reading and writing scores, and individual student writing if requested by a student.

Of the 978 students enrolled in ENG 97 or ENG 98R in Fall of 2011, 576 or 59 percent were successful in enrolling in or completing ENG 101 by Fall 2012.

Western Nevada College

English faculty at WNC completed a redesign of their remedial courses, resulting in common course standards and assessments for ENG 95 and ENG 98, with a focus on only these two courses for English remediation. A new proposal to streamline the remedial English pathway effective Fall 2013 with redesigned placement method and a new course is now in place. This redesign is based on student success data from a summer bridge program in 2012.

Scores on the Accuplacer essay test plus the Accuplacer reading test would determine placement in a new course ENG 99 or in ENG 101. Six credits are required in this new ENG 99, giving student and instructor more time to develop writing through integrated content and instruction. The content of ENG 95 and ENG 98 is included in this course, taking the student from sentence-level construction through paragraph writing up to the short college essay in one semester. For students, the ability to complete all remedial work in one semester has a distinct advantage of giving them uninterrupted attention to the needed skills and allowing them to move directly into college-level work within their first two semesters.

Of the 520 WNC students in remedial English courses in Fall 2011, 212 or 41 percent have successfully proceeded to enroll in or complete ENG 100 or ENG 101 by Fall 2012.

PROPOSED POLICY CHANGES

The NSHE Board of Regents temporarily set aside their current remedial policy (Title IV, Section 16, Section 1) to enable colleges and universities to conduct pilot projects with a fresh perspective, experimenting with new placement methods and scores, instituting new courses, and examining student data. The forgoing descriptions provided by the institutions of actions taken to date give positive evidence for the success of this Remedial Transformation Project. In light of the work completed, proposed changes to the NSHE policy are brought back to the Board at this time. These changes reflect best practices, enable faculty to continue to improve

instruction and learning outcomes for all students, and are congruent with national recommendations for remedial education.

Specific actions being recommended include:

- Effective Fall 2013, students who complete placement testing and course registration by a deadline set by the institution prior to the beginning of each semester will be guaranteed enrollment to the appropriate English and mathematics course in their first semester of enrollment.
 - Freshmen who enroll immediately and succeed in basic mathematics and English classes are more likely to complete a program of study.
- A student's English and mathematics placement test scores will serve as the foundation for decisions about the appropriate first college-level course, but allow institutions to rely on other factors such as high school courses and grade point average, demonstrable competencies, and work experience to predict student success and recommend placement.
 - Multiple measures ensure appropriate placement of students in the course they can succeed in, eliminating unnecessary course taking.
- The scores on specific tests, as set forth in the policy, will serve as benchmarks for placement into a college-level English and mathematics course.
 - General levels of performance on national tests provide a statewide understanding of college readiness expectations.
- Remedial education at NSHE institutions shall utilize instructional methods and course designs that are most effective in assisting students in successfully completing an entry-level college course in English and mathematics.
 - As can be seen from the excellent work done by English and mathematics faculty, a diversity of methods and course designs can serve our students and will be different at different institutions.
- Institutions should support enrollment in the appropriate college-level entry course immediately upon completion of remedial work.
 - Students who do not proceed directly from remedial work to college-level work are likely to either never enroll or fail when they do. Application of their learning gains must be immediate.
- Requirements for college readiness and college-level course enrollment shall be publicized by each institution to the appropriate Nevada school districts.
 - Since colleges and universities are creating different remedial pathways, it is critical that they each work closely with high schools and districts to develop common programs and strategies.

POLICY PROPOSAL
TITLE 4, CHAPTER 16, SECTION 1
Remedial Policy

Additions appear in ***boldface italics***; deletions are ~~[stricken and bracketed]~~

Section 1. NSHE Remedial Policy

The remedial policies of the Nevada System of Higher Education are intended to ensure a foundation of knowledge and competencies that will assist students in successfully pursuing and attaining an academic degree ***or certificate***. Students are strongly encouraged to prepare for the rigors of higher education prior to entering the NSHE.

1. Pursuant to federal regulations, institutions may make ability-to-benefit determinations using federally approved tests and passing scores to receive federal student aid. The Nevada System of Higher Education reserves the right to cancel the admission or registration of any individual whose attendance at a university or college, in the opinion of the appropriate administrative officer and the President, would not be mutually beneficial, as determined by the ability-to-benefit test, to that individual and the university or college.
2. Placement testing should take place prior to matriculation. ***Effective Fall 2013, students who complete placement testing and course registration by a deadline set by the institution prior to the beginning of each semester will be guaranteed enrollment to the appropriate English and mathematics course in their first semester of enrollment.*** Additionally, English and mathematics testing must take place no more than two years prior to matriculation.
3. All degree-seeking students who place into developmental/remedial coursework must ~~[take]~~ ***complete*** the ~~[prescribed sequence of courses until]~~ ***required*** remediation ~~[is completed. Students requiring remediation must complete all required]~~ prior to completion of 30 college-level credits unless otherwise authorized by the institution.
4. ***A student's English and mathematics placement test scores will serve as the foundation for decisions about the appropriate first college-level course. However, in addition to these scores, institutions may rely on other factors such as high school courses and grade point average, demonstrable competencies, and work experience to predict student success and recommend placement.***
 - a. ***English Placement.*** ~~[In order to be placed into a college-level English course, a student must achieve an ACT English score of at least 18, an SAT critical reading score of at least~~

440, a Compass Writing Skills score of at least 69, or an Accuplacer Sentence Skills score of at least 86.] ***The following scores will serve as benchmarks for placement into a college-level English course.*** Other appropriate placement tools may be used for English placement including ***reading tests***, departmental diagnostic tests or other proprietary tests if supported by institutional research.

<u>Test Score</u>	<u>Minimum Score</u>
<i>ACT English</i>	<i>18</i>
<i>SAT Critical Reading</i>	<i>440</i>
<i>Compass Writing Skills</i>	<i>69</i>
<i>Accuplacer Sentence Skills</i>	<i>80-86</i>

- b. ~~[5.] Mathematics Placement. [In order to be placed into a college-level mathematics course, a student must achieve an ACT Math score of at least 22, an SAT Math score of at least 500, a Compass Mathematics score of at least 65, or an Accuplacer College Level Math score of at least 63.]~~ ***The following scores will serve as benchmarks for placement into a college-level mathematics course.*** Other appropriate placement tools may be used for mathematics placement including ***reading tests***, departmental diagnostic tests or other proprietary tests if supported by institutional research.

<u>Test Score</u>	<u>Minimum Score</u>
<i>ACT Math</i>	<i>22</i>
<i>SAT Math</i>	<i>500</i>
<i>Compass Mathematics</i>	<i>65</i>
<i>Accuplacer College Level Math</i>	<i>50-63</i>

5. ***Remedial education at NSHE institutions shall utilize instructional methods and course designs that are most effective in assisting students in successfully completing an entry-level college course in English and mathematics.***
6. ***Institutions should support enrollment in the appropriate college-level entry course immediately upon completion of remedial work.***
7. ***Requirements for college readiness and college-level course enrollment shall be publicized by each institution to the appropriate Nevada school district.***

Remedial English Steering Committee

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Instructor

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Instructor

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Division Chair and Professor

Remedial Mathematics Initiatives

University of Nevada, Las Vegas – Mathematics Remedial Report

The report consists of items 1 through 13 and a final paragraph. I believe the data in the report helps to demonstrate the need to have the large Coaching Lab (discussed below) immediately in place (the computers are waiting for additional lab space). Included among the information below, the report provides some data with respect to (a) UNLV students who enroll in Math 95 by default due to it being our lowest level math course, but otherwise they would not qualify for it, as well as (b) the large number of Math 95 students who do not continue as UNLV students.

1) Spring 2012 Course Redesign with lab:

During spring 2012, UNLV offered a course redesign of Math 96, related to our future goal of setting up a Coaching/Emporium Lab.

In addition to the normal two days lecture per week, the class met three days in a teaching computer facility to work exclusively on online homework and/or problems. The instructor was directed that those three days were not meant for lecture, but exclusively for students to build/develop their ability to attempt solving math problems (developing productive struggle/persistence skills as cited by Dr. Uri Treisman of Complete College America at their Chicago fall 2011 meeting) and solving math problems. Enrollment was through department consent so that the course would be made available to students having a history of failure in Math 96. Only nine students were admitted, seven of which had failed Math 96 at least once, one of which had a W during fall 2011, and the last received a D in fall 2011. The D student had a medical withdrawal in progress for spring 2012 and another student withdrew midsemester. The remaining seven students received a C or better. This course redesign is not cost effective and the long term goal is to make use of the anticipated Emporium/Coaching Lab.

I directly discussed the course with one student following the spring 2012 Math 96 Department Final. She reported that the set up was extremely helpful and that Friday was a special trip. I mentioned in the traditional set up, she could have instead done the online homework at her leisure, and in particular, not attend on Friday. She indicated that she needed to work in the course redesign format to avoid distractions and to get coaching (when needed). Her input reinforces the need for a large Coaching/Emporium Lab for math courses below calculus.

2) Fall 2012 and spring 2013 Math 95 and 96 Course Redesign with lab:

We are offering during fall 2012, the spring 2012 course redesign with lab above for both Math 95 and Math 96.

We currently have available two such sections of Math 96 and are piloting for the first time one such section of Math 95.

These are not limited through department consent, as was done in the spring, but are strongly recommended for students who are repeating these courses. In fall 2013, the Math 95 course redesign with lab is being strongly recommended for all UNLV students who would not have placed into Math 95 at CSN with a SAT score of 400 or an ACT score of 16 (see item #11 below).

This course redesign is not to preclude this set up for larger groups of students, especially through a (cost-effective) large Coaching/Emporium Lab, but we are struggling with not having space for the lab.

For spring 2013, we are currently scheduling two of these for Math 95 and two for Math 96. These depend on computer teaching facilities availability, and the number of these for spring 2013 will depend on precisely this.

3) Fall 2012 and spring 2013 Math 95/96 (mini) Course Redesign #2:

We are piloting a fall 2012 Math 95/96 semester combo: Math 95 is set to run seven weeks, followed by Math 96 running seven weeks and two days.

The dates are set up so that Math 96 students can also take the fall 2012 Math 96 Department final; we can then compare whether the combo is as effective. The combination set up has the following advantage over one five-credit Math 97: when a student learns the Math 95 material but not the Math 96 material, the instructor may be averaging in an extreme case 100% with 0% to get an overall failing grade. Instead, such a student (in the combo set up) will at least pass Math 95 and move on to Math 96. It has the disadvantage that students could pass Math 95 and then decide to avoid Math 96 during the half semester, but early indications are that students are taking this course redesign over the traditional to complete Math 95/96 in one semester.

During fall 2012, we have two such sections of Math 95 during the first seven weeks leading into one large section of Math 96 during the second half of the semester. (We ran out of instructors to offer two such Math 96 sections, as there are NSHE rules concerning how many courses PTIs can teach.)

The spring Math 95 enrollment is much lower than that for fall (about half for the 2011-2012 academic year, while the Spring Math 96 naturally increases from the fall numbers). During spring 2013, we plan to run at least four of these. We anticipate that one third or more of spring 2013 Math 95 sections will have one of the two course redesigns.

The combo is working toward the goal of having UNLV students complete one gateway course during their first year. It is likely that some type of combination of the two course redesigns, involving a large Coaching/Emporium Lab, will be important in reaching this goal (in particular for students who have the needed background for Math 95).

4) Coaching/Emporium Lab:

There seems to be some confusion with some referring to this project as a tutoring lab. We already have an extremely successful tutoring clinic that suffers mainly from the lack of adequate space (approximately 400 square feet: 25 feet by 16 feet). Instead this is to be a coaching lab. Many, many students at the lower levels do not know how to try to attempt problems and often view a math problem as something that you either know how to do or don't (not the usual trial and error approach to develop understanding and arriving at solutions). The Coaching Lab is meant to develop needed productive struggle/persistence skills, as well as build ability to solve problems. These needed skills were cited by Dr. Uri Treisman of Complete College America at their Chicago fall 2011 meeting. Also, students require a study environment to avoid outside distractions and provide needed support, much as libraries double as study environments, with needed resources, for students at more advanced levels. We use online homework for Math 95, 96, 120, 124, 126, 127, and 132 (all courses currently taught mainly by GAs and PTIs). The Coaching Lab is eventually meant to provide service for all these courses, once funding and space have been secured. In the meantime, we can initially concentrate on certain courses, such as Math 95, 96, etc. and include some of the coaching sessions of the above course redesigns in the anticipated Coaching Lab, which would be cost effective, whereas using an instructor to meet three additional days in a teaching computer facility double costs and is too expensive if tried for a large number of sections; also securing a large number of teaching computer facilities is impossible.

The President and former Provost Bowers have shown great support for the Emporium/Coaching Lab, providing 60 new computers for the eventual lab. The main problem is that we have not been able to secure needed space from UNLV's Space Committee. Our initial attempt near the end of fall 2011 failed, partly due to short time table to get the needed space, and with the suggestion to use our small computer lab CBC C323, which is currently in use for higher level statistics students, computation mathematical students, etc. Near the start of 2012, the staff and I worked on a plan to squeeze 50 computers into the small CBC C323 space (approximately 25 feet by 18.75 feet, almost 470 square feet). In pursuing the set up, we were informed that significant/costly cooling issues were the main problem with that plan. Therefore, at the end of the spring 2012 semester, we again tried to obtain the needed space, emphasizing that we would try to make such a Coaching/Emporium Lab work even outside the main campus (e.g. the Paradise Campus, or any space being purchased/rented for instance on

the east side of Maryland Parkway). All attempts to secure the needed space so far have failed. My understanding is that the Space Committee wants us to first pilot, despite the success of the course redesign above, Emporium Labs are now being used at a number of institutions, and it is often emphasized to us not to pilot at meetings regarding Math 95/96. In any case, we are gathering information through our Math 95/96 course redesign with lab.

For fall 2012, we are running a "mini" (in terms of size and hours available) Coaching Lab in CBC C323 for about four hours daily Monday through Thursday. (CBC C323 is in use for course specific tutoring on Fridays and is in use during other times for the statistics and computational math courses).

We plan to continue to pursue our request for the needed space to set up the needed Coaching/Emporium Lab.

5) Department Tutoring Clinic:

Separate from our Coaching Lab attempts, we have a very successful tutoring clinic that mainly suffers from lack of space. The main area is about 16 feet by 25-26 feet and we have added an adjacent office with a few computers to help tutor with the online homework. The Tutor Clinic serves Math 95, 96, 120, 122, 123, 124, 126, 127, 128, 132, 181, and 182 students and is open 8am -5pm on Monday through Friday.

We have pretty high standards when hiring, so that sometimes we have problems with there being enough student tutors for hire meeting our standards. The Tutor Clinic is very successful, partly due to these standards and also that we can micro-manage it in its current location. Therefore, we have not pursued additional space, especially since we are currently pursuing space for the Coaching Lab and have had bad experience when requesting needed space.

6) Drop-in Course Specific Tutoring:

This is an extension of our tutor clinic. We run this every Friday in CBC C323. For fall 2012,

- The gateway algebra courses Math 124 and 126 are scheduled with instructor Bob Ain from 9-10am.
- Math 120, 127, and 132 are scheduled with instructor Gary Phelps from 10-11:30am.
- Math 95 and 96 are scheduled with instructor Christopher Bates from 11:30-12:30.

During fall, we run out of "good" instructors to hire (Clark County is very limited) and so we have the above combinations this semester. During spring 2012, we ran more/finer sections. These are much like problem sessions. Students can come to ask questions, but can also listen to other students' questions that are often from the same course. Some students may not be

far enough along or sophisticated enough to formulate their questions; this added feature is useful for such students.

Also, in the tutor lab, students are likely waiting their turn while questions are answered for another course. One goal here is to have more sessions so that the questions asked by any student are likely to be relevant to those in attendance. The drop-in course specific tutoring does not help toward coaching, which is badly needed, especially for remedial math.

7) Student Worker Presentations:

Our student workers conduct five minute student presentations in all Math 95, 96, 120, 122, 123, 124, 126, 127, 128, 132, 181, and 182 classes between the hours of 8am through 5pm. There are over one hundred such sections and much coordination with instructors involved; so this takes several weeks each semester to complete. A great deal of information is provided, including information about the Tutor Clinic, the Coaching Lab, the drop-in course specific tutoring, the Department finals, information concerning the Academic Success Center, midterm grades, etc., etc.

The tutoring clinic is well established and overcrowded. The Coaching Lab is new and the drop-in course specific tutoring is less known. Our experience with the tutor clinic is that it takes some time for these to become part of the student culture and then are overcrowded. These presentations are useful to get the word out to the students.

8) Department Online Homework:

We require online homework for Math 95, 96, 120, 124, 126, 127, and 132 for some time now, partly because instructor funding for these is currently mostly graduate assistants and part-time instructors (but also initially to avoid costs of homework graders). These instructors have regularly indicated that success in the course is directly related to following through with the online homework.

In the eighteen sections of spring 2012 Math 95,

- The average online homework score was 88% out of those obtaining a B or better,
- The average online homework score was 78% out of those obtaining a C or better, and
- The average online homework score was 46% out of those obtaining an F through C-.

The numbers are almost identical for Math 96. In the twenty-two sections of spring 2012 Math 96,

- The average online homework score was 88% out of those obtaining a B or better,
- The average online homework score was 78% out of those obtaining a C or better, and

- The average online homework score was 47% out of those obtaining an F through C-.

These comparisons further support the need for the Coaching/Emporium Lab, as well as other measures described under duties for a possible professional position through the anticipated Math Enhancement Fee. There is little preventing each student from obtaining an extremely high average on the online homework.

9) Department Placement Testing:

We continue to monitor the Department (DMS) Placement Test.

Old information: An earlier check involved students who took DMS Placement Testing during summer 2010 and the course during fall 2010. It compared those students to all students receiving a letter grade of F or higher in a given course, with comparison being based on those receiving a C or better. For instance, students who took fall 2010 Math 96 and placed into it through the summer 2010 DMS placement test did about 15% better in terms of the percentage obtaining a C or better when compared to all students who received a letter grade of F through A in fall 2010 Math 96.

Similarly,

- Math 120 was almost 5% higher,
- Math 124 was about 19% higher (but only 25 such students took the DMS math 2010 placement test),
- Math 126 was about 6% higher,
- Math 127 was much higher (but only 10 such students took the DMS summer 2010 placement test), and
- Math 132 was much higher (but only involved 1 such student taking the DMS summer 2010 placement test).

The test is primarily an algebra test and therefore especially useful for placement into Math 95, 96, 124, and 126.

Besides the SAT and ACT tests, another department test is available to skip Math 127, to go into Math 181 (first semester calculus). There is additional older information with similar positive results.

During the summer, we looked at spring 2012 students from different classes.

- With the spring 2012 Math 96 students, comparing to the overall percentage of those receiving C or better, those who qualified through the DMS placement test did

approximately 2.3% worse but about 1% better than those placing through the SAT and almost 5.6% better than those placing through the ACT.

- With respect to the spring 2012 Math 124 students, the DMS placement test group performed almost 6% better whereas the SAT/ACT group performed over 7% worse.
- For spring 2012 Math 126 students, the DMS placement test group performed almost 4.3% better whereas the ACT/SAT group again performed worse.

These numbers aren't surprising, as the DMS placement test is mainly an algebra test to place students into Math 95, 96, 124, 126, and to also place students into Math 127 (mostly trigonometry) if they have sufficiently mastered algebra.

- For Math 120 and 127, the DMS placement test group did worse than those qualifying through the ACT/SAT and the Math 120/127 spring 2012 students in general.
- For the 2012 Math 132 students, the DMS placement test group performed over 6.6% better, whereas the ACT group performed much worse and the SAT group performed almost identical (about 0.08% better) to the 2012 Math 132 students overall.

It should be noted that some students qualified for a course more than one way (DMS placement test, SAT test, prerequisite course), so that some are included multiple times.

We are working to also do the same check for spring and fall 2011 students in each of these seven classes.

We instead have overall comparisons of the DMS Placement Test, the SAT, and the ACT, involving students from 2011.

- Using those receiving a C or better in their course, the DMS placement test group performed better than the ACT group (about 6.7 for spring 2011 students, about 5.7% better for summer 2011 students, about 1.4% better for fall 2011 students).
- The comparison of the DMS math placement test and the SAT test have mixed results: DMS placement test about 5.3% better for the Spring 2011 students, down about 5.6% for the summer 2011 students, down about 2.6% for the fall 2011 students.
- For the spring 2011 students in Math 96, 120, 122, 124, 126, 127, 128, and 132, those qualifying through the DMS placement test performed about 7.7% better (looking at C or better) than all such spring 2011 students.
- For the summer 2011 students in the same courses, those qualifying through the DMS placement test performed about 3.3% better (looking at C or better) than all such summer 2011 students.

- For the fall 2011 students in the same course, those qualifying through the DMS placement test performed about 13.9% better (looking at C or better) than all such fall 2011 students.

We will be doing a similar overall comparison for 2012. Again, it should be noted that students sometimes qualify through multiple methods (prerequisite course, DMS placement test, ACT, SAT), so that some students are included in multiple categories.

Our Undergraduate Coordinator, Dr. Carryn Bellomo, has worked on an updated department placement test that we plan to also offer. She has collected much data through the relevant courses during previous years. She plans for this to also be offered through a computerized form in which slightly different tests are generated and results are immediately provided. We have been waiting on funds from a student fee to move forward on this last part. We are also learning through the issues with the Emporium/Coaching Lab that we are likely to run into significant cooling issues.

Most UNLV students below trigonometry but above Math 96 take Math 124 or 126, not Math 120, and so the emphasis has been on Math 124 and 126. (UNR does not offer Math 124.) Our Math 120 needs to be overhauled to better match the topics at UNR and the others in NSHE and to be at the college level, especially being one of only two universities. Once the course has been appropriately overhauled with better topics and to be at college level, then we can better place students through additional methods.

10) Math 95/96 common testing:

Math 95 and 96 are through Educational Outreach, are self-funded, and are therefore taught by PTIs. This has the huge advantage that the Math 95/96 sections can be taught with smaller class size than the sections of Math 120, 124, 126, 127, and 132, most of which are taught by graduate assistants (resulting in excessive loads for our graduate students). All seven of these courses are micro-managed, including syllabus frames for each such course, three tests, online homework, etc. Our Undergraduate Coordinator, Dr. Carryn Bellomo, has developed common tests for all sections of Math 95 and 96 that lead into the Department Final, as does the online homework (the common tests for Math 96 were developed this last spring). She extracts assessment information from data reports, turned in by the instructors. This set up allows her to compare whether students who get a particular problem type correct on an exam also get it correct on the final, etc. This assessment information will likely be helpful in making course improvements. Math 96, 126, 127, and 132 have Department Finals, while we work to have similar finals for Math 95, 120, and 124 (which is needed for assessment, etc.). There is not enough auditorium space available to us to also have department finals in these courses (these seven courses have a total enrollment of around 4,000 students just during the fall).

11) Course progression from Math 95:

Fall 2011 Math 95 consisted of a cohort of 1,004. Of these, 334 (approximately 33%) are not enrolled in any UNLV fall 2012 classes, and in particular, are not taking any of the gateway math courses. In addition, of the 1004 students, a sizable number did not have the background for Math 95 and almost all such students do not make it to a gateway math course.

Math 95 is UNLV's lowest level math course and it is the default course to place students into, regardless of their placement score. In fact, a student can enroll into Math 95 without any placement score. 595 of the 1,004 students had a SAT score in place.

- a. 165 of the 595 students or approximately 28% of the 595 students had a SAT score of 390 or less (10 had a SAT score below 300). A SAT score of 400 places a student into Math 95 at CSN.
- b. An additional 30 students had no SAT score and an ACT score below 16. An ACT score of 16 places a student into Math 95 at CSN.
- c. 228 students had neither a SAT nor ACT score.

Not surprisingly, the 194 Math 95 students in groups (a) and (b) are not being served by regular Math 95, and the plan is to have these students take the Math 95 course redesign with lab (see above), once space is found for the lab.

Only 16 students from group (a), or less than 10%, made it into a gateway course (Math 120/122/124/126/128) during the calendar year 2012. Only 19 students from the 194 students in groups (a/b), or again less than 10%, made it into such a gateway course. In comparison, 196 students total in the cohort (approximately 20%) made it into a gateway course during the calendar year 2012. The 20% is misleading in that it includes the students no longer enrolled at UNLV and a sizable number of students without the background to succeed in Math 95. At the same time, the Math 95 students need more than the classical lecture class, such as the Coaching Lab incorporated as part of the course.

It is unknown how many of the 228 students in (c) would be in group (a) or (b) if they had taken the SAT or ACT (possibly 28%, possibly most, etc.). Fall 2013 UNLV students will have such scores, which is important to place students into Math 95 course redesign with lab.

Also, of those 194 students in groups (a/b), only 112 are taking six or more credits during fall 2012, so that 82 of the 194 (over 42%) are taking less than 6 credits (1-5 credits or no classes) at UNLV during fall 2012. The 42% may hint that these students in groups (a/b) need help across the board if they are to eventually obtain sophomore status.

Of the 1,004 fall 2011 Math 95 cohort, 359 made it into Math 96 during the calendar year 2012 while 196 made it into a gateway course in 2012. Some of the 1,004 are in Math 96 during fall 2012 and have not had a chance to move on to the gateway course, while others may have taken our placement exam to move on to a gateway course. In any case, the main drop is from Math 95 to Math 96. As indicated above, a sizable number would not normally place into Math 95 and the Math 95 redesign with lab is needed. Also, as mentioned above (see item #8 above), Math 95 students receiving C or higher perform much better on the online homework than those receiving F to C- (recall the comparison for spring 2012 Math 95 was 78% compared to 47%).

The Coaching/Emporium Lab, the Math 95 course redesign with lab, and intervention based on regular reports of students not maintaining a 78% online homework score are needed for success, especially at this level (mid-term grades are typically too late to catch up in math courses and biweekly intervention is needed). These are also badly needed to lower the number of repeats (53 of the 194 in groups (a/b) repeated Math 95 one or more times).

12) Course progression from Math 96:

Fall 2011 Math 96 consisted of a cohort of 674 students. Of these, 317 or approximately 47% made it into a gateway course (Math 120/122/124/126/128) during the calendar year 2012. The spring 2012 Math 96 course redesign with lab pilot had much better results (see item #1 above) which is not surprising, with the huge difference in homework scores between those receiving C or better and those receiving F through C-.

As mentioned in #8 above, the average spring 2012 Math 96 online homework score was 78% out of those obtaining a C or better, whereas the average online homework score was 47% out of those obtaining an F through C-.

The students can get help through our tutoring lab, but they also need to develop their ability to identify and solve problems through the anticipated Coaching/Emporium Lab and the Math 96 course redesign with lab. Further, intervention using regular reports of students not maintaining a 78% online homework score is needed for success; especially at the remedial level (mid-term grades are too late).

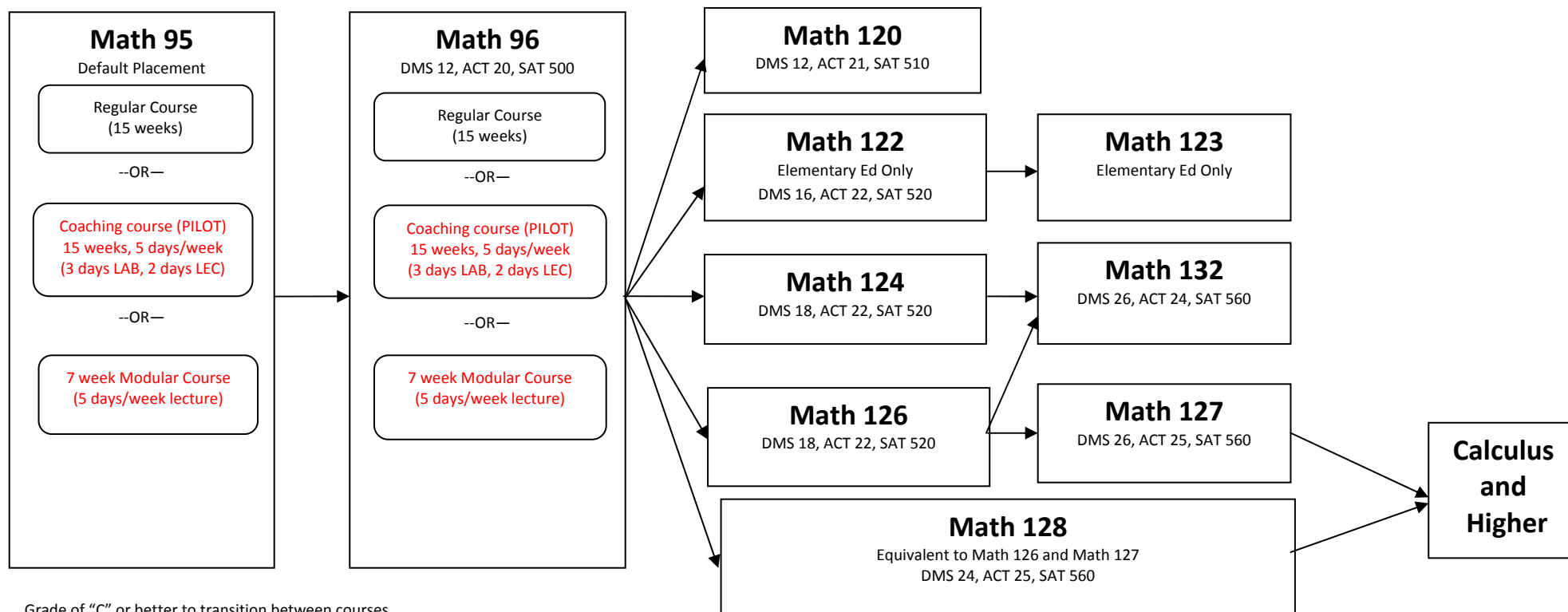
13) Review of Common Core Standards:

Our Undergraduate Coordinator, Dr. Bellomo, has recently started working on a comparison of the objectives in Math 96 to the common core state standards just recently adopted by CCSD. Nevada has recently adopted the Common Core Standards in Mathematics. There is currently no known comparison of these standards to remedial or college level mathematics, although the common core document does indicate what material is designated as 'college prep.' Dr.

Bellomo is working on a comparison of the common core to our Math 96 course to determine alignment.

There are a number of items, not reported here, some of which is old information from past reports. We still run mandatory instructor meetings during the week before instruction; in addition to the syllabi frames for these courses (see item #10 above) instead of allowing PTIs and GAs to produce their syllabi, a detailed MOU is gone over and initialed line by line with the PTIs and GAs; etc.; etc. We continue to have common grading following each Department Final. We are also hiring Dan Asera and Sarah Sikora for a number of items relating to these courses and the instructors. This report still provides a "short" summary.

DMS: UNLV Department of Mathematical Sciences



SUPPLEMENTAL ASSISTANCE:

- **Math Tutoring Clinic** (traditional tutoring open 8am-5pm M-F)
- **NEW PILOT: Coaching Lab** (open 10am-2pm M-R)
- **Course Specific Tutoring** (F)
 - 9:00am-10:00am Math 124/126
 - 10:00am-11:30am Math 120, 127, 132
 - 11:30am-12:30pm Math 95/96

University of Nevada, Reno – Mathematics Remedial Report

UNR has several changes to report involving placement cutoffs, remedial courses and Stretch first-year college-level math courses, as well as new data on pilot projects in these areas.

Stretch Math 120

In fall 2011, and again in spring 2012, UNR piloted two sections of Stretch Math 120. Students in the class met the prerequisites for Math 96 (ACT Math 19-21, SAT Math 470-490, or Accuplacer EA 76-CLM 54). With a class size of 25, these classes allow more intense group work and interaction with the instructor. Both semesters, we offered one section with three contact hours per week, and one with four contact hours, to allow more review to be integrated into the class. The data demonstrated that the students in the four hour format benefitted from this extra time; the four contact hour sections allowed these weaker students to perform as well as students in our regular Math 120 classes who meet the cutoffs for Math 120/Math 126 (ACT Math 22, SAT Math 500, or Accuplacer CLM 55).

Data from Stretch Math 120 (fall 2011 and spring 2012)

	ABC	D	FW	Number of students
4 day per week format	97%	3%	0%	43
3 day per week format	90%	5%	5%	34

We expect that some of the higher performance in the four-hour format was due to self-selection by more motivated students, but the test scores indicated higher learning in these classes. On the basis of the successful pilot, we have adopted the four-hour, small class model for Stretch Math 120 classes in fall 2012. We are developing a separate catalog description for this Stretch Math 120 format to be implemented in fall 2013, to facilitate enrollment of all eligible students during advising and enrollment. The class will be structured as a three credit Math 120 course with a one credit developmental co-requisite, for students with ACT Math 19-21, SAT Math 470-490, or Accuplacer EA 76-CLM 54.

First Pilot of Stretch Math 126

For the first time in fall 2012, UNR is also piloting Stretch Math 126 College Algebra classes--small classes with five contact hours per week, capped at 25 students. The five-hour format reflects the more algebra-based curriculum in College Algebra, which relies heavily on the developmental material in Math 96. Students were selected for this pilot from those who were enrolled in Math 96 with scores in the ACT Math 20-21, SAT Math 480-490, Accuplacer CLM 30-54 ranges.

UNR Math will add Stretch Math 126 to the catalog for fall 2013, with the cutoffs indicated above, unless the fall 2012 pilot data suggests otherwise. Stretch Math 126 will be structured as a three credit Math 126 course with a two credit developmental co-requisite.

Addition of Math 95 to UNR Remedial Curriculum

After analyzing extensive data on the correlation between placement scores and success in Math 96, UNR has added Math 95 to its curriculum to serve students who need to further strengthen their Elementary Algebra skills before attempting Math 96 or Stretch Math 120 (depending on their major's math requirement). For students meeting the traditional NSHE cutoffs for Math 96 (ACT Math 19-21, SAT Math 470-490, and Accuplacer EA 74-CLM 54), Math 96 functions well as a developmental course; but for too many students with lower placement, our Math 96 as a one-size-fits-all remedial class has been a recipe for repeated failures. Our weakest students will benefit from a course at the Math 95 level to prepare them for either Math 96 or Stretch Math 120, rather than repeated attempts in Math 96.

We have observed, and other organizations such as Complete College America have recently highlighted, that placement test scores alone do not effectively predict success versus failure in Math 96. The traditional NSHE cutoffs used by other campuses would give about a 70% pass rate in our Math 96, but around 400 of our 900 incoming remedial math students would actually place into Math 95 by these cutoffs, whereas slightly over 50% of these are successful at passing Math 96. Hence we have looked for alternative methods to screen the students placed below Math 96, to better determine which ones can succeed in Math 96 without Math 95 first.

Preliminary examination of fall 2011 data indicates that high school GPA at graduation, in combination with test scores, offers a more predictive tool than test scores alone for placing students in the Math 95/Math 96 sequence. Further analysis is underway to set a new cutoff, based on this combined data. We believe that this will allow several hundred more students with the potential for success in Math 96 to start there, while still tracking those students who need to take Math 95 first into this course.

Alignment of Late Start Class Start Dates with First Exams

For several years UNR has offered Late Start Math 96, 120, 126, 127, and 176 classes each term. The classes start around a month late, and then meet at a more accelerated pace to make up the contact time and finish by the end of the term. These classes offer students who for any reason are enrolling late (or making late major decisions affecting their math requirements) the opportunity to stay on track toward timely completion. But we recently have been tailoring the Late Start classes to begin after the first exam grades are returned to the students in the regular courses. Students whose first 100-level math course gets off to a rocky start have been allowed

to retreat into a Late Start class to “redo” their class from the beginning, with the necessary tutoring and time commitment in place, once they have learned what is required. This semester, over 200 students have enrolled in these Late Start classes. This semester’s ample data will allow us to study whether this mechanism improves student success in first year courses.

Guaranteeing Availability of Seats in Remedial and 100-Level Math Classes

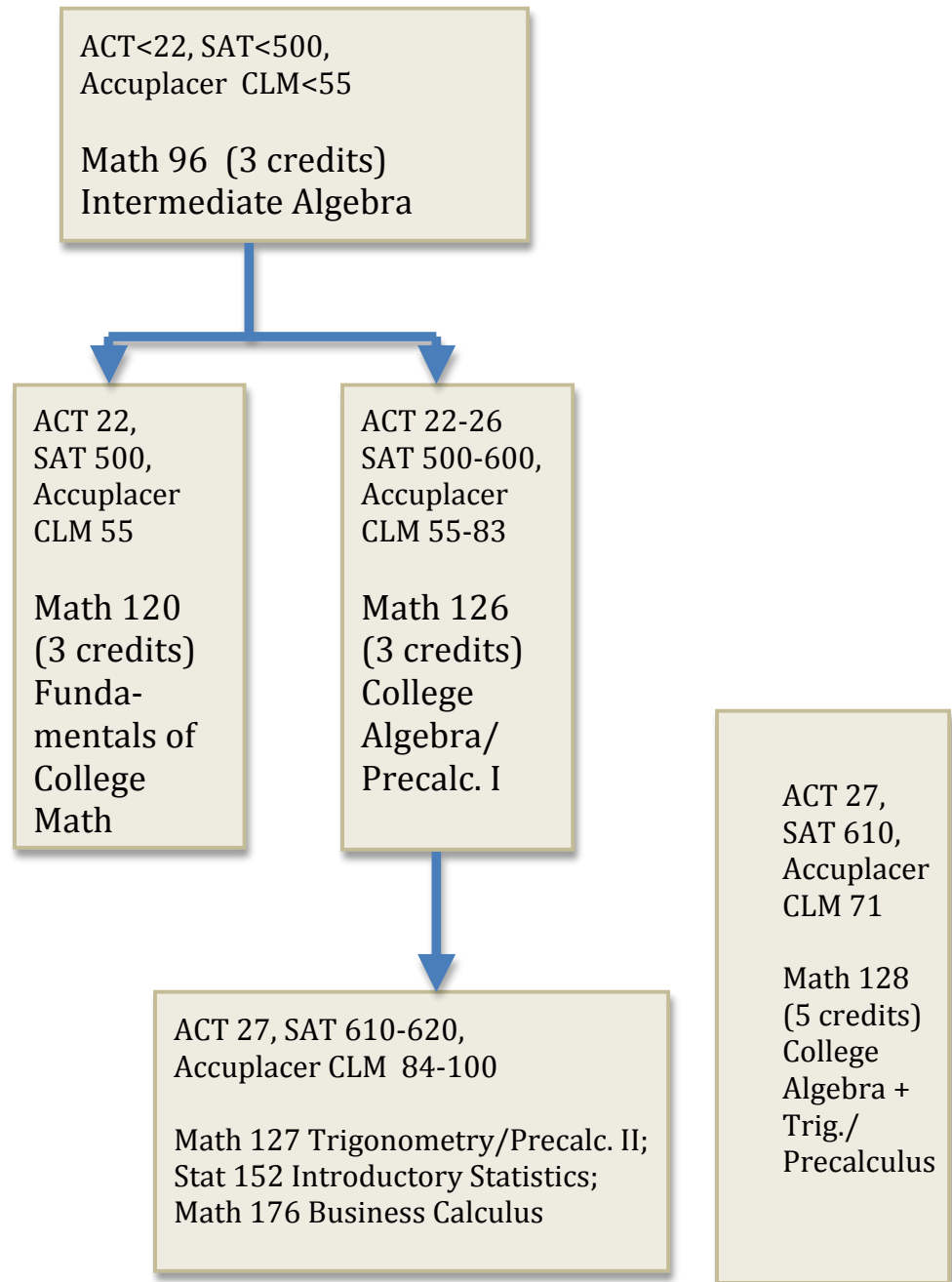
For over six years, UNR had guaranteed availability of seats in remedial and 100-level math classes to all eligible students; if classes fill, we find larger classrooms and/or hire additional instructors, in order to provide the seats needed. Even this fall, when a recent change allowing Core Math credit for Math 126 (making this now the best choice of a first math class for undecided majors) caused an unexpected surge of around 250 more students in this class, we have met the demand. In this case, meeting the demand meant setting a new record for the largest enrollment ever in a UNR class, a College Algebra course of over 450 students. Working closely with the College of Extended Studies, we also provide evening, Late Start, Online, Wintermester and Summer Session options for students with difficulty scheduling their required math classes in the traditional formats.

Placement Cutoffs for College Level Math Courses

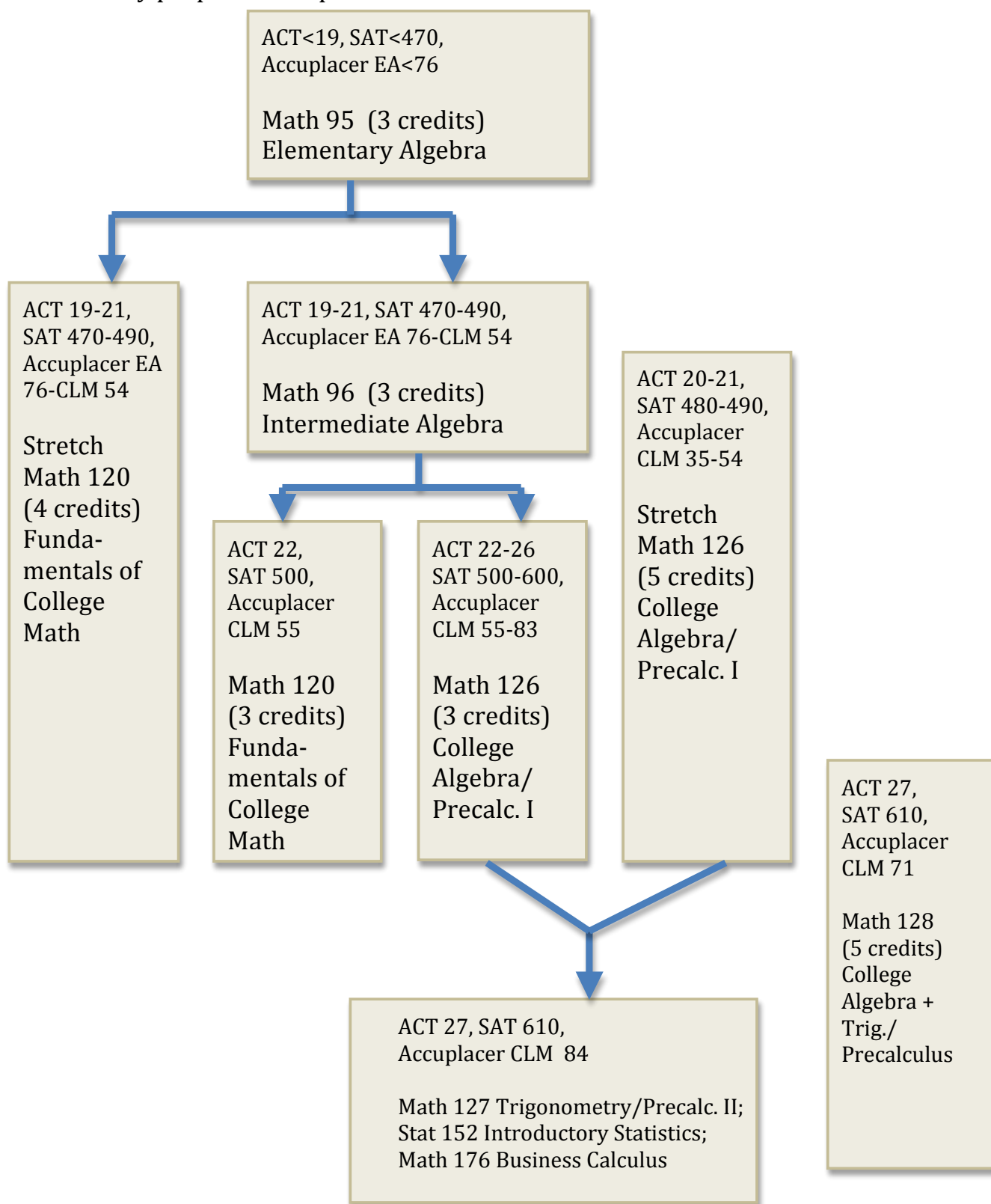
UNR uses primarily ACT and SAT scores for initial placement into Math courses, but students have the option of challenging their ACT/SAT placement by taking the Accuplacer placement test on our campus. As indicated above in the discussion of Math 95 and Math 96, we are looking into the feasibility and effectiveness of using high school transcript information as well as these test scores to determine which remedial math course is most suitable for students below the college level cutoffs.

Finally, let us clarify the UNR position on the Accuplacer CLM score for Math 120 and Math 126. We have considered lowering our Math 120 cutoff slightly to CLM 50, to match that used by TMCC. But we feel that a two-tiered cutoff for college readiness, dependent on majors, is difficult to explain to students (especially undecided students), parents and school districts, and these disadvantages outweigh the potential benefit for UNR’s very few students (numbering under ten per year) in the range CLM 50-54 who are in majors requiring only Math 120. Now, with the availability of Stretch Math 120 for these students, we see more compelling reasons to keep the cutoff the same for a more consistent message about the meaning of college readiness to undeclared students, parents, advisors, school districts, and prospective students in high school.

UNR Current Remedial Mathematics Pathways



UNR Remedial Mathematics Pathways,
as currently proposed and piloted



Nevada State College – Mathematics Remedial Report

Overview

Nevada State College has been redefining our remedial mathematics program since spring 2010. Based upon a comprehensive analysis of the national literature and data on student performance in our courses, a revised program was launched in fall 2012. The essential premise of the redesign is the modularization of course content into 5 week segments as opposed to 15 week semesters. While there are a myriad of advantages to this approach as explained below, the most critical feature is that it allows us to more discretely identify and deliver precisely those fundamental mathematics concepts that students are lacking. Our preliminary data suggest that this redesign is highly effective at assisting students achieve mastery and move on to college level mathematics courses.

Content Modularization

The content modularization is an internal restructuring of the remedial mathematics courses. We have replaced the Math 93/95/96 sequence with a series of 6 modules that run for 5 weeks each. To maintain alignment across the NSHE system, we have established the following content correlation:

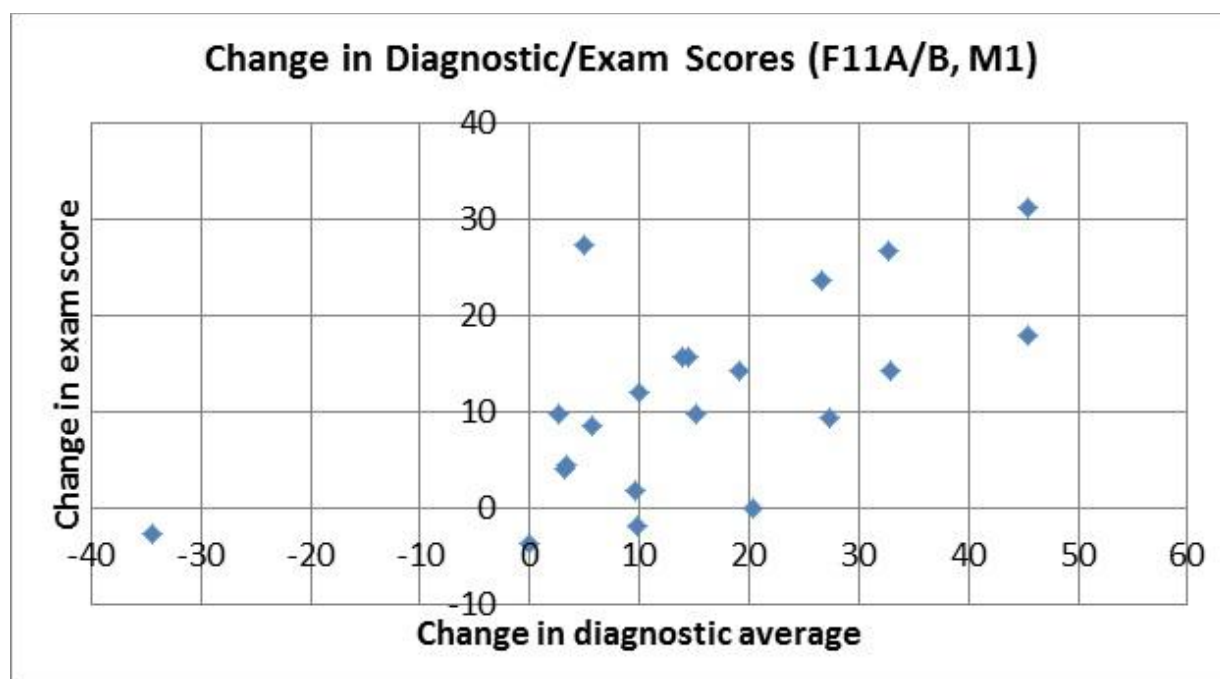
NSHE Course Numbering	Math 93		Math 95		Math 96	
Module Numbering	Module 1	Module 2	Module 3	Module 4	Module 5	Module 6

Furthermore, we have established a system in which students still enroll in classes and receive credit following the normal processes, so that we are able to remain consistent with all of the other institutions. Since each module is 5 weeks long, it is possible to complete the entire remediation in two semesters.

The Benefits of Modularization

The underlying logic of the modularized approach is centered on maximizing student success by ensuring that students receive the appropriate instruction for their current level of mastery. During a normal semester, a student who begins to fall behind in the middle of the semester is likely to continue on a path to failure and ultimately will waste a significant amount of time. First, that student must endure the second half of the semester, which is liable to include content he or she does not understand. Then after that student fails, he or she must repeat the first part of a class that has already been learned. By the time the right content comes around again, the student has already been disengaged for 10 weeks. However, the modularized format allows us to send that student back to repeat the content immediately.

Furthermore, students are able to learn the material much more effectively when it is repeated back-to- back as opposed to waiting several months to return to it. In fact, the data indicate that we are very successful when working with students a second time. The following chart illustrates the improvement of students in their second attempt in the modularized format. The y-axis shows the mean improvement on weekly quizzes among students who are taking a specific module for a second time, and the x-axis shows the increase in points on the final exam. For example, the student marked by the data point labeled “1” exhibited roughly a 45 point increase on the weekly quizzes and just above a 30 point increase on the final exam. Compared to what we have observed in more conventional courses, we firmly believe that these data demonstrate the effectiveness of the program with the “recaptured” students.



The effect of recapturing can also be tracked across modules. The following chart shows the student enrollment in the various modules over the first two semesters:

Head Count by Module/Date						
Module Number	2011-4A	2011-4B	2011-4C	2012-2A	2012-2B	2012-2C
1	142	26		31	6	
2		107	28		25	8
3			89	21	12	28
4				84	34	18
5					54	31
6						40

The highlighted boxes indicate that students who fail a module can be recaptured and put on a track to continue advancing. Although a student may fall behind, their delay is 5 weeks as opposed to 15 weeks. Both of these charts clearly demonstrate the effectiveness of the system we have developed.

Other Changes

Although we are currently only using the Accuplacer exam for placement, we are examining the student performance data more carefully and considering the development of a more discrete placement system to ensure that students are placed in the most appropriate module and do not waste time in a module they do not need. As one component of this analysis, we have found that the quizzes used in the classes are very strong predictors of student success in the modules:

Module 1	Quiz: 70+	Quiz: 70-	Module 2	Quiz: 70+	Quiz: 70-
Class: Pass	0.82	0.15	Class: Pass	0.79	0.33
Class: Fail	0.19	0.85	Class: Fail	0.21	0.67
Module 3	Quiz: 70+	Quiz: 70-	Module 4	Quiz: 70+	Quiz: 70-
Class: Pass	0.63	0.28	Class: Pass	0.72	0.32
Class: Fail	0.37	0.72	Class: Fail	0.28	0.68
Module 5	Quiz: 70+	Quiz: 70-	Module 6	Quiz: 70+	Quiz: 70-
Class: Pass	0.78	0.31	Class: Pass	0.82	0.10
Class: Fail	0.22	0.69	Class: Fail	0.18	0.90

These tables show the correlation between the scores on the first quiz (70+ means above 70% and 70- means below 70%) and whether or not a student passes the entire module. In the coming months, we will continue to analyze these trends and reexamine our placement methods.

We are also in the middle of redeveloping the textbooks for fall 2013. Students have indicated a strong preference for the style of presentation used in our Pre-Algebra textbook (Math 93), so we want to capitalize on this favorable view by extending the textbook series to include both Elementary Algebra (Math 95) and Intermediate Algebra (Math 96).

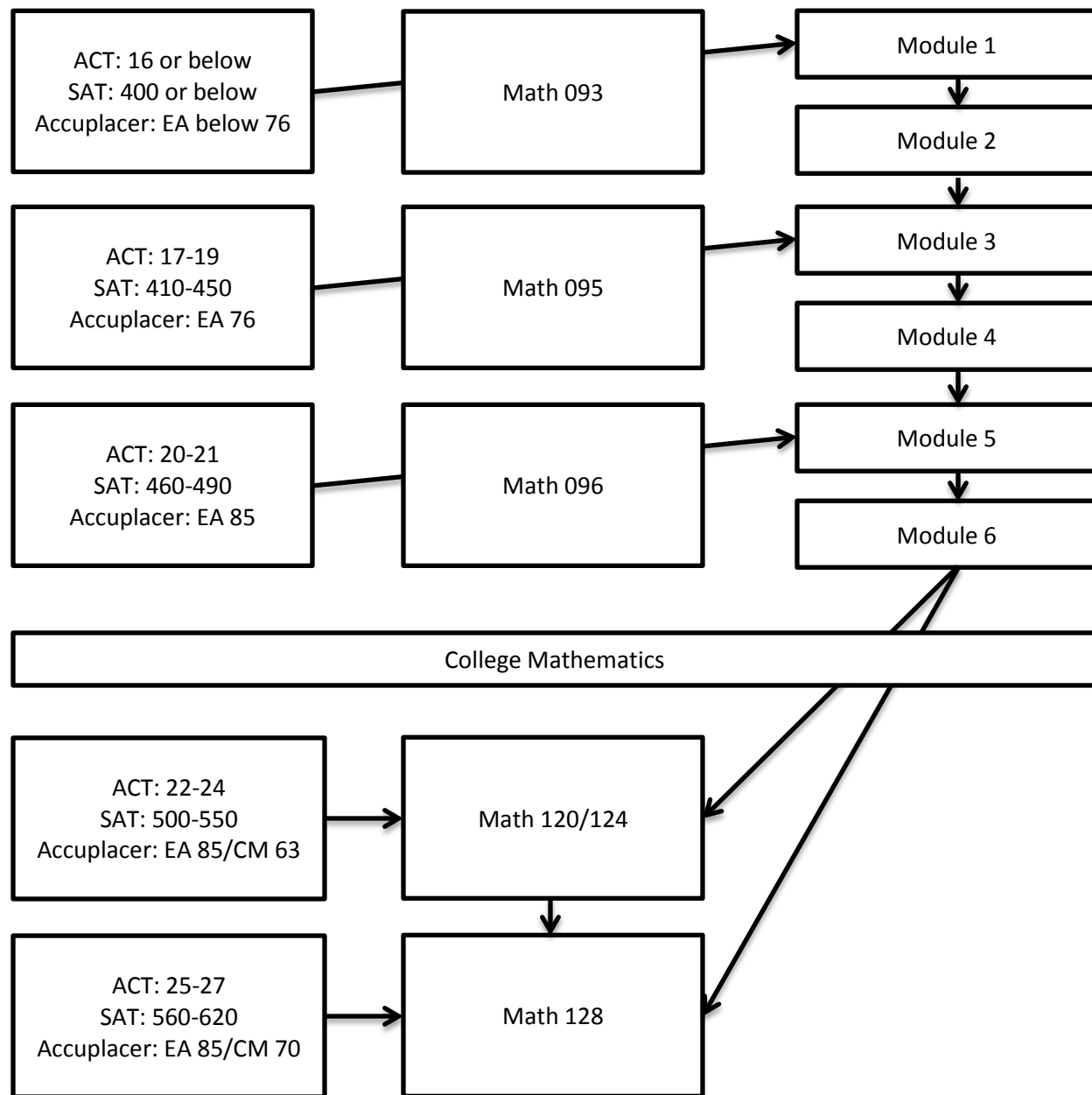
This semester, we are experimenting with using online videos to extend our students' learning opportunities. In the first two modules, we created a collection of pre-lecture videos and worksheets for the students to complete before class. We believe that this will enhance the learning experience and improve the overall level of retention and will be examining the student performance data to assess the overall impact of this approach. These videos can be accessed at the following URL:

<http://www.scsv.nevada.edu/~wonga19/FMath-Videos/index.php>

Finally, we have implemented an incentive program designed to increase semester-to-semester retention by giving bookstore vouchers to students who make progress towards completing their remediation. As the vouchers are only valid for one semester, students are incentivized to take classes in continuous semesters rather than taking a semester off. We will be assessing the impact of the incentive program in the coming months as well.

NSC Foundational Mathematics Program

The NSC Foundational Mathematics Program takes the courses Math 093, Math 095, and Math 096 and teaches them in an accelerated modular format. Each course is two modules and each module is 5 weeks long so that each course can be completed in 10 weeks and the entire sequence can be finished in two semesters. Students take the modules in sequence and each module is individually pass/fail. Once a module is completed, students do not need to repeat it.



College of Southern Nevada – Mathematics Remedial Report

MATH 95, 96 & 97:

Beginning in the fall 2012 term, Math 97, the 5-credit combination of Beginning & Intermediate Algebra was replaced with accelerated, 7-week sections of Math 95 (Beg Alg) and Math 96 (Int Alg).

The accelerated sections of Math 95 will run in Weeks 1-7 and the accelerated sections of Math 96 will be offered in weeks 10-16. The two-week break between the sections allows for grades to be submitted from the Math 95 classes, and the prerequisite (a C or higher in Math 95) for Math 96 to be verified.

The main advantage of the Math 95/96 pairs over the Math 97 classes allows for students to earn credit for the Math 95 classes halfway through the term. A student who failed Math 97 due to poor performance over the second half of the course led to the student repeating the entire course. Now, the same student can have credit for Math 95 and then repeat only the Math 96 material, if necessary.

In nearly all the sections of Math 95 and Math 96, we have begun using the MyMathLabPlus software from Pearson Education. In addition to providing an e-book, online homework and assessments, this Learning Management System provides many interactive tools to help the students understand the concepts in the courses.

MATH 104:

A new course, Math 104 – Applied Math, was established to allow specific AAS and AGS degree-seeking students the opportunity to complete the corresponding Math requirement in a more expedient fashion. Many of those degrees previously required Math 120, and students often had to first progress through two or three semesters of remediation. For a slightly more rigorous option, some AAS degrees require Math 116 -Technical Math. Neither Math 104 nor Math 116 have prerequisites, and students can register for the course without taking the Math Placement Test. The courses are not, however, transferable for credit toward a baccalaureate degree.

MATH 120:

The course prerequisite for Math 120 - Fundamentals of College Math is being dropped from Math 96 to Math 95. As Math 120 is the traditional “Liberal Arts Math,” the content in it is not dependent upon the content in Math 96, but it is relevant to the content in Math 95. This course prerequisite change will occur in the fall 2013 term, when the change appears in the

CSN catalog. Until then, students wanting to bypass Math 96 may do so by achieving an appropriate score on an in-house written Diagnostic Test #3 (DT3), which is an alternative to the ACCUPLACER Math Placement Test. Any student who demonstrates a sufficient understanding of the material from Math 95 by scoring 70% or better on the DT3 is allowed to register for Math 96 or Math 120, beginning in the fall 2012 semester.

MATH 198 PILOT COURSE:

To further expedite the path to Math 120, CSN ran four sections of a pilot course during the summer. Students in the pilot courses met in a computerized classroom for eight hours a week for four weeks, and then were allowed to take an exit exam, Diagnostic Test #3 at the end of the course. Students achieving a score of 70% or better on the DT3 were allowed to register for Math 120 in the fall term. 79% of the students who took the DT3 at the end of the Math 198 course earned a passing score. For a comparison, during the spring 2012 semester, 44% of the students who took the DT3 in the CSN Testing Center earned a passing score.

PLACEMENT TEST PREP:

Students wishing to pursue Liberal Arts, Elementary Education, or a STEM-Track degree are required to either provide sufficient SAT/ACT scores or transfer credit to establish initial placement level. In the absence of those test scores or credits, they are required to take the ACCUPLACER Math Placement Test. Prior to taking the placement test, students are encouraged to visit the CSN Math Department website at <http://www.csn.edu/math> and review the plethora of materials we have linked to that site, including a list of concepts, the cut-off scores, and practice questions.

The attached flow chart indicated the course sequence and corresponding cut-off scores.

Students wishing to challenge the ACCUPLACER results can take one or more of the in-house written Diagnostic Tests, which mirror the final exams for the course prerequisites. For example, Diagnostic Test #3 (DT3) is used to gauge placement into Math 96 or Math 120. Thus, DT3 is modeled after a Math 95 final exam.

CSN INSTITUTIONAL RESEARCH DATA:

The following data indicates the number of students enrolled in Developmental/Remedial MATH courses in the fall 2011 term who subsequently enrolled in a College-Level MATH course by the fall 2012 term.

	Fall 2011 Headcount	Enrolled in College-Level Math by Fall 2012
MATH 91	453	11
MATH 93	559	64
MATH 95	1175	292
MATH 96	1206	946
MATH 97	400	221
MATH 198*	91	24
Totals	3884	1558

- MATH 198 was only offered in summer 2012
- College-level Math includes all Math classes 120 or higher

CSN Remedial Math Sequences

For the majority of AAS and AGS degree seeking students, no placement test, SAT/ACT scores or remedial coursework is necessary. Students can register directly into to the following:

MATH 104 Applied Math	MATH 115 Hospitality Math	MATH 116 Technical Math
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For students seeking MATH 120 or higher, the following sequences apply:

Placement Level Data

Courses

SAT < 350, ACT < 13
ACCUPLACER
- Arithmetic Test < 50

MATH 91 Basic Math

SAT=350-399, ACT=13-15
ACCUPLACER
- Arithmetic Test \geq 50
- Elem Alg Test < 50

▼

MATH 93 Prealgebra

SAT=400-449, ACT=16-18
ACCUPLACER
- Elem Alg Test < 85

▼

MATH 95 Beginning Algebra

SAT=450-499, ACT=19-21
ACCUPLACER
- Elem Alg Test \geq 85
- College Math Test < 65

▼

MATH 96 Intermediate Algebra

*MATH 198 Pilot Course did not require any previous placement data and allowed for a direct path to MATH 120 or MATH 96.

*MATH 198 Pilot Course

SAT \geq 500, ACT \geq 22
ACCUPLACER
- College Math Test \geq 65

▼

MATH 122 Math for Elem Teachers	MATH 124 College Algebra	MATH 126 Precalculus
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Great Basin College – Mathematics Remedial Report



Actions to Date

The fall 2012 semester at Great Basin College (GBC) has a current enrollment of 583 students placed in one of five remedial math courses; Math CMP90Z, 091, 095, 096, or 097. Delivery of instruction for these courses includes traditional live only courses, live interactive video (IAV) courses to multiple receiving sites, and fully online courses. Remedial courses are delivered by both full time and adjunct faculty at the Great Basin campus and all satellite centers. All remedial courses are made available to students during a wide variety of times from early morning to evening in all delivery formats. The exception is Math 091 and Math 097 which are not delivered online.

Online enrollment for remedial math courses now account for 22.0% of all remedial math enrollment at GBC. Electronic instructional materials, such as e-textbooks, video instruction, skill set mastery, and assessment are becoming more prevalent with new emerging technologies. The new learning management system in place at GBC provides an excellent opportunity for implementation of these instructional materials.

Instructional Strategies

Currently, GBC is piloting three programs to reduce the remediation process in mathematics. The first program is allowing students with both a grade of C or better in Math 095 and C or better in ENG 101 to directly enroll in Math 120, thus bypassing the Math 096 course. The second pilot program, CMP 90Z, allows remedial students to enroll directly in Math 116, Technical Mathematics, or Math 120 upon successful completion. This course was first delivered in the summer of 2011 and was offered again in spring and summer of 2012. CMP90Z is currently being offered again this fall semester. Pass rate for the original summer 2011 CMP90Z class was 74% (13/17) and 70% (19/27) for the summer 2012 course. Lastly, a grant funded program provides an embedded course for Math 116 that combines the college's diesel and welding/blueprint programs. Students in this program will be evaluated against a control group from the traditional Math 116 course. Currently there are 29 students enrolled in this embedded program, 15 of which are from the direct path CMP90Z summer 2012 course. All three programs are under current evaluation for their success rates.

The Math 097 course, a one semester, combined Math 095/096 course, is in the second year of offering. The Math 097 course reduces the remedial course enrollment by one semester. Additionally, compressed five week courses in Math 095 and 096 are being offered online to students during the Christmas holiday break.

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Elko, NV 89801
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ELY CENTER
2115 Bobcat Drive
Ely, NV 89301
775.289.3589 • fax 775.289.3599

PAHRUMP VALLEY CENTER
551 East Calvada Boulevard
Pahrump, NV 89048
775.727.2000 • fax 775.727.2014

WINNEMUCCA CENTER
5490 Klunzy Canyon Road
Winnemucca, NV 89445
775.623.4824 • fax 775.623.1812

www.gbcnv.edu

This new academic year has seen GBC undergo a transfer of its electronic learning management system (LMS) from BlackBoard to the Canvas system by Instructure. It is hoped that this new LMS will help with curriculum alignment between remedial and college-level courses and provide a better measurement of learning outcomes not only with math courses, but all Great Basin courses as well.

Tutoring support is provided to all GBC students at the Elko main campus through the Academic Success Center and all satellite centers as well. Live, in-person tutoring and online synchronous voice and video help is available at all GBC locations.

Placement Methods

Current placement for remedial math courses at GBC is aligned with the proposed policy proposal draft for Title 4, Chapter 16, Section 1 of the NSHE Remedial Policy regarding benchmarks for placement into college-level mathematics. A complete breakdown of specific placement scores can be found on the GBC College Math Sequence diagram.

In addition to student placement scores, review of high school transcripts, recognition of highest math course completed, elapsed time since last math course, retake of placement exam, and/or a personal interview with the student by a full time math faculty member when possible are other methods used to help indicate placement in the appropriate math course.

GBC has been coordinating with local high schools administrators about the math programs being offered and the requirements for enrollment in math courses. GBC also provides high school juniors and seniors the opportunity to take the Accuplacer exam and informs students of the placement results from that exam. This has provided valuable information, with regards to future class selection, while still in high school for those students deciding to continue a post-secondary education.

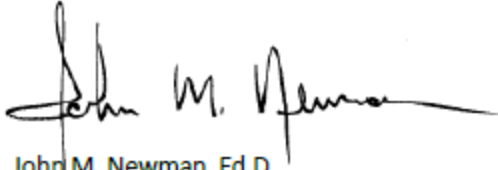
Advisement is a key factor in the correct placement and success for students enrolled in all courses at GBC. The current advisement system at Great Basin is undergoing major changes using the PeopleSoft data base system by the director of admissions and registrar. This new, aggressive advisement campaign looks promising to help insure that students are placed in the appropriate classes.

Moving Forward

Preliminary data supplied by institutional research personnel at GBC report that pass rates for the college entry course, Math 120, were found not to be significantly different from those students that enrolled directly into Math 120 from Math 095 bypassing Math 096 altogether. This would see student enrollment in a college level entry course, Math 120 after only one or two (if Math 091 were needed) semester(s) of remediation. Using this reasoning, the math department at GBC is looking at possibly reinstating the Math 124, College Algebra course which could conceivably lead to the elimination of the Math 096 course entirely and offer a pathway for students to complete their entry level-college course within two semesters. This

tends to support the national recommendation of placing students into redesigned first-year, full credit courses. Discussion about this is ongoing within the mathematics department at GBC.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "John M. Newman". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

John M. Newman Ed.D
Mathematics Department Chairman

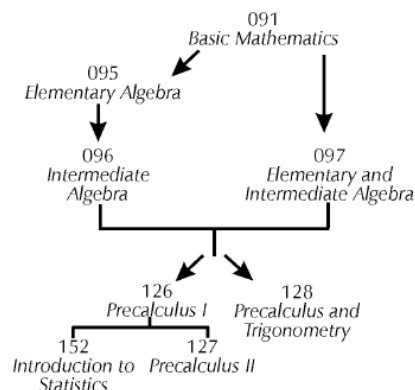
Attachment – GBC Math Sequence

Great Basin College Math Sequence

ACT	SAT	Accuplacer	Accuplacer	Accuplacer	Class
		ARTH.	ELEM AG.	COLL LEV MATH	
≤16	<400	<86			MATH 091
17-18	400-465	≥86	≤62		MATH 095 or MATH 097
19-21	470-495	≥86	63-120		MATH 096
22-24	≥500	≥86	63-120	40-63	MATH 116 or MATH 120
22-24	≥520	≥86	63-120	≥63	MATH 126 or MATH 128
≥25	≥560				MATH 127 or higher requires discussion with mathematics faculty.

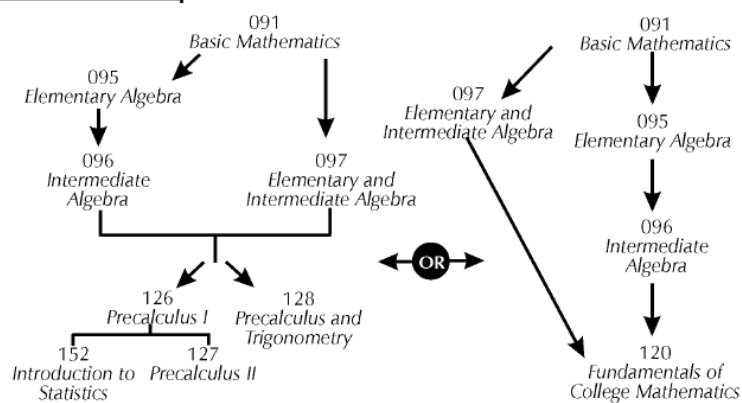
MATHEMATICS SEQUENCE

Associate of Science



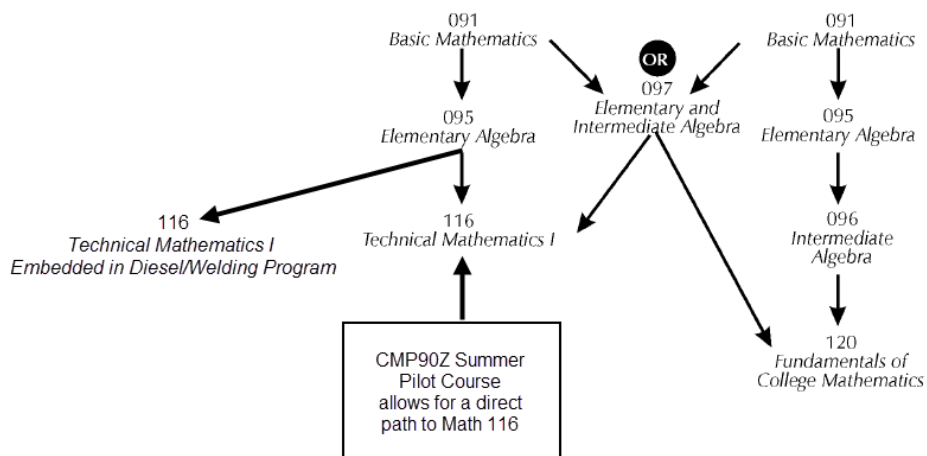
MATHEMATICS SEQUENCE

Associate of Arts



MATHEMATICS SEQUENCE

Associate of Applied Science Associate of General Studies



Truckee Meadows Community College – Mathematics Remedial Report

The following actions were taken to improve retention and to shorten the time needed to complete remediation prior to entering college level math courses:

Math Skills Center:

We are in our fourth semester of developing the Math Skills Center excluding summer sessions. The Skills Center is designed to address the needs of students who place below Math 95. The Skills Center replaced the Math 91 and 93 two semester sequence. Students are placed into the Skills Center when their score on the Accuplacer Arithmetic test is less than 80. The focus of the skills center is to teach understanding of mathematical concepts along with algorithmic skills. Students are exposed to mathematical topics through ALEKS, a Web-based assessment and learning system. Memorization by rote without accompanying conceptual understanding is discouraged and, to this end, small group and individualized instruction is used to augment the computerized tutorials. Successful completion of the skills center program is determined by appropriate Accuplacer scores. Students are able to test in to levels higher than Math 95 if they put forth the time and effort. In fact, for spring 2012 four students jumped all the way to 120 and two students tested into 126.

Our early assessment of the Skills Center indicates we are moving in the right direction. Our experience with MATH 91 and especially MATH 93 demonstrated that individual course retention in developmental courses is a poor measure of success. Even though pass rates for MATH 93 were high, only 1 in 6 students (17%) who passed Math 93 ever enrolled in Math 95. This in part is what motivated the idea of the Skills Center; we suspect that students simply did not view the pathway through the sequence as achievable. The number of students moving on is now substantially higher, averaging 24% over the past four semesters and reaching 30% by the summer of 2012. We also consider the students who are re-enrolling in the Skills Center (approximately 10%) to be successes. Many students who enroll in the Skills Center enter at a basic arithmetic level (MATH 91 in our previous curriculum). The median student in the Skills Center has an Accuplacer AR or AG score in the lower forties which would have barely placed the students into Math 93 using the former cut scores for 93. These students should in general require more than one semester to prepare for Math 95. The fact that they have decided to retake the Skills Center indicates that they feel that the Skills Center offers a valuable service. We also have a number of students in the “Attending TMCC but not taking Math” category. We know that a number of these students were close to passing Accuplacer and intend to continue using the ALEKS system to finish their preparation on their own. We intend to track those students in future semesters.

Fall 2012 will mark the first semester that the majority of students from the Skills Center will be entering college level math having started three to four levels below college level. Historically, only 3% of 091 students and 6% of 093 students ever completed a college level math class. This semester will give us our first clear data about whether or not we have successfully improved the number of students entering college level courses after three semesters.

Mini Sessions:

TMCC experimented with a new course, Math 097, which was designed to teach the content of Math 95 and 096, each three credits, in a single five credit course. This five credit course proved problematic in that it reduced the amount of time available for instruction and heavily penalized students who made it at least half way through but were unable to finish the entire course. Consequently, TMCC moved its focus to the scheduling of mini-sessions. Via mini-sessions, students are still able to complete the developmental sequence in one semester. Both Math 95 and Math 96 are offered as seven week courses in a double time block together in one semester. The mini-session also allows students who are unable to complete the entire sequence to still obtain credit for Math 95. We have also used mini-sessions for college level courses and plan to offer other combinations such as Math96/Math120, Math96/Math126, Math126/Math127.

Use of Technology:

Individual instructors continue to experiment with different formats and technology to improve success rates in developmental class. For example, one instructor is separating the course into two parts: skills-based learning using ALEKS and understanding-based learning using interactive groups.

Online Courses:

Since success rates for remedial math classes offered online average approximately ten percentage points lower than in class instruction, we are continuously testing different strategies to improve success. We are temporarily, if not permanently, phasing out Math 95 online and are strongly focusing on improving the pass rates for Math 96. We moved from 12 online developmental sections for fall 2011 (which includes some Math 95 sections) to five online sections in the fall of 2012 (all Math 96). As of spring 2012, stringent requirements are now imposed on these students. These requirements are:

1. The student has not dropped or failed the class before, or the student has a minimum GPA of 3.0.
2. The student has a grade of A or B in the prerequisite class, or a qualifying ACCUPLACER math, ACT math or SAT math score, taken within the past two years.

3. The student has a minimum ACCUPLACER Reading score of 86 and a minimum ACCUPLACER Essay Sample score of 5 (or a minimum score of 440 on both the SAT Reading and Writing tests, or a minimum score of 18 on both the ACT Reading and Writing tests), of a C or higher in English 98R, taken within the past two years.

Different teaching techniques for these online courses are also being explored. Some instructors are using MyMathLab and others are using ALEKS with increased assessments and stricter progress requirements. Another instructor has introduced his own instructional videos in addition to ALEKS.

Common Assessment:

A few Math 96 full-time instructors have been working diligently since spring 2011 to develop common final exam questions in order to reduce inconsistencies and assure high standards among the many sections offered as well as to assess the effectiveness of instruction. Some faculty members continue to explore the creation of a common final.

Tutoring and Learning Center:

The TMCC Tutoring and Learning Center (TLC) exists to support the institution in its mission to improve the quality of life for its students. In this effort, the TLC staffs its inviting environment with well-trained tutors to help students become independent learners for academic success. Tutors are trained to create a positive learning experience, clarify content and help students to attain higher academic achievement. For fall semester 2011, over 1300 students took advantage of the TLC. This represents approximately 11% of the student population. The average number of visits per student this semester was 5 times. Of the total number of student visits, 51.5% of the tutoring was in mathematics with approximately half of those seeking tutoring in developmental math (095 and 096). Assessment data from the TLC shows that students who use the TLC are retained at a higher rate (+9-11%), persist at a higher rate (+16-19%), and earn higher grades on average (+0.25 points) than those TMCC students who do not use the tutoring center. Our survey results show we have helped to improve students' overall understanding of the subject. In turn, this improves their confidence in their academic skills.

Summer Bridge Math Academy:

The Math Academy was piloted as part of the 2012 Success First Summer Bridge Program. It added a "math track" to the established program, with 71 students in four sections participating in a math-based curriculum. As a new track in the Summer Bridge, the Math Academy was constrained to 5 weeks, which precluded offering an established math course as is done in the English track (summer math courses are 7 weeks). Based on previous Summer

Bridge cohorts, the majority of incoming participants were expected to be placed in Math 95. Major goals of the Math Academy were to:

1. Enhance the math skills of 095 and 096 ready students in order for them to be better prepared for their fall math class at TMCC
2. Increase the persistence and retention rates of Math Academy students
3. Enhance students' interest in mathematics and the sciences and ultimately, keep them on track to complete a degree in math or science
4. Enhance the students' appreciation of mathematics and applied mathematics

The curriculum uses hands-on activities and computer-based exercises (using MyMathLab software) to practice specific math skill objectives. It was designed to strengthen foundational understanding through the application of multiple skills while solving a problem. Long term tracking of student persistence and retention is needed to fully evaluate the impact of the Math Academy. The Pre- vs. Post-Test comparison showed significant growth in the targeted skills, which were chosen to establish a foundation for success in Math 95 and 96. The survey data suggest some increase in student interest in STEM careers and there seemed to be improvement in student confidence with math.

Adjustments to Cut Scores:

Cut scores are continuously analyzed to determine whether or not they are producing the desired improvement in retention. In 2011-12, an analysis indicated that success in Math 95 was more dependent on Accuplacer arithmetic scores than on elementary algebra scores. Consequently the elementary algebra score was dropped for Math 95 in favor of only the arithmetic score. Another change made recently was an adjustment to the NSHE standardized Accuplacer CLM (College Level Math) cut scores for Math 126 and 120. For Math 126, a student with a CLM greater than or equal to 50 and less than 63 was found to have a 74% chance of passing on the first try. For Math 120, a student with a CLM greater than or equal to 50 and less than 63 had a 81% chance of passing 120 on the first try. Thus TMCC submitted a request to NSHE to revise the cut scores from the current system CLM 63 for both Math 120 and 126 to CLM 50 for Math 120 and CLM 55 for Math 126. The change was approved by then Vice Chancellor Nichols and implemented for fall 2012.

Test	Raw Score Range	Course Placement
ACCUPLACER Arithmetic	20 – 79	MATH Skills Center
	80 – 120	MATH 95, MATH 108, CUL 245
ACCUPLACER Elementary Algebra	76 – 120	MATH 96,, MATH 106
ACCUPLACER College Level Math	20 – 49	MATH 96, MATH 106
	50 – 83	MATH 120
	55 – 83	MATH 126
	84 – 100	MATH 127, STAT 152
	70 – 100	MATH 122, MATH 123, MATH 128
	84 – 100	MATH 176
	101 – 120	MATH 181
SAT		
	400 – 460	MATH 95
	400 – 460	MATH 95 Online (minimum score of 440 on both the SAT Reading and Writing tests)
	470 – 500	MATH 96
	470 - 500	MATH 96 Online (minimum score of 440 on both the SAT Reading and Writing tests)
	500	MATH 120, 126
	560 – 610	MATH 127, STAT 152
	620	MATH 122, MATH 123, MATH 128, MATH 176
	630	MATH 181
ACT		
	17 – 18	MATH 95
	17 – 18	MATH 95 Online (minimum score of 18 on both the ACT Reading and Writing tests)
	19 – 21	MATH 96
	17 – 21	MATH 96 Online (minimum score of 18 on both the ACT Reading and Writing tests)
	22 – 24	MATH 120, 126
	25 – 27	MATH 127, STAT 152
	25 – 27	MATH 122, MATH 123, MATH 128
	27 – 28	MATH 176
	28	MATH 181

Another change was made to allow unlimited tries spaced a minimum of four weeks apart on the Accuplacer, as long as a student has not yet started the math sequence. This change was made in order to allow students to review and prepare themselves to enter the math program. Prior policy limited students to a maximum of three tries within a two year period on the test, but we found that students entering the skills center had previously taken the Accuplacer anywhere between one and three times, thus preventing them from further placement into Math 95. Note that prerequisites for any math class are valid for up to two years.

Stretch Courses:

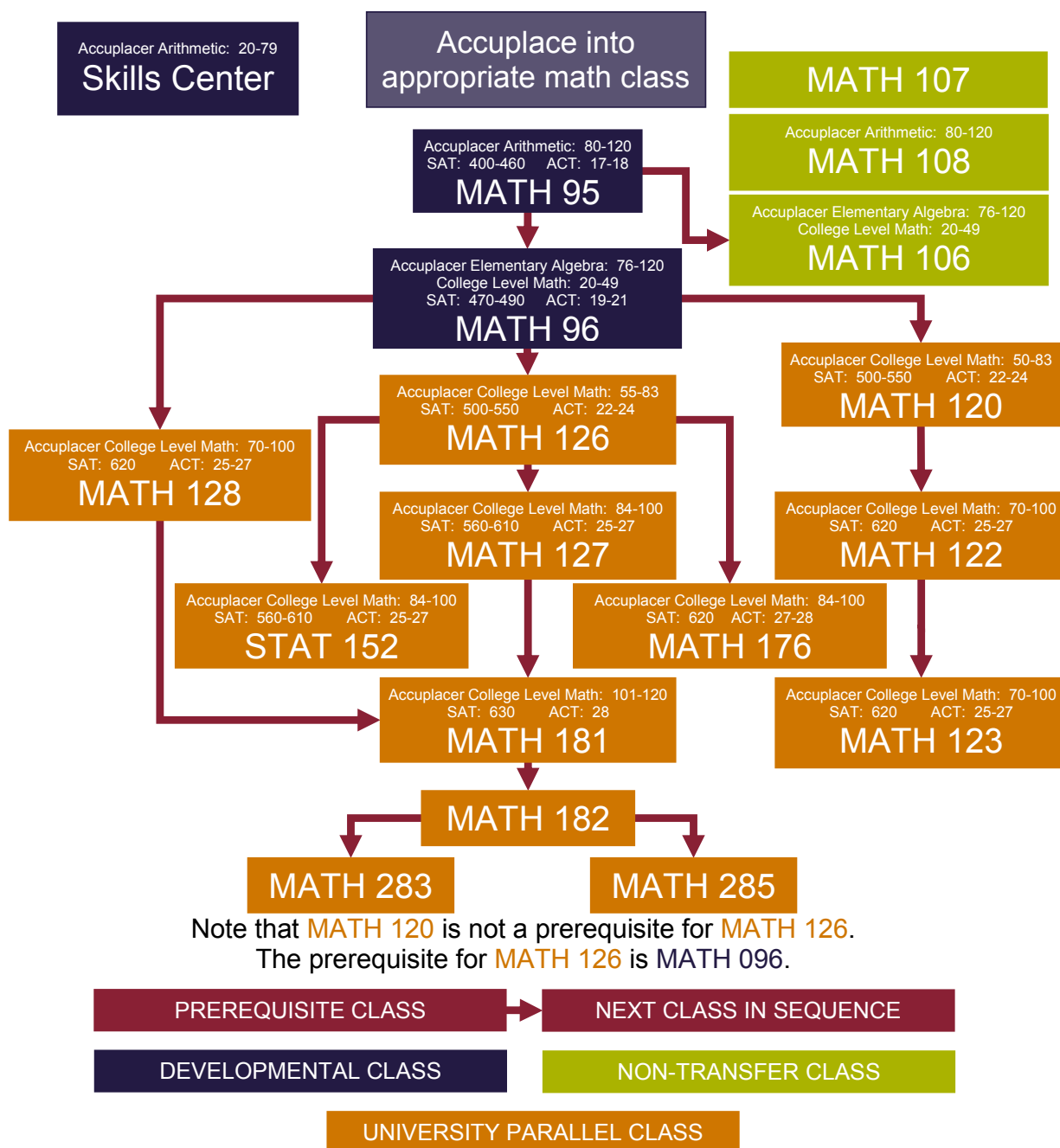
During fall semester 2011, one faculty member piloted a version of a Math 95/92 stretch course as a pathway into Math 120. The pilot course covered everything in math 95 as well as a few

additional topics. These included scheduling, fair division of goods, linear programming, basic rational expressions, voting theory, and graph theory. After this one semester course students then took Math 120. Under the traditional route students would take Math 95 then Math 96 and then Math 120. The pass rates on these courses are roughly 60%, 50% and 70%. That means a student has roughly a 21% chance of passing Math 120 in 3 semesters if they start at Math 95. In the pilot 52% of the students completed Math 120. The pass rate of these students in Math 120 was 80%, so those students who reached Math 120 had a higher pass rate than other students. The pass rate for the pilot course itself was 63%, for the traditional route only 30% would have completed the developmental sequence.

TMCC has scheduled pilot stretch courses in Math 126 and Math 120 for spring semester 2013. These stretch classes will pair the traditional three credit courses with a Math lab (Math 92). Student who are at the top 1/3 of the Math 96 placement range can opt to select the 92/120 pair or 92/126 pair rather than complete the full Math 96 course. Math 92 will be either front loaded or integrated in the pairing so that developmental deficiencies can be completed during the same semester. This pilot is being offered as a potential approach to shortening the developmental to college level pathway.

Career Pathways:

The pathway for the Associate of Science and Associate of Arts programs is via the Math 95 to 96 to either Math 120 for liberal arts or Math 126 for STEM programs. Among career and technology programs, the Applied Industrial Technology programs have adopted Math 108 Math for Technicians as their requirement. Math 108 requires a placement into Math 95 or out of the Skills Center. All of the AS and AAS options in Computer Technology also follow the STEM pathway. Some Health Science programs utilize specialty math courses such as Math 100 Math for Allied Health Programs and Math 105R Math for Radiological Technicians. These courses have no prerequisite math requirements. Math 106 Geometry is also taught for career programs. It requires a prerequisite of Math 95 or test scores equivalent to placement into Math 96. Nursing and Veterinary Technology require Math 120 or higher while Dental Hygiene has selected Math 126 for their degree. The TMCC math flowchart on the following pages outlines the prerequisite sequences from developmental math to college level math.



Mathematics Remediation Report

Western Nevada College

We have implemented three new pathways for students who place into remedial mathematics:

- College-level (general education/liberal arts) math without intermediate algebra.
- A new, self-paced remedial mathematics review course designed to allow students to place into college-level courses after as little as one semester.
- Accelerated (8+8) sequences designed to allow students to complete remediation, and possibly college level math, in one semester.

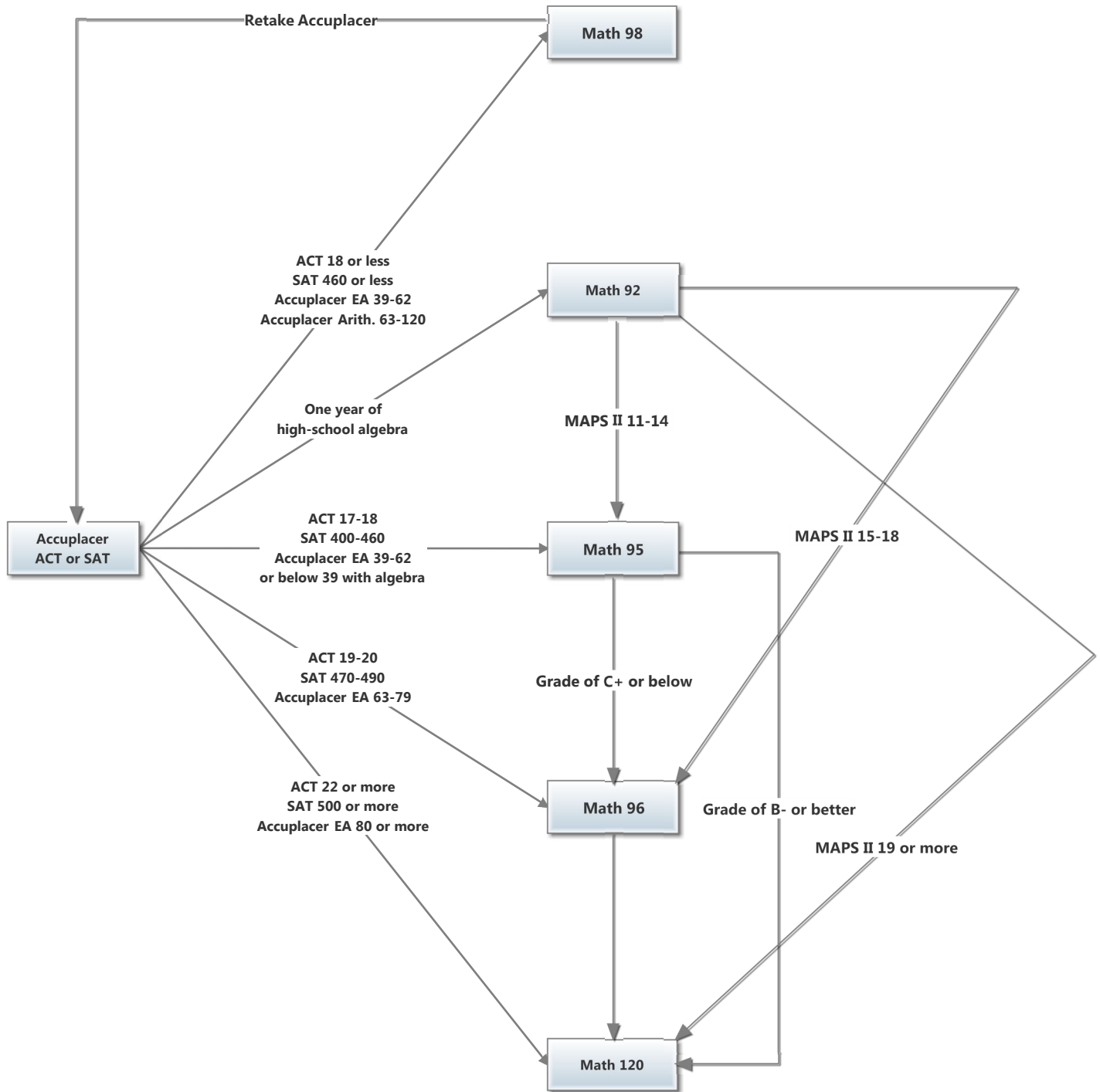
In addition, we continue to offer the Algebra Review (Math 92) as a week-long “boot camp” for those who have learned algebra, but need a quick refresher.

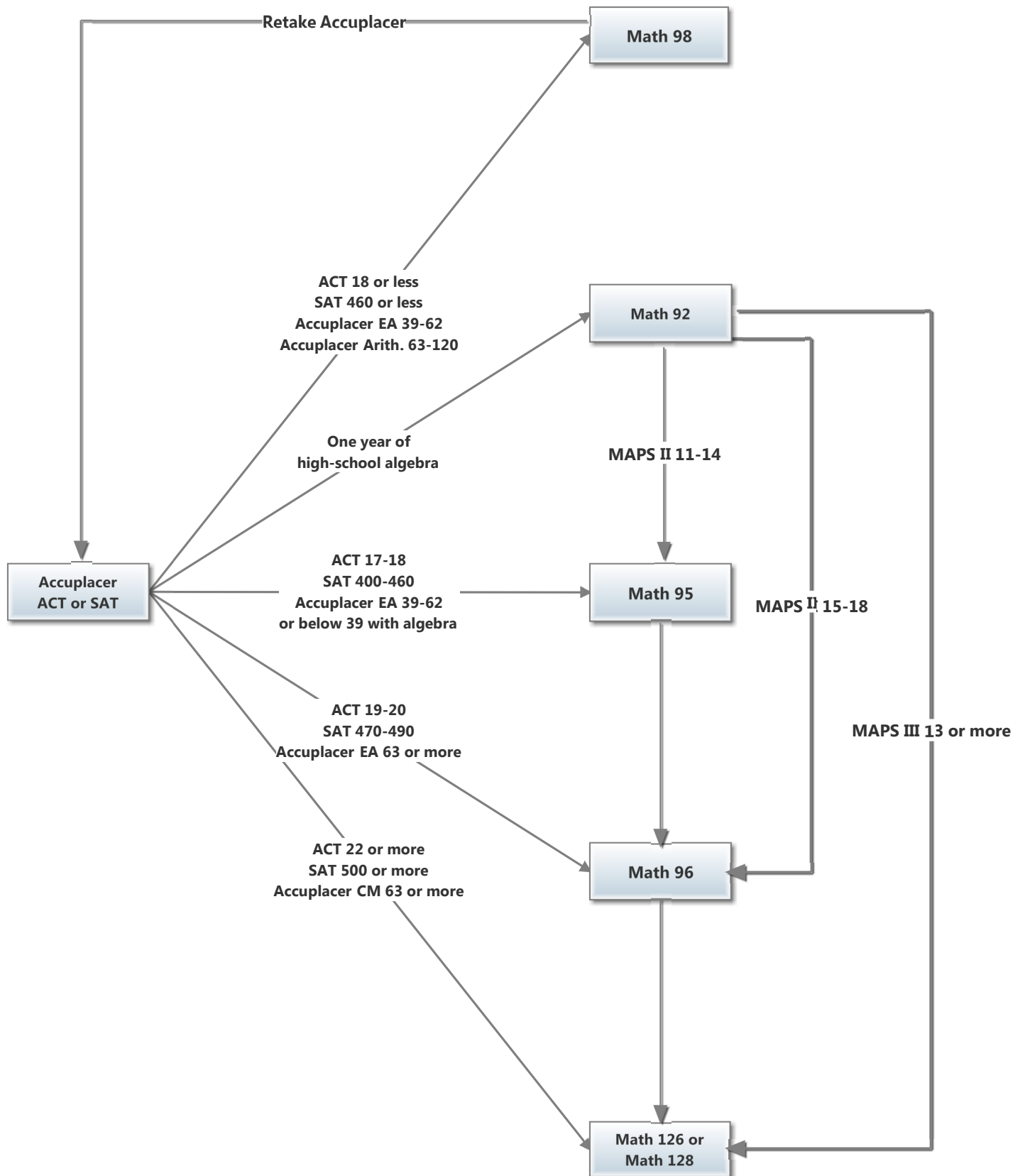
Students seeking general studies or arts degrees can take their college level math course (Math 120) after beginning algebra, if they achieve a grade of B- or better. In addition, students scoring high enough on the Elementary Algebra section of the Accuplacer placement test may take Math 120 without any required score on the College Math section of the Accuplacer. This was implemented during the Fall 2012 semester.

We have designed a Developmental Mathematics (Math 98) course to give students a computer-based, self-paced review of pre-algebra, basic algebra and intermediate algebra. This course was designed as an option for students whose math skills are insufficient for beginning algebra and primarily for those interested in general studies or arts degrees. However, the course is open to students placing into any remedial mathematics course or seeking any degree offered by the college. At the end of the course (or sooner if the student chooses) each student re-takes the Accuplacer exam and his/her subsequent course is determined by the new score, according to the usual placement scores. This was implemented during the Spring 2012 semester, and is still undergoing review and revision.

We have committed to offering a number of accelerated 8-week courses in the traditional format with the sequences 95–120 (beginning algebra—college mathematics) and 95–96 (beginning algebra—intermediate algebra). Students seeking general education or arts degrees will be able to complete remediation and college-level math in one semester, and students seeking science degrees will be able to complete their remediation in a single semester.

These three new pathways, along with our existing courses, give Western Nevada College students more personalized and/or accelerated options for mathematics remediation.





Remedial English Initiatives

University of Nevada, Las Vegas – English Remedial Report

For more than a decade, the UNLV English Department has been actively seeking customized solutions in curriculum, placement, processes, and policy in order to provide effective support to students who need remedial help with language and literacy. In this effort, we have been aided by colleagues at other NSHE institutions, both in the north and the south, and we appreciate the opportunities given to us by the system to share best practices.

COURSE OPTIONS

UNLV currently offers two courses designed to meet the needs of students who are not fully prepared for college-level writing instruction, each targeted to a different set of needs.

ENGLISH 98

Our traditional pre-college composition course, ENG 98, is designed to help students who struggle with fundamental language and literacy skills. This class teaches students strategies to improve reading comprehension, to develop their ideas into academic essays, and to eliminate language errors that interfere with effective communication.

Over the past decade, we have experimented with a variety of models for offering this instruction, including outreach classes offered on high school campuses, computer-assisted learning, and a memo of understanding with CSN in which they provided the classes for our students on our campus. Of these models, traditional face-to-face classes and online classes based on the same curriculum as their on-campus counterparts have been the most effective. We currently offer ENG 98 during fall, spring, and summer in both face-to-face and online formats.

In order to emphasize mastery of skills and to encourage consistent standards across sections, we require all students enrolled in ENG 98 to complete a common final exam along with a portfolio of revised essays. Instituted as a requirement fall 2008, this exam is evaluated based on four criteria: reading comprehension, focus and content, organization and coherence, and correctness. The exam and rubric used were developed in the spring of 2008 as part of the College Readiness Assessment, a joint project between UNLV, NSC, CSN, and CCSD. The standards in the rubric reflect the consensus between representatives from all four institutions as to what skills students need in order to be prepared for college-level work.

ENGLISH 101E/101F

In 2005, after two years of pilots, we began offering ENG 101E and 101F, our extended two-semester ENG 101 sequence, as an official alternative to ENG 98 and ENG 101. This is not a remedial course; it requires the same level of academic rigor experienced by students in ENG 101, and the curriculum, objectives, and requirements for both ENG 101 and 101E/101F are the same. The difference is that students in ENG 101E/101F are given additional support in achieving those goals. That support comes through additional instruction and practice in mastering critical skills, help breaking down complex tasks into more manageable components, and a two-semester learning community that helps students feel more connected to campus.

ENG 101E and 101F are offered during fall, spring, and summer as face-to-face classes. Since fall 2009, we have also offered ENG 101E in the fall and ENG 101F in the spring as online courses. We also piloted a hybrid model of ENG 101E/101F during the 2011/2012 academic year, which combined the face-to-face and online learning environments into one class. Based on our pilot, we do not believe that the hybrid model is effective for this group of students, but we continue to experiment with options that will give students greater flexibility in their schedules.

Beginning in spring 2013, we will add ENG 101E as an online option during spring and ENG 101F as an online option during summer and fall. We are also planning pilots of other options, such as modular classes linked with introductory content classes. Not only would this provide students the opportunity to shorten the timeline to completing their composition requirement, but it would also provide coordinated instruction between the courses to help students apply skills learned in their composition classes in discipline-specific environments and an even stronger learning community.

PLACEMENT OPTIONS

Student success begins with placement in an appropriate course. Students are more likely to drop out if they are frustrated because the level of instruction is too difficult or if they are bored because the level of instruction is too easy. In order to place students effectively, we rely on a combination of factors, including standardized test scores, writing samples, and student attitudes.

STANDARDIZED TESTS

We begin with standardized tests because it is the data that is most easily available for most students. Although standardized tests are not a perfect indicator, they are effective in efficiently providing guidance to many of our students, thus allowing us the opportunity to target those students who are not well served by these scores and to give them additional advice.

Students with test scores above 20 on the ACT English test and 500 on the SAT verbal are encouraged to enroll in ENG 101. Institutional experience based on both diagnostic essays and class performance has shown that the vast majority of these students are prepared for college-level work. Some students who meet these benchmarks self-select ENG 98 or ENG 101E/101F, but this is a rare occurrence.

In students with lower scores, we see a much broader range of abilities, making these tests less predictive of success for these students. These students are placed through directed self-placement. Students are first provided recommended cut-off scores when they meet with their advisors. (This information is also available online: <http://english.unlv.edu/composition/placement>.) Students who meet the NSHE guidelines of ACT English 18 or SAT Critical Reading 440 are encouraged to complete the ENG 101E/101F sequence.

PLACEMENT PORTFOLIOS

Students who believe that they are prepared for ENG 101 even though they do not have the required test scores are encouraged to demonstrate their preparation for ENG 101 by submitting a portfolio of four writing samples, including a timed essay. This additional placement method was first introduced in 2002 after meeting with our colleagues at UNR and learning about the success of a similar program there. Our administration of this assessment has continued to evolve, and we currently use the same criteria that are used to evaluate the final exam for ENG 98, using the same rubric developed as part of the College Readiness Assessment.

If the students' writing demonstrates a mastery of these basic skills, they are given permission to enroll in ENG 101. If their skills are borderline, they may still be given permission to enroll in ENG 101, but they are cautioned that the course may be difficult, and they are advised to take advantage of the Writing Center, which offers free tutoring services to all UNLV students through both online and face-to-face consultations. Students whose writing suggests that they would not be successful in ENG 101 are advised whether ENG 98 or ENG 101E would be the more appropriate introductory course and made aware of options for non-native English speakers.

Students with questions about their placement results are encouraged to contact the Composition Program for further discussion of the strengths and weaknesses identified in their portfolios. Students may resubmit portfolios if they feel that they can improve their performance.

Although the portfolio method of assessment would be too cumbersome to administer to all students, our program data shows that portfolios work well for placing those students who choose to submit one. (Data is available on request.)

FIRST-DAY DIAGNOSTICS

Although we try to advise students based on the information we have, we recognize that there are other factors which affect student success, including level of motivation, maturity, and relevant work experiences. Because of this, we counsel students, but allow them to decide whether to enroll in ENG 98, 101E, or an equivalent course offered by the English Language Center for non-native English speakers.

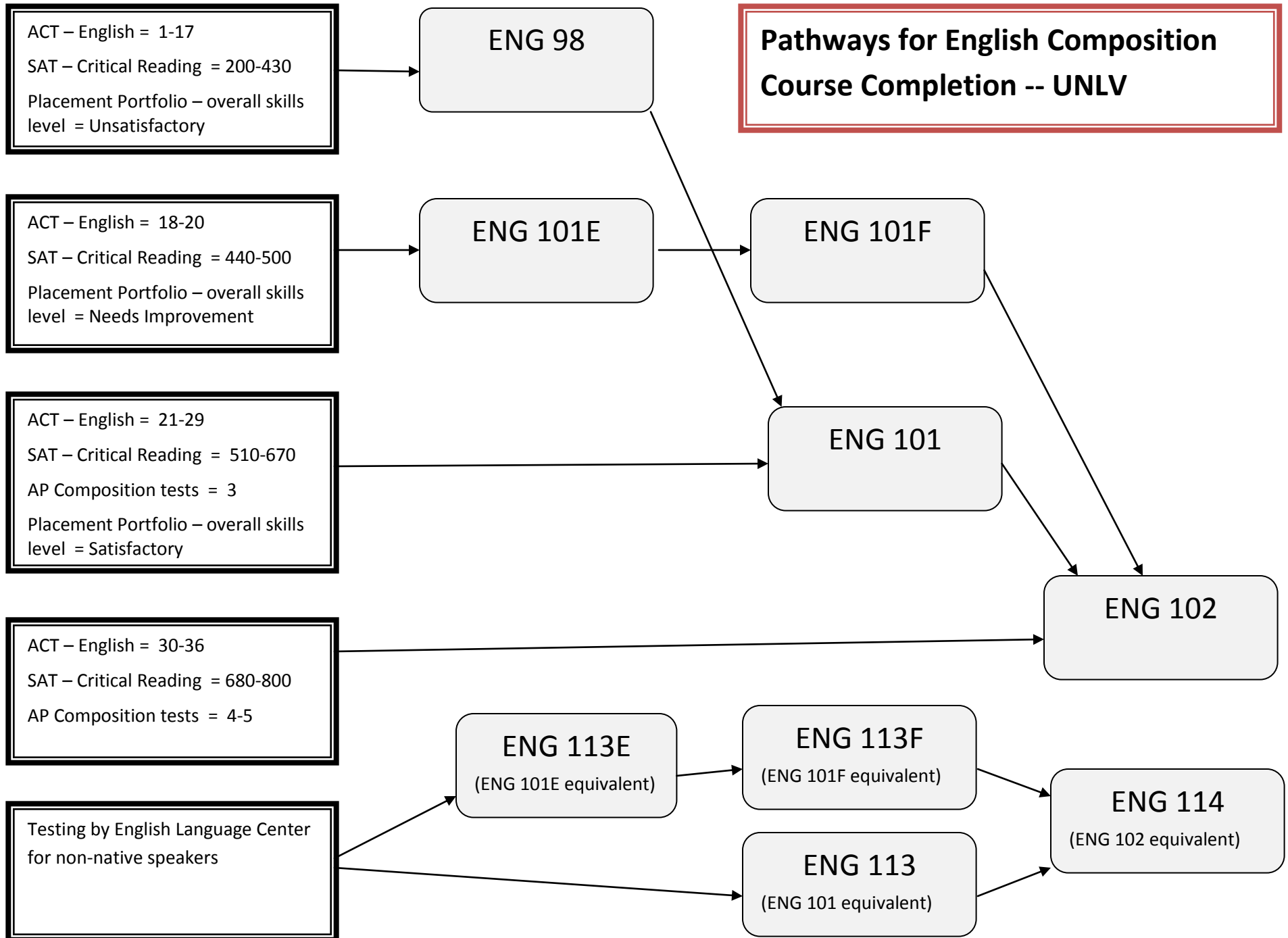
In order to identify and further advise any students who may have chosen unwisely, we require all students to write a diagnostic essay the first day of class. This essay is evaluated based on the same set of criteria used to evaluate the final exams for ENG 98 and the placement portfolios. Students whose writing indicates that they would be better served by a different course are advised through email before the close of registration, but the decision is still ultimately the students.

NEXT STEPS

Perhaps our greatest ongoing challenge is the need to develop policies and procedures so that students take their foundational composition courses earlier in their college careers. Our institutional data has shown that, on average, students do significantly better in terms of both persistence and grades if they start their composition sequence during the fall semester. (Data is available on request.)

At this point, we have not been able to identify whether the difference is because the students who enroll during the fall semester are more motivated, because students who begin the sequence in the fall have two consecutive semesters of instruction before the summer break, or a combination of both. Our next research project is to further explore the factors involved and use that feedback in providing more effective scheduling options for students.

Pathways for English Composition Course Completion -- UNLV



University of Nevada, Reno – English Remedial Report

Summary of actions taken recently to improve delivery of remedial English

We instituted the 100i/105/106 series to “bridge” students who score between 18-20 on the ACT verbal test (440-500 SAT verbal/critical reading). These are students who would have placed in 098 before 2010 when the cut scores were shifted downward. The curriculum is keyed to the same objectives as 101 but is taught over five hours in a single semester instead of three hours. Initial statistics indicate that the 100i series is preparing students for 102 at least as well as 101 does, if not better. Technically, this course is not a remedial course, as it serves students who would have placed in ENG 101 with the new cut-score paradigm.

In spring 2012 we piloted one section of English 106 online, and anecdotally the instructor reports better results and better student experience in that course than in the face-to-face version. We are piloting one section of 105 online next fall and offering 106 online again. Our next step in this pilot project is to enroll the same cohort of students in a 100i (classroom) with the online 105/106 sections. The goal of this project is to see if online 100i/105/106 taught by one instructor can ease the concerns students expressed about scheduling and workload in student evaluations.

Placement methods

Here is a brief summary of our placement regime. Please see the following website for more detail: http://www.unr.edu/cla/engl/core_writing/cw_course_placement.html

Most incoming freshmen are placed in our Core Writing Courses via ACT or SAT test scores:

English 098: ACT (verbal) 17 or less/SAT (verbal/critical reading) 430 or less.

English 100i: ACT scores of 18-20; SAT scores of 440-500. If students who fall within these ranges take English 105 and 106 in tandem with 100i, they may enroll directly into 102 the following semester.

English 101: ACT 21-29; SAT 510-670

English 102: ACT 30 or more; SAT 680 or more

Note: We do not use Accuplacer.

If an incoming student has not taken either the SAT or ACT, he or she is automatically placed in 098. However, if a student does not have scores or feels that his or her score on either exam

does not adequately represent his or her abilities, the student has two other options to achieve placement: a portfolio submission or a timed writing essay exam.

The Portfolio Submission must include the following:

- A cover letter
- 3 essays written in the past year
- A brief statement explaining which course the student has been placed into on the basis of test scores, which course he or she wants to be considered for, explanation of why he or she believes the alternate course would be a better placement
- A short description of the strengths and weaknesses in the papers submitted

The Timed Placement Essay is done by appointment only, and the student is allowed two hours to complete the exam to read the prompt and write a response.

The portfolio submissions and the timed placement essays are read by the Assistant Directors of the Core Writing Program and graduate student appointees using the following criteria:

- Sentence fluency: The student's writing should not show recurring problems with basic sentence structure. However, occasional minor problems in usage will not necessarily place him or her in English 098 or in the English 100I series of courses.
- Development: The student's writing should demonstrate an ability to develop a central idea with explanation, examples, and other kinds of support. Clear, well-organized writing generally leads to placement in English 101.

In order to enroll in the appropriate Core Writing class, beginning in the summer of 2012, students are required to have their placement determined by August 1. Core Writing works closely with the Core Curriculum and Admissions & Records each fall to accommodate all incoming freshmen in the appropriate Core Writing courses.

We are currently working with Washoe County School District and Truckee Meadows Community college to better articulate remedial instruction across institutions—including a pilot project in which TMCC is supervising the teaching of 098 in WCSD—and to reduce WCSD's students' need for remediation at the college level.

Articulation of remedial and entry-level courses

As mentioned above, we instituted the 100i series to serve students whose placement scores were marginal between the old and new remedial cut-score paradigms, and initial statistics seem to indicate this "bridge" to 102 is working well. A previous assessment tracked students through 098 and 101 and found that their sentence-level skills were significantly improved. We do not have a formal method in place for assuring the immediate transition from 098 to 101.

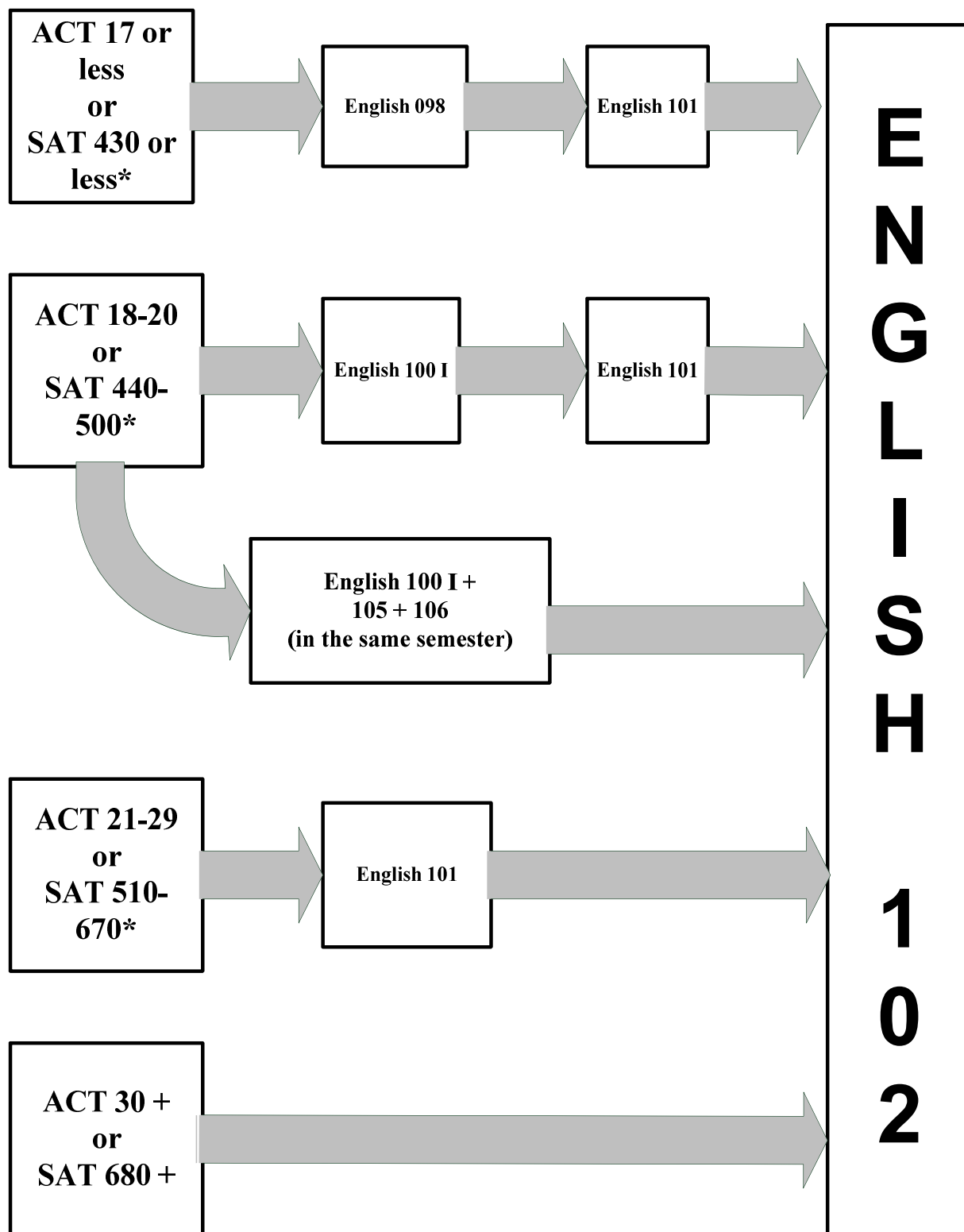
However, we predicate the number of sections of 101 and 102 to offer in the spring on the number of sections of 098 and 100i/105/106 offered the preceding fall, and the classes always fill.

Assessments

Placement: An internal study of our placement regime found that 89% of students placed into ENG 098 this way passed the course on the first try; 93% of those who enrolled in 101 the following semester passed that course on the first try. Further, a random sample of portfolio-placed students was tracked through Core Writing with the finding that 78% of them passed all of their writing courses on their first try.

Student learning: An assessment of the new 100i series—using faculty focus groups and portfolio analysis—is currently underway. The goal is to make sure teaching practices, student learning outcomes, and student performance align correctly in the 100i series. While this course series is not remedial, it is an important “bridge” between remedial and entry-level writing at UNR.

Placement by Exam Score



* If you believe your test score does not accurately reflect your writing skills, you may request alternate placement. Contact the Core Writing Program office for details: www.unr.edu/cla/engl/cwp or (775) 784-6709.

Nevada State College – English Remedial Report

Overview

New students at Nevada State College (NSC) are placed into an English composition class based on their scores on the SAT, the ACT, or the Accuplacer exam. The accompanying flow chart shows the qualifying scores for the two possible placement options, which consist of ENG 100 (Enhanced Composition) and ENG 101 (Composition I). The cut scores for each of these placement options adhere to the guidelines established in the proposed changes to the NSHE Remedial Policy (Title 4, Chapter 16, Section 1). As the chart shows, NSC does not currently offer classes in remedial English. However, NSC does offer ENG 100, a single semester course that serves students who are ready for college level work, but need additional assistance in order to fully prepare them for ENG 102 (Composition II). To provide this assistance, ENG 100 is a five credit class that meets more frequently than ENG 101. Instructors use this additional time to focus on improving the students' grammar, diction, syntax, organizational skills, and rhetorical strategies. The additional time also allows for more interaction with the instructor and more frequent peer-review sessions. NSC has adopted Accuplacer as its English placement exam. Students who wish to appeal their placement may use WritePlacer.

NSC Placement Exam – Accuplacer Adopted in the summer of 2012

From 2003 to 2012, NSC used a prompt-driven system of evaluating student writing and placing students into the appropriate composition class. In this system, students came to campus and were provided with a writing prompt. This prompt was delivered electronically and students composed their essays using NSC's computers. When the students completed their essay, two English faculty evaluators rated the writing. If there was a disagreement, a third faculty evaluator also rated the essay. Using these ratings, the students were placed into ENG 101 or ENG 100. Although there are several factors involved in evaluating writing, the basic guidelines were as follows:

ENG 101. At this level, nouns, verbs, pronouns are essentially under control. The sentences may not be perfect, but student is clearly making efforts. The development is appropriate and the essay is organized.

ENG 100. The student meets some of the 101 indicators, but has noticeable errors. The writing is coherent, but indicates that the student needs some additional assistance in order to write at the college level.

Remedial English. (Referred to CSN) At this level, there may be: verbs that are improperly used or conjugated; nouns and pronouns shifted; no sense of the sentence; and/or nonstandard punctuation use. These essays are often very poorly developed.

In the summer of 2012, the English faculty at NSC explored the possibility of using Accuplacer as an alternative to the prompt-based essays. After evaluating the system and providing a recommendation to the Dean and the Office of the Provost, NSC replaced the prompt-based method with Accuplacer.

Using Accuplacer, students take a standardized reading comprehension exam and a sentence skills exam. Their placement into ENG 101 or ENG 100 is determined by their score. Students that do not meet the minimum cut score are referred to CSN. Students who do not believe that Accuplacer has placed them into the appropriate class may take an additional Accuplacer exam called WritePlacer, which asks the student to write a prompt-driven essay. This essay is graded electronically by Accuplacer. Should students still wish to contest their placement, they can request a conventional prompt-driven essay exam, which will be graded by two members of the English Faculty. This is the final step in the appeal process. The two-tier appeals process allows students to provide a sample of their writing with WritePlacer and, in the second-tier, keep English professors and composition instructors directly involved in the placement process.

Since August of 2012, 45 students have been placed using Accuplacer. 14 of those students were referred to CSN for remediation. 12 of those students were placed into ENG 100. The remaining 19 students were placed into ENG 101. After the fall semester, the English faculty and the representatives from Student Services will meet to discuss these results and propose any changes.

NSC is now providing students with resources to help them prepare for the exams and clearly explain to students what the exams entail during orientation and early advising sessions.

Every student entering NSC as a first time college student is provided an opportunity to enroll in an English course because sections of ENG 100, 101 and 102 are opened based on the placement results.

Student Performance Data – 2005 through 2008

Key Observations (First Year Students who began at NSC in 2005 - 2008)

54% $[(270+387+122)/1443]$ of the First Year Students (FYR) enrolled in ENG 100, 101 or 102

- 6% of the students who enrolled in ENG 100 as FYR Students graduated
- 14% of the students who enrolled in ENG 101 as FYR Students graduated
- 16% of the students who enrolled in ENG 102 as FYR Students graduated

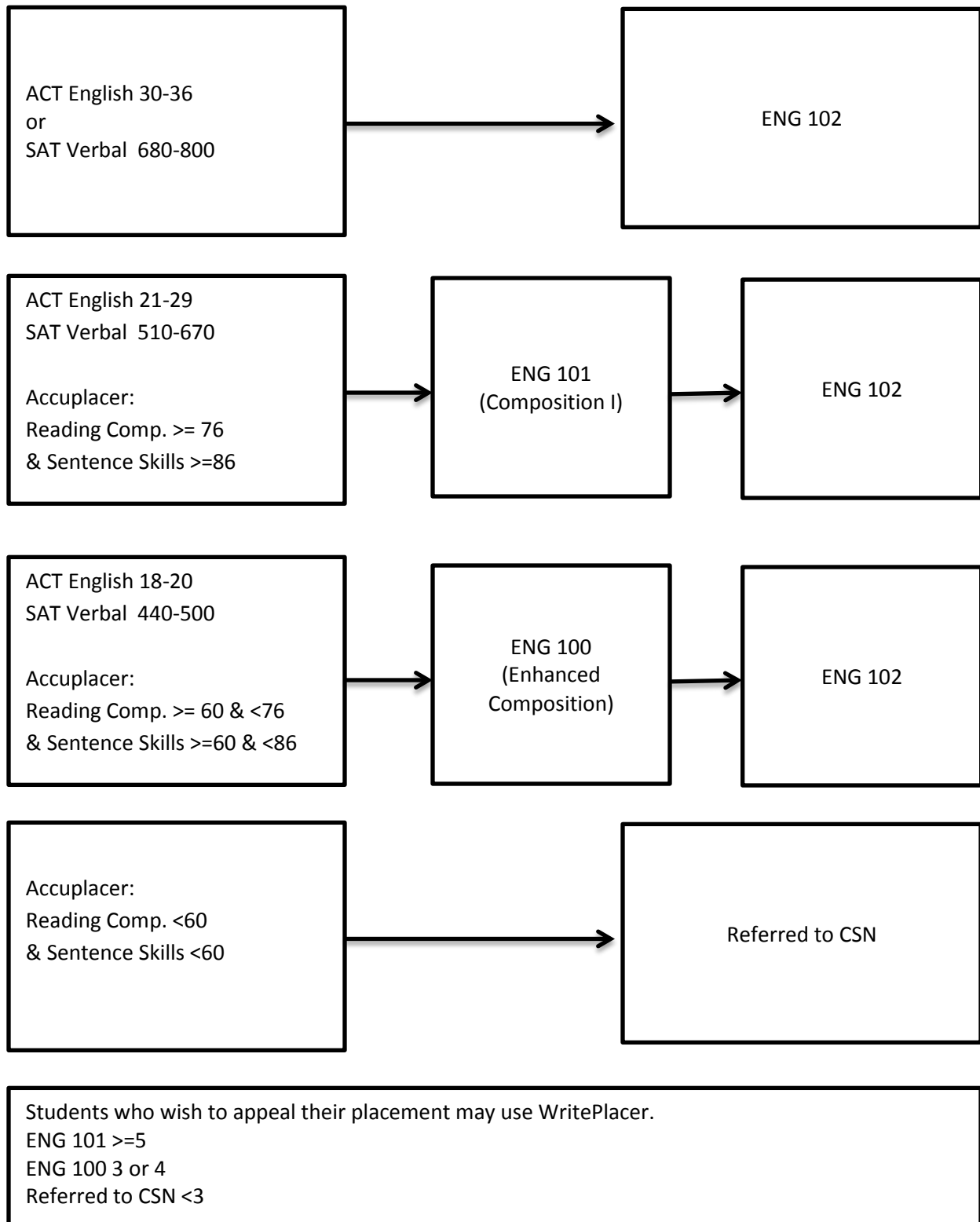
- 71% [191/270] of the students who enrolled in ENG 100 as FYR Students simultaneously enrolled in remedial math
- 53% [206/387] of the students who enrolled in ENG 101 as FYR Students simultaneously enrolled in remedial math
- 5% [6/122] of the students who enrolled in ENG 102 as FYR Students simultaneously enrolled in remedial math

FYR: First time in college as a college student.

Students can have FYR status only in their first semester unless they don't complete over 12 credits and reapply as FYR students.

NSC English Placement

Students are placed into ENG 100 or ENG 101 via ACT/SAT or through an Accuplacer score. Students that do not meet the minimum requirements are referred to remedial classes at the College of Southern Nevada.



College of Southern Nevada – English Remedial Report

CSN Report on English Remediation

As the state's largest deliverer of college-level English Remediation, CSN's Basic Writing program is a key area we constantly strive to refine, assuring that we are giving students the tools they will need in subsequent coursework and professional settings.

The outcomes for our Basic Writing courses, English 092 and 098, were written with those of our Composition sequence in mind, assuring a seamless transition from one curriculum to the other. Our Basic Writing assessment has long demonstrated the success of our instructors in preparing our students for the composition objectives; we plan to implement assessment protocols to demonstrate longitudinally that students have, in fact, been given the tools they need to achieve both their goals and those of their courses moving forward. When we have this longitudinal data, we will again review the curriculum and outcomes of our Basic Writing sequence.

Over the past year, several of our instructors have field-tested technological alternative delivery methods for non-context-determined course material, particularly MyLabsPlus; the instructors felt that the technology was still too cumbersome for student use. However, we understand the platform has been changed to be more user friendly, and we plan to revisit MyLabs.

Our stretch course, English 100, now has exactly the same outcomes as Composition I, English 101, for which it is considered an equivalent course. English 100 students should have precisely the same skillset at the end of the semester as those in English 101, but they may require a five-credit course instead of the traditional three-credit course to reach this goal. Research suggests that more contact time, frequent writing experiences, and timely feedback are critical for success for inexperienced writers.

We currently do not offer any concurrent courses; our five-credit courses, English 092 and 100, are often taught as concurrent reading and composition courses, but this is not universally the case. We are currently exploring the possibility of a "bundling" of English 100 with ALS 101, Academic Life Skills; we feel that these students may benefit from the emphasis on time management and self-knowledge of learning styles and modalities that the latter offers, as well as establish a greater sense of community.

Our higher Basic Writing Course, English 098, is often offered in an eight-week format; this permits highly motivated students to complete both English 098 and English 101, in one term. From a different perspective, we also offer many sections of each course to accommodate

student schedules; whether a student requires an English course at eight in the morning or ten at night, we try to satisfy that student's need.

Our online courses have no screening in place other than the placement test. CSN is exploring a mandatory tutorial for online coursework, which may help many students, especially Basic Writing students, navigate on-line education more successfully. Online students also have access to all of the support offered our students in on-the-ground sections.

CSN offers many options for lab and tutoring support for our composition students. All students are entitled to unlimited tutoring, and we also have a contract with SmarThinking that allows students to get guidance on drafts. The centerpiece of our Composition assistance for students is CSN's own Writing Center, and we're excited by the possibilities offered by the reorganization of this vital piece of the puzzle; we are working toward aligning the Writing Center even more closely with our course outcomes with the newly established Writing Center Advisory Committee.

CSN places students using its "home grown" placement test; we offer students the ability to test into English 101 through ACT and SAT scores, but very few of our students have such scores, and we feel that an essay is a better indicator of writing ability than an objective or editing test. Placement essays are evaluated by instructors, who have participated in a norming session, using a consistent rubric to determine the proper starting point for each student.

We have several methods to help students prepare for their placement test: we have both a website and a booklet to help students know what to expect and how to show themselves to best advantage. We anticipate producing an on-line video to reach students who require multiple modalities for learning.

We are also looking at several other possibilities in terms of our placement test. We continue to track currently available computerized options to permit a more timely delivery of scores. Our Placement and Reading faculties, in collaboration with UNLV faculty, are currently developing a reading component into the existing writing placement so that students who may need additional reading instruction can be identified for further screening and placement.

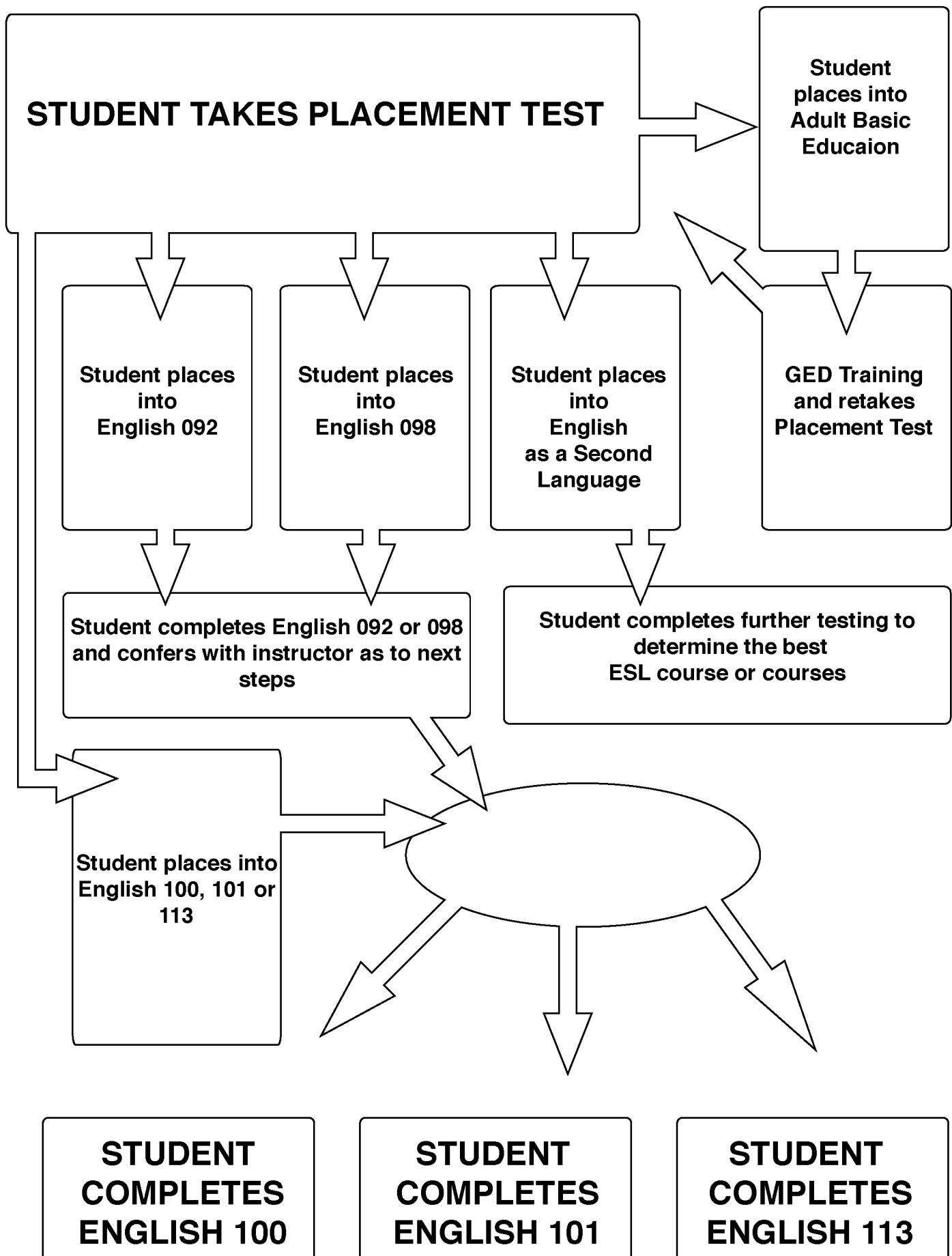
Assuring that all students admitted and tested by the due date are able to enroll is challenging for us as a very large institution; we simply cannot offer enough sections to make this assurance. Students who schedule when registration is first available have no problems, but those who wait for more than a month or two may have difficulty. This is simply the reality of our current budgeting constraints, classroom space, and available faculty. We offered 156 sections of English 101 in the AU12 term, and it wasn't enough. In keeping with the newly proposed policy on remediation, we can assure the availability of seats in the appropriate level class to students who complete the placement testing by a specified date prior to the start of

the semester. By reviewing our data on registration, we will be able to determine the approximate date and publish it for our prospective students.

Our primary move forward for this year is a more integrated assessment, adding statistical and student measures to our already excellent Exit Test program. We're also continuously exploring as many ways as possible to help our students succeed.

Our pathways to ENG 101 diagram is on the additional document. Please note the following:

- 1) Most of our students do not have ACT or SAT scores. However, we follow the state guidelines for cut scores in the event that such scores are available: ACT score of 21 or SAT score of 510.
- 2) Our placement test does not use an arbitrary scale. Our essay readers, using a standard rubric, recommend appropriate placement. Each essay is read by a minimum of two trained readers.
- 3) English 100, 101, and 113 are all considered Composition I equivalents. They permit student to pass into English 102 or English 114 (Composition II equivalents.)
- 4) Just to be clear, ENG 113 and 114 are sheltered courses. They share the same outcomes as ENG 101 and 102; however, they are "sheltered" courses. In other words, they are courses designed specifically for ESL students and taught by faculty with combined English and ESL backgrounds.



Great Basin College – English Remedial Report

Great Basin College offers two remedial English courses. English 074 is specifically for technical education students; all other students requiring remediation in English are enrolled in English 095. Both courses are Pass/Withdraw.

In English 095, instructors use a standard syllabus. Students write three or four essays during the course of the semester with the last essay being subject to holistic scoring during a session with all 095 instructors. Papers are scored with a rubric that students have been given before they write the essay. Two instructors read each paper. Papers are scored 4, 3, 2 or 1 with 4 and 3 being passing scores. If a paper receives a passing score from one of the instructors and a failing score from the second instructor, a third instructor reads and scores the paper.

The instructor of the course has the final decision on whether to pass a student in the class or not.

Placement Methods/Use of Multiple Measures

Currently, English students place into ENG 074 (the developmental course for Career and Technical Education), ENG 095, or ENG 101 with a single Accuplacer score. Accuplacer scores of < 86, ACT <18, or SAT <440 require placement into ENG 095. The Accuplacer scores are based on sentence skills. In previous semesters, we asked for writing samples to accompany the Accuplacer, but students were frustrated at having to wait several days before they could enroll in the English class, and the writing samples were discontinued.

Students taking the Accuplacer are also reminded that they can study before the test, or they can enroll in math or English refresher courses before taking the test. Anecdotal evidence has shown that students can raise their Accuplacer scores significantly by enrolling in a refresher course.

Accuplacer testing is located in the Academic Success Center (ASC) which is open year-round. As a result of more hours and armed with information from Complete College America (CCA), the writing sample will be re-implemented as part of the Accuplacer testing. Additional measures will also be used to give a more holistic picture of student ability in writing. Several of these additional measures were used to place some students into ENG 101 in fall 2012.

Several high school students with scores of 17 on the ACT requested the opportunity to take ENG 101. We asked them to submit a transcript so that we could evaluate the sorts of courses they took in high school and look at their high school GPA as well. At least four of those students were admitted to ENG 101 on the basis of GPA's of 3.4 or higher and evidence that they were enrolled in rigorous high school courses. Data from CCA indicate that multiple

measures of placement will result in higher rates of student success. We look forward to verifying this as students complete ENG 101.

At this time, students who score below the required numbers in any of the placement tests must take ENG 095. They may not self-select in an ENG 101 course.

Success Rates in College Level English

The data here is interesting and, in some ways, contrary to what we expected. ENG 095 has been offered online since fall 2009. Students complete the online 095 course with the same rate of success as those who take live or IAV courses. However, 095 students are not as successful in ENG 101 online as in live or IAV sections. We are looking more closely at our data to determine the impact of such factors as age, gender, instructor, including instructor status (fulltime or adjunct).

30-Credit Policy

Because GBC has several accelerated programs (Career and Technical Education), this policy hasn't been implemented yet. Implementation is in-progress, but faculty are still in discussions about the details.

Automatic Enrollment in ENG 101

At this time, GBC does not have automatic enrollment in ENG 101. However, no student who wishes to enroll in ENG 101 is turned away. Waiting lists are cleared by increasing course caps to 30 or by opening new sections. Instructors teaching ENG 095 this fall have been asked to encourage students to enroll in ENG 101 in the spring semester.

Remedial English in High Schools or for High School Students

The Accuplacer is administered to high school students in their junior year. Scores are given to the high school English teachers who then have the opportunity to focus on any remediation during the senior year. GBC is in the second year of this process, so this fall is the first semester that students who took the Accuplacer will be enrolled in college courses.

On-line or Distance Ed Remedial Education

ENG 095 has been available as an online course since fall 2009. As noted above, students complete the course in this mode of delivery with the same success rates as those in live or IAV ENG 095 classes. English 095 is taught live at all centers, so students have choices in the mode of delivery. An important aspect of ENG 095 is the support provided by tutors from the ASC. All campuses now have writing tutors; students can also access tutoring online through the Academic Success Center. Usually, students in 095 are encouraged to use tutoring services.

This fall, the English department will recommend that 095 students be required rather than encouraged to use tutoring services several times during the semester.

Remediation in Business or Technical Writing Courses

Career and Technical Education students wishing to earn an AAS are usually enrolled in the accelerated 48-week program. These students are required to take six credits of technical writing courses, ENG 107 and 108. Students place into ENG 107 by earning Accuplacer scores of 80 and above because of data found in a pilot ENG 107. These scores are slightly lower than scores required for ENG 101. In fall 2010, all technical writing students in the technical education program were enrolled in ENG 107, with the requirement that those who tested lower than 85 on the Accuplacer would complete mandatory tutoring sessions. We discovered that the issue was not so much one of needing remediation, but one of learning how to go to college. Students, particularly those with scores lower than 85, failed to complete the course for one of two reasons. The attendance of the students was sporadic, resulting in failure, or they failed to hand in required work. We also discovered that most of the students who were in the 074 were seeking the Certificate of Achievement which requires completion of only ENG 107.

As a result of these findings, the English department is changing its approach to remediation in technical writing. Beginning this fall, 36 students placed into ENG 074; their classes take place in a classroom adjoining the ASC. The instructor provides direction for the current assignments, then follows up in the computer section of the ASC where students begin the assigned writing. This approach allows the instructor to focus on the needs of each student as the student is actually writing. The instructor will also provide “how-to-attend-and-be-successful-in-college” strategies. Those students will be automatically enrolled in ENG 107 for the spring upon completion of the 074 class.

Pilot Restructure of ENG 095/101

Following the Complete College America Conference in Phoenix this spring, several members of the English department agreed to pilot ENG 101 courses which would allow the enrollment of a certain number of students whose Accuplacer scores are 80-85. Although two instructors agreed to pilot these courses, students had already begun to enroll in ENG 095 by the time a workable process to enroll qualifying students into ENG 101 was implemented. Consequently, only four students have been enrolled into one section of ENG 101. During spring enrollments, these numbers will be increased.

These four students are required to keep regular appointments at the Academic Success Center with a writing tutor. The instructor has asked that the tutors focus on specific skills for each student. The skills include editing, organization, or revision. The English department believes

that with the assistance of the ASC, just-in-time tutoring will assist these students in completing the first semester composition course successfully. These students and all other students enrolled in ENG 101 will be encouraged to enroll in English 102 during the spring of 2013.

The four students in the pilot section of English 101 will be followed to see how successful they are in ENG 102.

Reading and Remediation

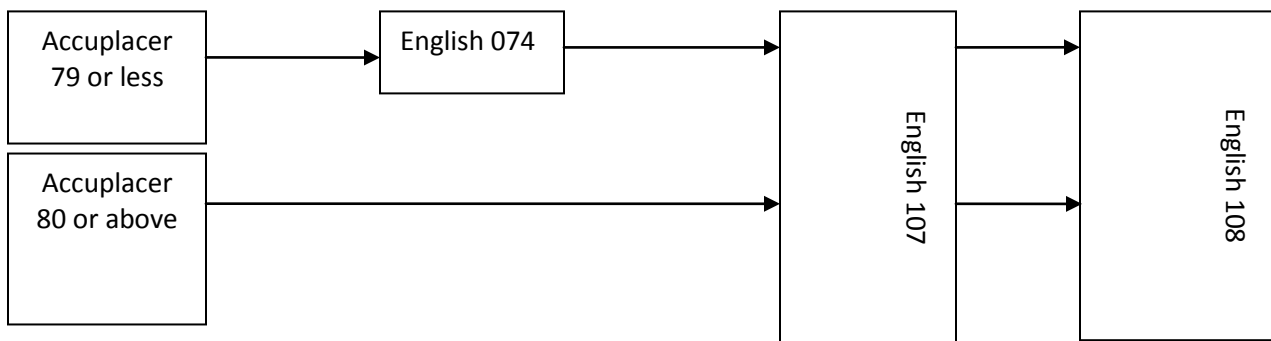
Several years ago, GBC implemented a reading course for students scoring <85 on the reading section of the Accuplacer. Only anecdotal evidence was gathered as a measure of student success in this course. Faculty in a variety of disciplines stated that the students in their courses didn't show evidence of increased reading abilities. At the same time, math instructors were able to show that students who passed ENG 101, the composition course, had a higher success rate in MATH 120. We are still attempting to provide remediation in reading to students who need it. This summer, one English professor is taking a Reading Apprenticeship (RA) course through WestEd. This fall, she will use RA strategies in several of her freshman level courses. She will also share what she has learned with other faculty. The hope is to incorporate these strategies at the discipline level in freshman courses using texts that the students are using for those courses.

Reading apprenticeship is currently being implemented with several small groups of Career and Technical Education students who scored at 79 and below on the Accuplacer. Four of the Academic Success Center tutors were instructed how to use several Reading Apprenticeship strategies. Students were divided into groups according to their program emphases: welding, diesel, and millwright areas. No more than eight students are in a group, and each group uses the technical manuals or textbooks required by their courses. Tutors work with the students for 25 minutes two times each week on reading skills. The rest of the 75-minute period focuses on writing. We believe that the reading/writing combination will help students improve in both areas.

Included in this report are several charts prepared by IR. These charts show how students are placed into ENG 074, 095, 101, and 102 by placement scores.

English Placement by Exam Score

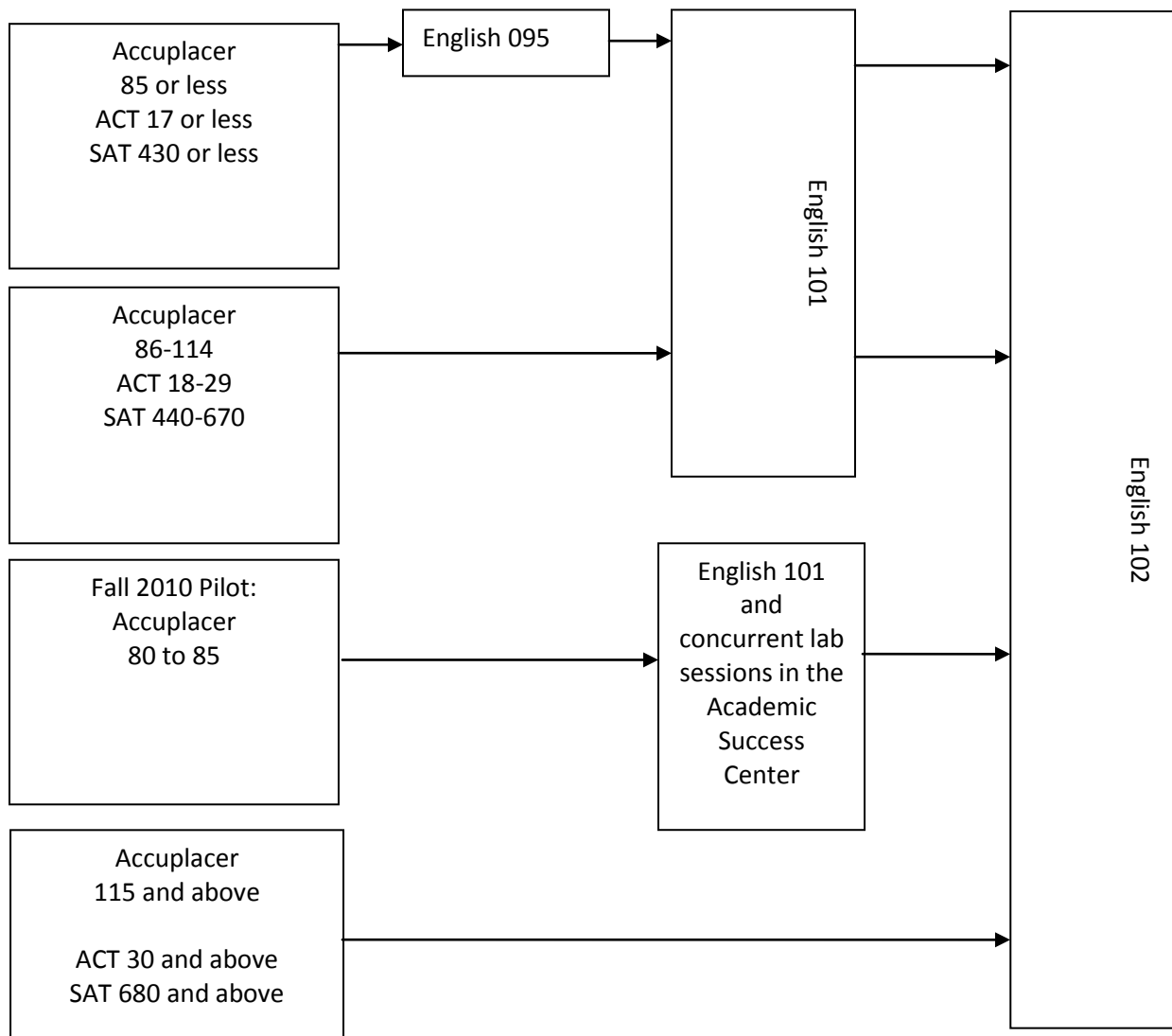
Career and Technical Education Students



Certificates Only

All other CTE

All other students



Truckee Meadows Community College – English Remedial Report

TMCC works to ensure that our students are served in the best way possible as they enroll in our Developmental English, Reading, and college-level English course offerings. Our goal is to promote academic excellence through course retention, as well as the overall goal of student success through persistence to college-level English 101 and then completion of English 102. However, unlike university students, our community college students matriculate needing a strong foundation in remedial coursework. According to the Washoe County School District data profile, “Of the 460 WCSD graduates with a Standard Diploma who entered TMCC in the fall of 2011, 93% needed remediation in either English, math, or both subjects. Of the 119 WCSD graduates with an Advanced Diploma who entered TMCC at the same time, 83% needed remediation in either English, math, or both.”

Faculty in our English department have a history of addressing student needs. Because our students have many particular needs to become successful college students, we have tried to implement methods and courses to best support them. We place students into TMCC English courses through a number of methods. First, we evaluate SAT and ACT scores. The scoring is consistent with UNR’s scoring methodologies, as is our use and evaluation of the CLEP exam. We will also evaluate and accept AP test scores, providing that the student has successfully passed the exam with the appropriate score. If requested, we will evaluate student writing on an individual basis. However, our students rarely apply to TMCC having taken the SAT or ACT, and therefore we must require that students take the Accuplacer exam to determine placement. (This Accuplacer is consistent with the placement that the SAT and ACT recommend.) Our Accuplacer is designed to first test Reading Comprehension. If students reach a certain score, then they are then shifted to the Writeplacer portion of the exam. This then determined if they need to take 98R or 101. What we have consistently found is that students need developmental skill building in addition to 98R coursework. Therefore, in spring 2009 our departmental developmental committee implemented new courses to address the needs of students who tested below an ability to benefit. These courses were designed as a Reading/English cohort. Our 2009-2010 Reading Program Discipline Review describes it as such:

This committee piloted the ENG 091/READ 093 Learning Community to help to serve students with the highest needs in both writing and reading. Taking these students out of the ENG 098 environment is giving them a better chance of gaining the skills they need to succeed in ENG 098. It is also allowing the students enrolled in ENG 098 to move farther and faster in their skills without the highest need students keeping the curriculum moving at a slower pace.

The students in question tested between 20 and 49 on the Accuplacer, and between spring 2009 and spring 2010, 150-200 students (each semester) fell into this range. We offered 5 sections of the cohort in spring 2009, 6 sections in fall 2009, 5 sections in spring 2010, and 6 sections in fall 2010. We were in the process of gathering data when the cohort was pulled by TMCC administration beginning spring 2011. For the Reading 93 courses, we do know that student retention was at 71%. The five-year TMCC retention rate (from fall 07 to spring 12) is 73.1% (TMCC Factbook).

After spring 2011, our English department had to then once again address the needs of our students in a blanket manner, meaning provide remedial education (ENG 98R) to all students testing below college level English. The Accuplacer range for these students was 35-86+ on Reading Comprehension. This is a massive range, and presented a problem for instructors trying to ensure a quality education for their students. We had difficulty addressing the needs of students who tested 35 on the Accuplacer with those who tested 86+ and 4 on the Writeplacer. How can both of these students be served appropriately in the same classroom?

Because the range of these students proved to be too great to adequately teach and develop appropriate reading and writing skills, we had to again alter our course offerings based on Accuplacer placement. The English department adopted a similar cohort to the ENG 91/Read 93 classes, and put forth an ENG 98/Read 93 cohort. The addition of the reading courses has been integral to student success because reading skills are necessary for overall success in college. The following is from our Reading Program and Discipline Review:

The English Department's mission is "to promote literacy—specifically the ability to read, write, and think critically." The reading courses offered through the department provide the first step to literacy by teaching potent strategies to students who struggle with reading. They also introduce and practice both writing and critical thinking.

The TMCC mission states that the college "promotes student success, academic excellence and access to lifelong learning by delivering high quality education and services to our diverse communities." Recent explorations into our graduation and retention rates at TMCC have concluded that Reading is a core skill needed for student success. We have actually identified a lack of reading skills as one of the issues keeping developmental students from succeeding here at the college. Academic excellence also rests on a student's ability to read, comprehend, and contemplate the texts in the different disciplines. The reading courses contribute to this immensely.

By delivering this cohort in addition to ENG 98R, we are working to fulfill our departmental and college mission. This is the current (fall 2012) placement schedule for Accuplacer:

Test	Raw Score Range	Course Placement
Native-ENGLISH Reading Comprehension & WritePlacer	20 – 34	English Skills Center
	35 – 49	ENG 98R/READ 93 Block
	50 – 85	ENG 98R, Recommended READ 135
	75 – 85	Online ENG 98R, Recommended READ 135
	86+ and WritePlacer 1 – 4	ENG 98R
	86+ and WritePlacer 5+	ENG 101, ENG 107
SAT	440 – 670	ENG 101
	680+	ENG 102
ACT	18 – 29	ENG 101
	30 +	ENG 102

It may also be apparent in the above chart that the **English Skills Center** is a new addition to our placement. This Skills Center has been implemented by the college to address the needs of students who test below what is considered to be successful in ENG 98R. The English Skills Center is under the direction of the Adult Basic Education area of TMCC as they have success in working with students at this level and transitioning them to the College for more classes or to other appropriate paths. The English Skills Center provides deeper assessment of student reading needs and then tailors a program for the student to meet those needs. Students retake the Accuplacer after their time in the Skills Center to determine their appropriate level of English placement.

Therefore, we have been teaching the 98/93 cohort for a few semesters and collected data. We found that from spring 2011-fall 2011 60% of the students received a “C” or better in the courses (passing grade), 67% were retained, and only 17% persisted to higher level English. These numbers indicated that we still had work to do to consider the needs of our students. What we realized was that even though we had the new Skills Center, we still needed to go back to the “pre-98R” model that we had begun with the 91/93 cohort. It is a reality that there are students who come to TMCC who are not prepared for remedial work, and therefore need to build skills through developmental coursework, pre 98R.

Our department has been working this semester to refine our English offerings. We believe that we could further improve the retention—and persistence—of our remedial students by adjusting the Accuplacer placement to reflect government established ability-to-benefit scores as well as renaming our 98R/93 block to ENG 95/READ 95 for consistency. This would allow 98R instructors to hone their curriculum to pre-college level, and allow 95/95 instructors to focus on

developmental skill enhancement. Our English department believes that a good rationale for this scenario is directly supported by our most recent 98R assessment results, which demonstrated low skill level in multiple indicators. We could address these issues by carefully re-examining the purpose and delivery of our classes. The new course descriptions are as follows:

English 95 provides instruction in basic writing skills particularly sentence patterns and paragraph development leading to the writing of short essays. The course also introduces students to concepts of grammar, mechanics, punctuation, spelling, and word usage. Students in this course must co-enroll in READ 95.

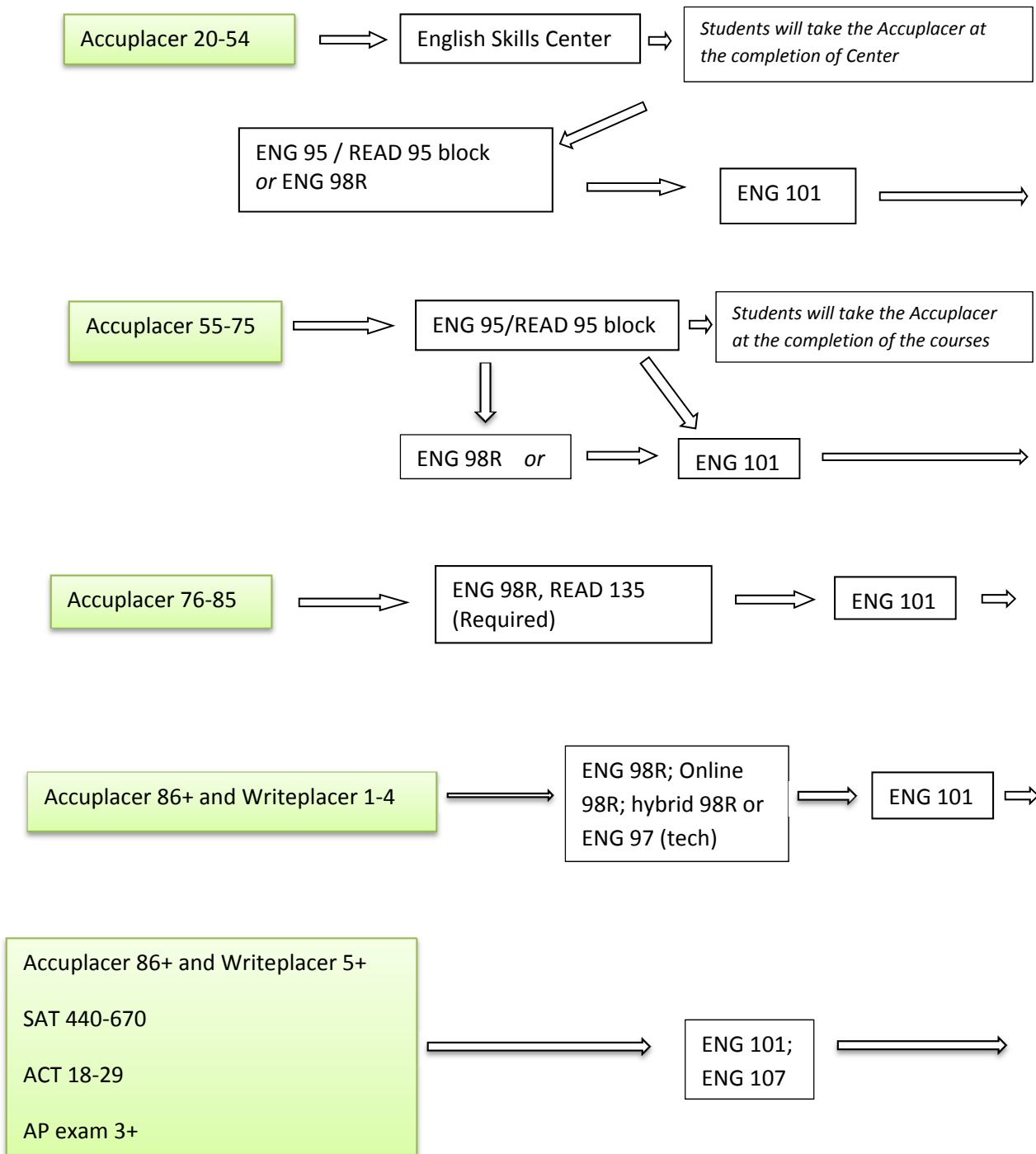
Reading 95 provides improvement in fundamental reading skills including word attack skills, vocabulary development, reading comprehension and fluency. Students will learn various reading strategies to utilize before, during and after reading. Students in this course must co-enroll in ENG 95.

As a result, the following are proposed changes to the scoring for Accuplacer, which would affect placement based on student preparation and skill level. Included is the addition of the ENG 95/Read 95 cohort:

Test	Raw Score Range	Course Placement
Native-ENGLISH Reading Comprehension & WritePlacer	20 – 55	English Skills Center
	56 ¹ – 75	ENG 095/READ 095 Block
	76 – 85	ENG 98R, Required READ 135
	86+ and WritePlacer 1 – 4	ENG 98R; Online 98R; hybrid 98R; or ENG 97 (for tech students)
	86+ and WritePlacer 5+	ENG 101, ENG 107 (for tech students)
SAT	440 – 670	ENG 101
	680+	ENG 102
ACT	18 – 29	ENG 101
	30 +	ENG 102

¹ Since a score of 55 on the Accuplacer has been indicated by the government as the cut off for students who have an ability to benefit, we would like to refer students to the English Skills Center who test below this number.

TMCC English Placement by Exam



ENGLISH 102

Western Nevada College – English Remedial Report

As many of our students are testing into at least one remedial English course here at WNC, steps were taken in this last academic year to promote a better, more successful climate for the completion of college-level English courses within 3 semesters of enrolling at our institution. The first step in this process was to consolidate the instruction of the remedial course content, with the goal of mitigating the wide range of classroom experiences our students were experiencing in our remedial courses. To this end, the English faculty designed and implemented common course standards for our existing ENG 95 and ENG 98 courses (Basic Writing II & III). These standards explicitly communicate expectations regarding both course content and assessment of student performance. Upon the completion of this initiative, we turned our attention to an evaluation of the placement methods used to identify the students in need of remediation.

Upon their application and acceptance to Western Nevada College, students are currently placed into a given level of English via the following placement process:

1. Students take the ACCUPLACER test upon registration at WNC.
 - a. The student's score (on the sentence skills portion only) determines their placement. Our current score breakdown is as follows:
 - i. ~~54 or below = ENG 90 (we have ceased to offer this course).~~
 - ii. 55-85 = ENG 95
 - iii. 86-96 = ENG98 or ENG 100 or BUS 108
 - iv. 97 and above and a score of "6" on the separate essay = ENG 101
2. SAT and ACT may be used in lieu of taking the ACCUPLACER, but very few of our students seem to utilize this option, (with the opinion of the faculty being that this is due to their lack of planning to attend college).
 - i. SAT = 440 for ENG 100 and 510 for ENG 101
 - ii. ACT = 18 for ENG 100 and 21 for ENG 101
3. Students may test into ENG 101 with a CLEP test score between 50-63 (earns 3 credits) or higher on the English language test, and may test into successful completion of ENG 101 & ENG 102 with a CLEP score of 64 or higher (earns 6 credits).
4. Students may test directly into ENG 101 with a Score on the AP test of 3 or higher.

Although the pathway mentioned above has functioned during the last few years, there are concerns from both faculty and administrators regarding several of its aspects and/or implications, including the multi-faced nature of testing into ENG 101 (students have to take, and score high enough, on two completely different skill sets), the difficulty involved in a student being able to pass ENG 101 within 3 semesters if they test into ENG 095 initially, the

amount of student confusion generated by a convoluted pathway through remediation, too many choices which many students attempt to negotiate without proper counseling, etc. Consequently, English faculty, in conjunction with Counseling and Student Services at WNC, have created a proposal to change our remedial ENG pathway to a more streamlined model.

To relate it in the clearest of terms, we propose changing the remedial pathway for WNC English students in the following two ways: first, we would change our entrance placement method from a score on the sentence skills Accuplacer to the Accuplacer essay test, plus the score on the Accuplacer Reading test. The proposed placement scheme would progress as follows:

- ENG 101 = score of a 5 or higher on the Writeplacer essay, plus an Accuplacer Reading score of 86 or above.
- ENG 99 = any score **below** a 5 on the essay and/or a score **lower than** an 86 on the Accuplacer Reading.

As mentioned above, the second aspect of this proposal would involve the creation of a new course ENG 099, a six credit course consisting of the course content from the existing ENG 95 and 98 courses currently offered here at WNC. Any student who did not test directly into ENG 101 would take this single remedial course, as opposed to having to negotiate several different remedial English courses, as they do now. Through counseling and advising, students would also be directed to take this ENG 99 course concurrently with a 3 credit college success course (e.g. EPY 150). This would not be mandated, per se, but merely a recommended part of their first semester experience, presumably in conjunction with their enrollment in a remedial math course (should they find themselves as placing into that realm of math instruction).

The proposed streamlined remedial ENG pathway originated out of experiences and data culled from the pilot of a summer bridge program initiated here at WNC this past summer semester of 2012. In the summer bridge, students from four area high schools were tested and placed into remedial English courses. Of the 38 students who participated, 34 tested into our ENG 95 course. Consequently, we developed a program of study which would enable the motivated student to progress through both ENG 95 and ENG 98 within one summer semester. In this program, the students met for three hours per day, Monday through Thursday. These courses were taught in four week sections, permitting students to take both remedial courses within the 8 week summer semester. Extra money was also used to employ writing tutors who were embedded directly into the class, so that the tutors could absorb the course content and expectation of the instructor in order to better facilitate student success. Although the courses were administered separately, the group of students who began in ENG 95 kept the same instructor and peer group when they progressed to ENG 98. Of the 34 students who began in ENG 95, only two (one from each section as it turned out) were unable to move on to ENG 98, a

pass rate of over 94%. The four students who were able to test directly into ENG 98 joined the existing courses four weeks into the semester. Of these four late additions, one did not pass the course, so that the student who entered in later and missed the instruction given to the others in the ENG 95 portion only had a pass rate of 75% (all of those students who successfully passed ENG 95 also completed the ENG 98 portion). Consequently, those students who took a combined ENG 95 & 98 course of study had a successful completion rate of 94%, while the pass rate of students testing into ENG 98 directly was only 75%. This is believed to be due to the more fundamental and formative instruction which takes place within ENG 95. As a result, we formulated a plan to combine the remedial English courses at WNC into one, 6 credit course which would take a student from sentence-level construction through paragraph writing and up to the short college essay within one semester.

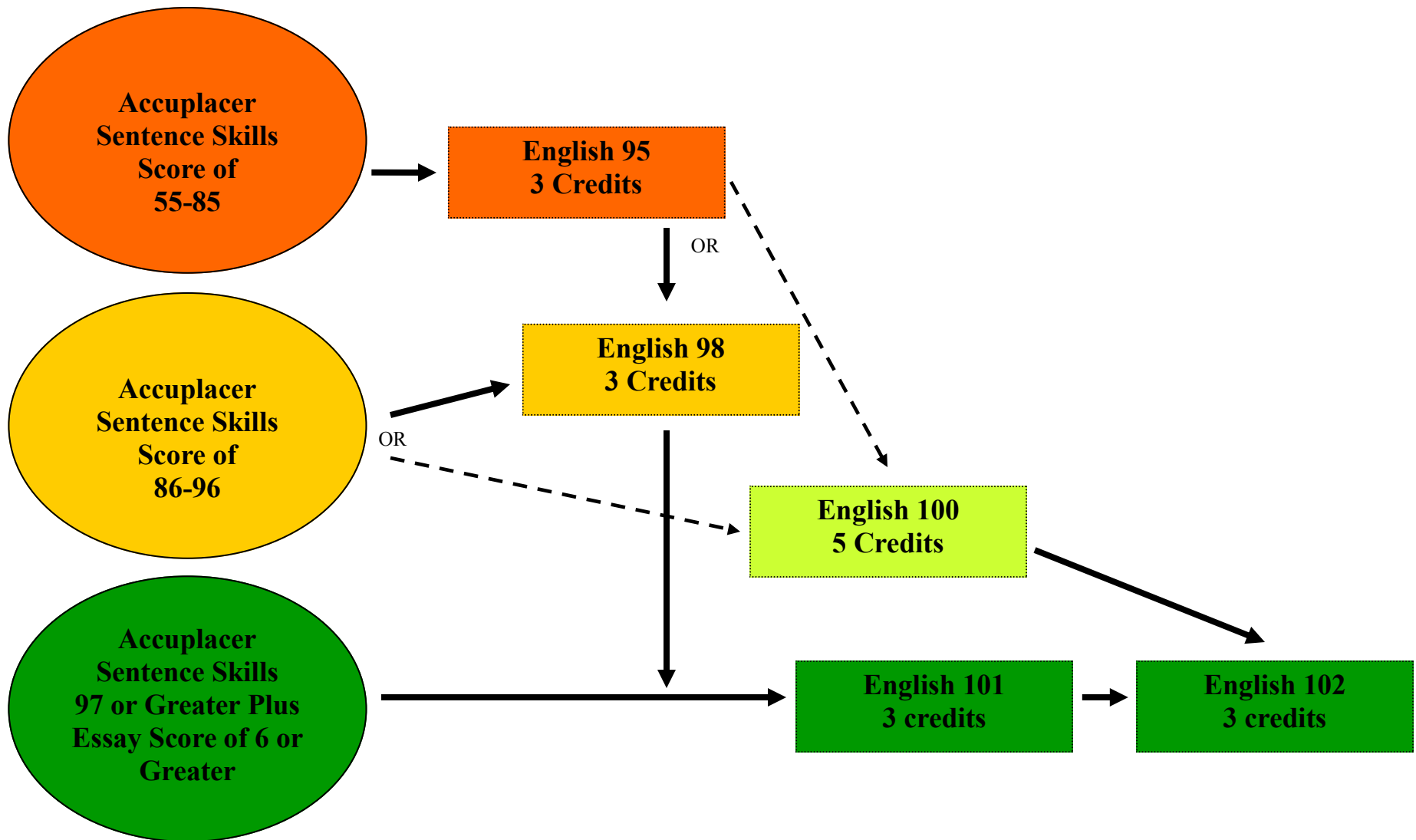
Moving to this model offers several benefits to the student, as well as to the faculty teaching the course and the institution as a whole. First off, the student benefits from this proposal because it creates a more streamlined and common-sense remedial pathway. When a student applies to WNC and takes a placement test, there will be only two possible outcomes: either the student scores place them directly into college-level writing, or they will be placed in a single remedial English course. Upon completion of said course, the student progresses directly into ENG 101, thus speeding up the amount of time that the student spends in non-credit courses. Consequently, even the student in need of remediation only has to take one extra course, making it far more likely that they will successfully pass ENG 101 within three semesters. Another benefit to the learner is that they receive a course of instruction in Basic English with one instructor instead of two, thus allowing their writing to blossom more fully over time, instead of lying dormant for a period as they become accustomed to a new set of expectations, grading policies, and classroom management techniques.

Secondly, the aforementioned proposal offers explicit benefits for the instructors of the proposed ENG remedial course, such as coherence and a more organic presentation of course content. The current pathway breaks the remedial instruction of English into two “phases”: sentence-level to paragraph-level in ENG 95 and paragraph-level to five paragraph essay form in ENG 98. However, there are many places where content overlaps and could be better approached as a conceptual development and integration of assignments. For example, in the proposed single ENG 99 course, students could be given a paragraph assignment (e.g. write an argumentative paragraph) and next be asked to develop that into an entire essay (now, take the paragraph and expand it into an argumentative essay). Setting the course up in such a way might allow the skill set under development to be more naturally connected, creating integrated instruction, as opposed to episodic, compartmentalized knowledge.

Finally, the proposed remedial pathway presents WNC with a distinct advantage in accomplishing institutional goals over the current model. Presently, it is rather difficult for our

incoming students who test into ENG 95 (as a significant number do) to actually complete and pass ENG 101 within three semesters of being in their course of study. Specifically the average student must take and pass ENG 95, ENG 098, and then ENG 101 sequentially without any semesters “off” to complete within three semesters. Yet, statistically speaking, very few of them actually follow this course of study, for various reasons. Consequently, WNC has the lowest three-semester completion rate for ENG 101 of any NSHE institution. We believe that the proposed change would allow us to shorten the process for our students, so that those testing in at the lowest of levels would still have the opportunity to complete ENG 99 and then ENG 101 within the first year. This should help raise our completion rate for ENG 101 within three semesters of enrollment rather rapidly and drastically.

Existing Path for English Requirements (WNC AA or AS degree seekers)



Proposed Path for English Requirements (beginning Fall 2013)

(WNC AA or AS degree seekers)

