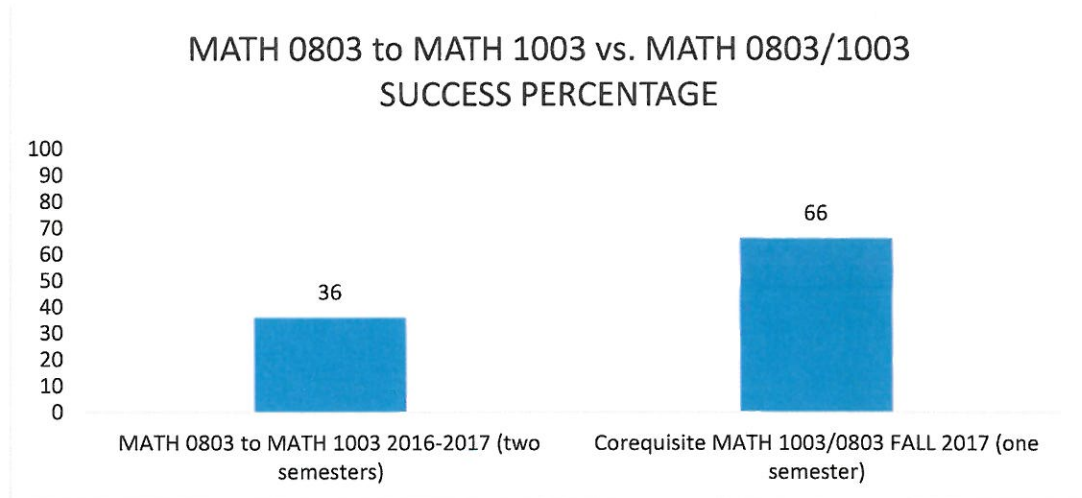# REMEDIAL AND GENERAL EDUCATION ASSESSMENT OF NEW MATHEMATICS CURRICULUM IMPLEMENTED FALL 2017

COMPARATIVE SUCCESS RATES

I.   Corequisite MATH 1003/0803

MATH 0803 to MATH 1003 vs. MATH 0803/1003
SUCCESS PERCENTAGE

COURSE	Total # of Students Enrolled	# of students in Fall MATH 0803 who enrolled in MATH 1003 in Spring	# of students who successfully completed MATH 1003	MATH 1003 Success rate %
MATH 0803 in FALL/MATH 1003 in SPRING 2016-17	147	68	53	**36%**
MATH 1003/0803 FALL 2017	104		69	**66%**

SUMMARY: Outstanding positive results and student success with Corequisite MATH 1003/0803 model. 66% or 69 remedial math students with equivalent math ACT score below 19 received their general education math credit in one semester at ATU.

II. Corequisite MATH 1113/0903

MATH 903 to 1113 vs. MATH 1113/0903 SUCCESS PERCENTAGE
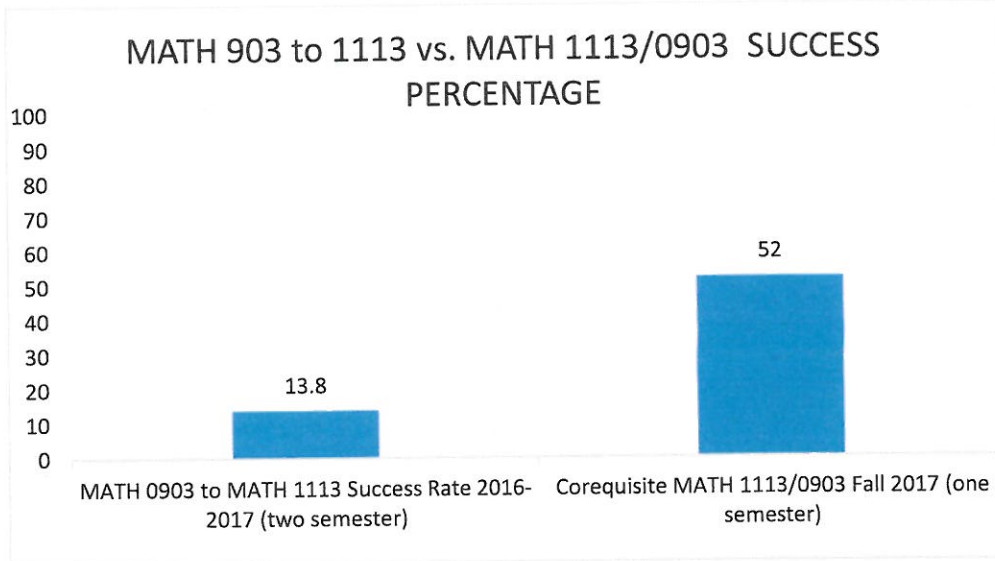
COURSE	Total # of Students Enrolled	# of students in Fall MATH 0903 who enrolled in MATH 1113 in Spring	# of students who successfully completed MATH 1113	MATH 1113 Success rate %
MATH 0903 in FALL/MATH 1113 in SPRING 2016-17	428	153	59	13.8%
MATH 1113/0903 FALL 2017	185		97	52%

SUMMARY: Outstanding positive results and student success with Corequisite MATH 1113/0903 model. 52% or 97 remedial math students with equivalent math ACT score of 17-18 received their general education math credit in one semester at ATU.
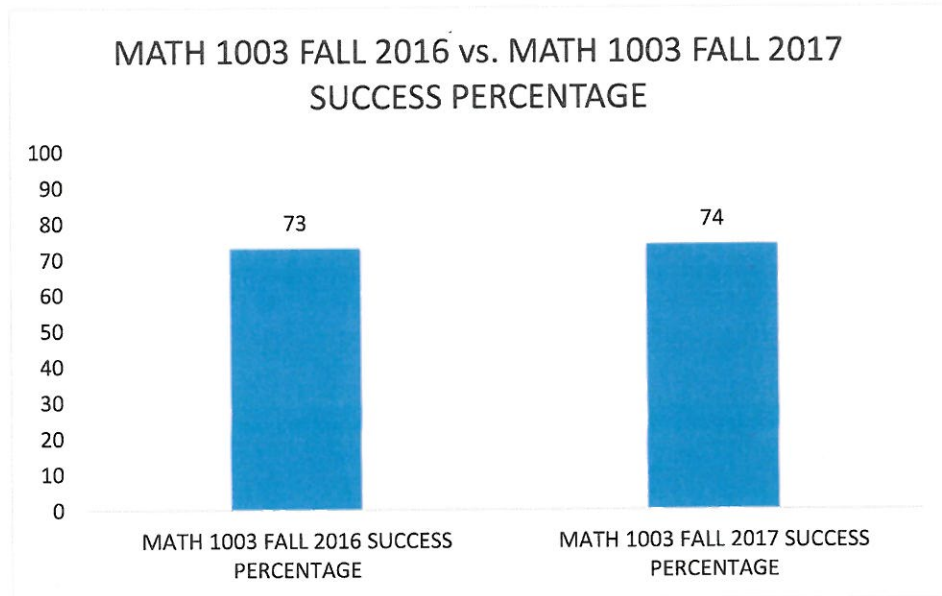
III.   MATH 0903/0900

MATH 0903 FALL 2016 vs. MATH 0903/0900 FALL 2017 SUCCESS PERCENTAGE
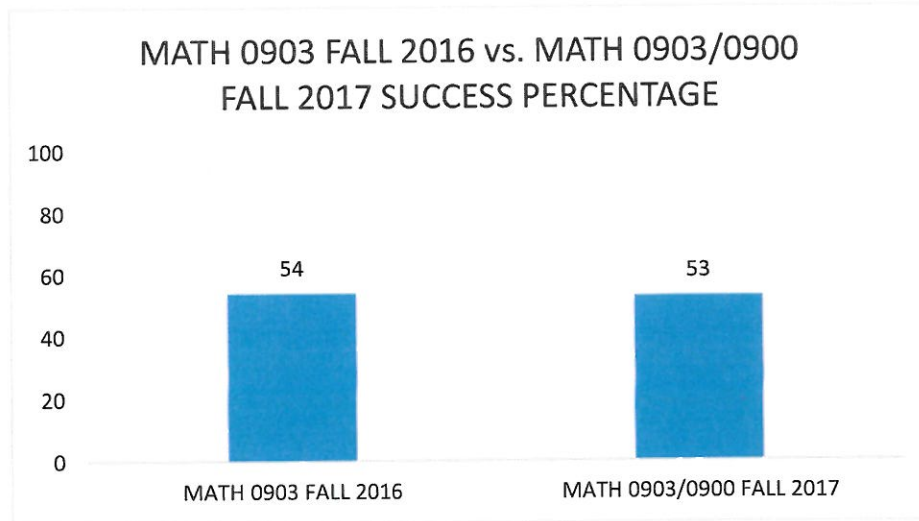
COURSE	Total # of Students Enrolled	# of students who successfully completed MATH 0903	MATH 1003 Success rate %
MATH 0903 FALL 2016	428	233	54%
MATH 0903/0900 FALL 2017	360	210	53%

SUMMARY: No significant difference in the percentages. However, MATH 0903 in FALL 2016 included students with equivalent math ACT score below 19 and the MATH 0903 in Fall 2017 only included students with equivalent math ACT score below 17. So, the labs apparently had an effect. To increase the success rates in Spring 2018, MATH 0903 course and lab MATH 0900 have the same corresponding instructor and are scheduled back to back on the same days or all 5 days of the week.
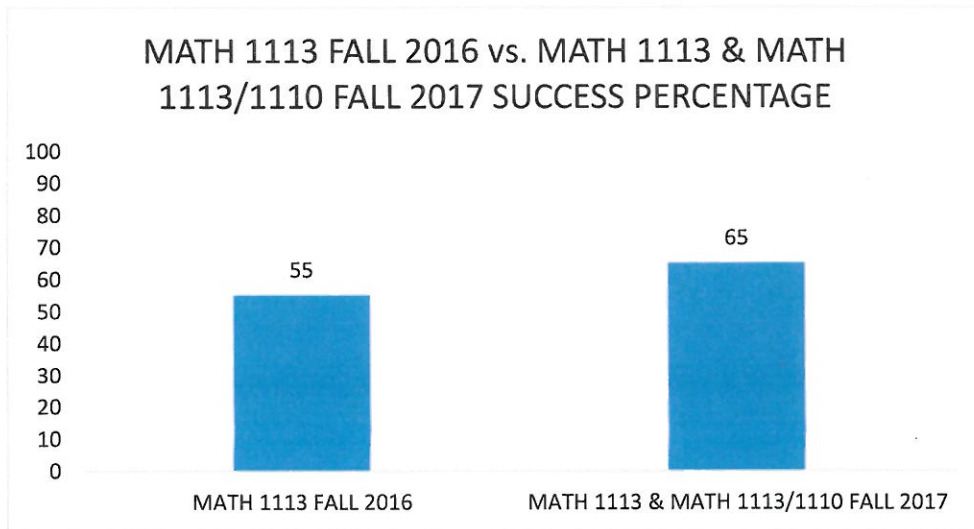
IV.   MATH 1003

MATH 1003 FALL 2016 vs. MATH 1003 FALL 2017 SUCCESS PERCENTAGE

COURSE	Total # of Students Enrolled	# of students who successfully completed MATH 1003	MATH 1003 Success rate %
MATH 1003 FALL 2016	211	154	73%
MATH 1003 FALL 2017	178	131	74%

SUMMARY: No significant difference in success rates because no changes were made to our regular MATH 1003 course from FALL 2016 to FALL 2017.

V. MATH 1113 & MATH 1113/1110

MATH 1113 FALL 2016 vs. MATH 1113 & MATH 1113/1110 FALL 2017 SUCCESS PERCENTAGE

(Bar chart: MATH 1113 FALL 2016 = 55; MATH 1113 & MATH 1113/1110 FALL 2017 = 65)

COURSE	Total # of Students Enrolled	# of students with ACT 19 or above who successfully completed MATH 1113	MATH 1003 Success rate %
MATH 1113 FALL 2016	536	295	55%
MATH 1113 and MATH 1113/1110 FALL 2017	513	332	65%

SUMMARY: Noticeable improvement in the success rates of College Algebra MATH 1113 and College Algebra with Lab MATH 1113/11110 in FALL 2017. In FALL 2016, MATH 1113 included students with equivalent math ACT score of 19 or above. In FALL 2017, MATH 1113/1110 included students with equivalent math ACT score of 19-20 and MATH 1113 included students with a math ACT of 21 or above. Thus, this comparison is reasonable since the student math ACT scores are 19 or above for both FALL 2016 and FALL 2017.

ONLINE REMEDIAL AND GENERAL EDUCATION MATH COURSES

ONLINE SUCCESS RATES 0803, 0903, 1003, 1113
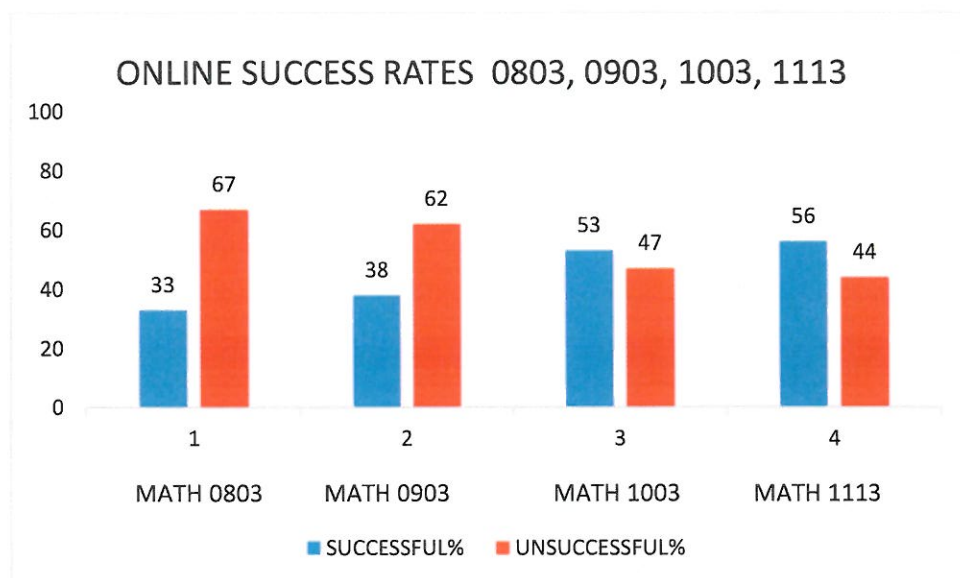
ONLINE COURSES FALL 2017	SUCCESSFUL RATE %	UNSUCCESSFUL RATE %
ONLINE MATH 0803	36%	67%
ONLINE MATH 0903	38%	62%
ONLINE MATH 1003	53%	47%
ONLINE MATH 1113	56%	44%

SUMMARY: Success rates of online remedial and general education math in FALL 2017 were undesirable. Because of this, only fully online students are allowed to take online remedial and general education mathematics courses.

CONCLUSION

The changes in the mathematics curriculum for FALL 2017 noticeably improved the success rates in remedial and general education mathematics courses.

Table Talk
Proposed Technology Intensive Designation

Draft A:
Courses designated as "Technology Intensive" ensure that ATU students have a broad understanding of an advanced technological tool or process as well as principles that allow technology to assist in the enhancement of our society.

Draft B:
A Technology Intensive course is an integrated component using both hardware and software to support the learning objectives of the course. The course provides students with technological experiences that promote learning and prepare students for employment.

Draft C:
Technology Intensive: These are courses in which students gain modern technological skills needed for success in their professional lives. They emphasize the learning of such skills in [*the majority of*] the learning outcomes. They are not courses that just use technology to deliver the course content.

Draft D:

What should the requirements be for a Technology Intensive course? Who should be responsible for approving courses as Technology Intensive? What should the procedure be?

How can we ensure a low impact to faculty load, but a high impact with roll out to students?

How should the program be marketed to the different groups of stakeholders (and who are the stakeholders)?

Have you spoken to your faculty/staff about a Technology Intensive designation? How was it received?

Would it be feasible to have a fall 2018 roll out for the Technology Intensive course designation? What challenges or obstacles exist?

Pathways to Achieving and Recognizing Student Proficiency with Technology

Overview
Proposed hereafter is a mechanism for highlighting curricular content that help students become proficient with technology utilized in their disciplines and document technology skills acquired while earning a degree at Tech. This is important for the students as they compete in the marketplace with others earning credentials, digital badges, online certificates and degrees that document specialized knowledge, skills, and abilities. Recognizing proficiencies is especially valuable when one is not easily associated with the type of degree that a student is receiving. However, at Tech each student has several opportunities to gain technological skills that are important for success in his or her discipline and transferable to other fields, occupations, and interests. The acquisition of proficiency with technology may be acquired through taking a set of classes within the general education curriculum or within the courses in the major.

Providing students with clear pathways to achieve a proficiency in a high demand area such as technology and reflecting the proficiency on the transcript and diploma would provide a clear advantage to the student and a clear differentiator between Tech and its regional competitors. With a shrinking number of students and a crowded higher education landscape, Arkansas Tech needs to differentiate itself from other regional institutions. This proposed initiative could be one of the pillars that the anticipated branding campaign for ATU; as it would help Arkansas Tech to fully capitalize on its name. "Tech" being part of the name of the institution puts ATU in the same category as many impressive institutions in other states such as Georgia Tech, Louisiana Tech, and Tennessee Tech. Putting "Tech back in Tech" was popular and reflects the desire of the Tech community for identifying a unique a differentiating factor for Tech as an institution.

Implementation of Pathways for Achieving Technology Proficiency
Technology proficiency will be achieved through completing a set of 12-18 credit hours from courses defined as technology intensive with a minimum cumulative GPA of 3.0 in these courses. Technology intensive courses are **not** courses where technology is used to deliver the course content but rather courses where students gain essential modern technological skills needed for success in their major and in professional life. Technology intensive courses emphasize learning modern technological skills and tools in the learning outcomes of the courses.

Each department will identify a set of courses for each major that meet the definition of technology intensive. The courses will be submitted through the college dean for review and approval by a subcommittee of the curriculum committee to ensure consistency across the institution. Final approval of the courses will be made by the VPAA.

Recognizing Technology Proficiency of Students

Currently, ATU provides students who meet a GPA of 3.5 and who complete special set of courses identified by the department from which they are graduating as graduating with distinction. The distinction appears on student's transcript and diploma. Different proficiencies that a student achieves such as technology proficiency will be similarly identified on the student's transcript and diploma.
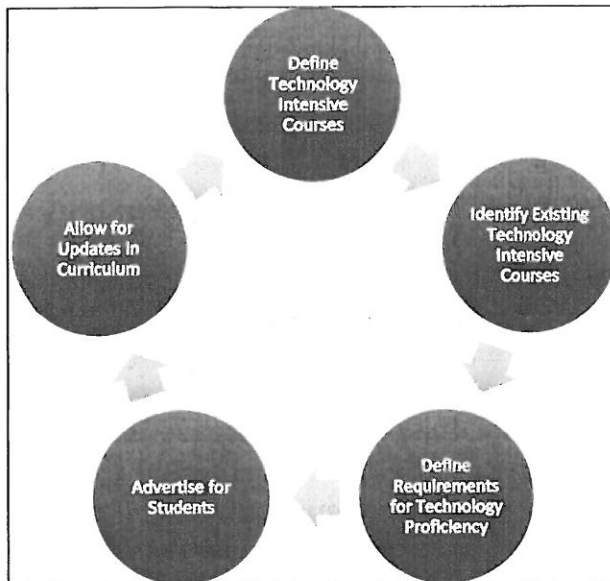

Figure 1 Implementation of Technology Proficiency Initiative

Table Talk
Communication

What do you think is communicated **well** in your office/department/college? Across campus?

What do you think is communicated **poorly** in your office/department/college? Across campus?

How do you primarily communicate to your faculty/staff? (meetings, emails, etc.) How often?

How do your faculty/staff hear about discussions in Deans' Council/Academic Council?

How do you hear about discussions in Faculty Senate/Staff Senate?

What do you think could be done to improve communication in your office/department/college? Campus wide?

What are the most significant process/policy/practice challenges in your daily work?

What is a task you perform or oversee that requires significant time or resources that must be done, but could be simplified?

What is a task you perform or oversee that requires significant time or resources that may not be necessary?

What manual processes do you perform that could feasibly be automated to free up a significant amount of time?