

ABSE Mixed Level Math: JDEI Curriculum Development Report

Academic Year 2025–26

Summary of Results

- Enrollment and course completion numbers indicate a strong need for math courses offered using the hybrid Zoom modality. Student feedback supports the importance of providing access options for students who otherwise could not attend in person classes on campus.
- Student progress data and feedback supports the benefits of providing an additional pre-algebra option for students who need additional time to build foundational skills without having to repeat a single-level course.
- Students who have remained active in courses throughout the term show steady progress towards GED completion, enrollment in a higher level course, and transition to credit math.
- The success of this course indicates that a similar, mixed level algebra course is needed to meet the needs of students progressing out of this level.
- As part of our continuous improvement process, we will continue to evaluate the effectiveness of the mixed level hybrid Zoom course over the upcoming academic year and revise or build on course elements to best meet the needs and goals of students.

Purpose and Outcomes of Course

The ABSE math curriculum aligns to OACCRS state standards for adult education, GED standards, and the Lane CC credit math pathways, with the goal of helping students prepare to complete the GED mathematics exam, transition to program level math, or develop math skills necessary for the workplace. Our ongoing process of program improvement indicated an unmet need for a prealgebra option for students who need additional practice or an accelerated review of arithmetic and applied math before taking the GED test, entering the workplace, or transitioning to a career technical program.

While our initial goal in developing this class focused on providing an accelerated option for building foundational skills, we quickly realized that the structure of the class made it well suited for a combination of remote and online learning. Since returning to in person instruction following the pandemic, we received from a significant number of students requests to offer more remote learning options. These students identified the in person modality as a barrier to students in rural areas, students with significant health challenges, and students performing caregiving roles, among others. Remote learning options during the pandemic had offered many of these students a rare opportunity to begin an educational program and the return to fully in person instruction threatened to disrupt their progress.

Specific and measurable outcomes include:

- Course enrollment over three terms exceeded 95% capacity in each term.
- Increased GED practice and official GED test scores in Mathematical Reasoning.
- Increased persistence from pre-algebra level math to GED completion, ABSE algebra courses, and/or program level credit math
- Increased computer literacy
- Improved learning techniques and strategies through metacognitive engagement
- Increased sense of belonging in an educational setting
- Increased awareness about career and college options

- Increased number of students who progress to credit bearing classes

Students Served

During the 25–26 academic year, we offered a single section of Mixed Level Math during each academic term. Enrollment remained robust throughout the academic year:

- Fall and Winter terms: 26 students enrolled (96% capacity)
- Spring term: 30 students enrolled (111% capacity)

Of the students enrolled during the most recent term, 70% either completed their GED or intend to continue as students at the college.

Enrollment in these classes is reflective of overall ABSE enrollment. Our department serves a highly diverse student population; nearly 100% of ABSE students are socioeconomically disadvantaged and 44.5% belong to a racially marginalized and historically underrepresented group.

Goal Assessment

ABSE Mixed Level Math provides students with an additional route through the ABSE math curriculum, functioning both as a supplement to existing courses for students who need extra time building basic math skills and as an accelerated option for students needing a quick review of basic skills before moving into a more advanced class, a career technical class, or a workplace environment. An emphasis on applied, real world problem situations helps students contextualize concepts, build critical thinking skills and apply problem solving strategies. Additionally, students build math vocabulary and practice communicating mathematical ideas.

Students also explore and access campus and community resources that support success in mathematics, practice active study strategies, and learn about math requirements and options at the College. Students are introduced to services provided by campus partners, such as academic tutoring and the STAR program, that promote success, retention, and degree completion.

Progress towards goals for these courses includes:

- **Increased GED practice and official GED test scores:** All GED–goal students in the courses were given the opportunity to take GED Ready practice tests, with most students scoring in the likely–to–pass range. This term, eleven students completed a practice test, with five students scoring in the “likely to pass” range and the remainder scoring within 5 points of passing. At least two students completed their GED this term.
- **Increased persistence through course levels:** Twelve students in the most recent term met level outcomes and will advance to next math course in future terms.
- **Computer literacy:** Following initial orientations to course technology, very few issues with student technology literacy have arisen this term. Hardware/software issues were supported by SHED presence on both campuses.
- **Learning techniques and strategies:** Students self–reported during a mid–term survey that the course helped them become aware of resources and supports, and helped them develop new strategies for success, such as revising completed work and accessing tutoring services.
- **Increased sense of belonging in an educational setting:** Students report that they would not be able to continue their education at Lane if they did not have a remote learning option at this level

of math. They also were able to establish connections with other students in similar circumstances and feel connected to campus partners.

- **Increased awareness about career and college options:** In addition to sharing information in class, students receive presentations on transitioning to credit programs from STAR program advisors. As students develop their program plans, they determine their future math pathway.
- **Increased number of students who progress to credit bearing classes:** We will need to track follow up data for each student cohort to gauge success in this area.

Instructor Observations

From instructor Julie Pfaff:

Having taught this course for a year, I highly recommend not only continuing to offer this course but also expanding our course sequence to include a similar course for algebra content. As well as providing an academic option for students who need additional work with basic skills before enrolling in algebra courses, this course serves students who have no other option for attending class. Students reported enrolling in this class because they had health issues that made attendance on campus difficult; because transportation from rural areas to Eugene was too costly or difficult; because they were parenting young children or caregiving adult family members. These students are eager to further their learning and engage with others on campus and this class provided an opportunity to do just that.

Student Observations

Students at this level report increased confidence with their math skills. Some feedback from students:

This class helped me study and get prepared for my math GED test which I passed last week.

I am doing my best. I am thankful for the tools we have been given. and I feel confident.

I feel very confident that I'm going to pass the test at the end of this term.

I feel confident that if I continue to do the things I am already doing I will be ready by the end of the term to take and pass my GED test.

I am having a greater time learning math with this program than other math program thanks to my teacher Julie shes wonderful at explaining new concepts, brushing up on old ones, and everything in between so shout out to Julie Phaff I would not be as I am with math now if it weren't for her highly recommend her and hope the best for her.

I am feeling more confident in Math with this class for sure.

im getting better each term hoping to be able to focus more.

With class itself, I feel confident I can meet my goals, however there are several things that have occurred in the last 2 weeks that have seriously put me behind on schoolwork. As long as things settle down and I can get back on track, I think I'll be okay.

I'm having fun.

Next Steps

As we evaluate this term and plan the next several terms of these courses, we have identified two key areas of focus. First, we need to expand our ability to assist students with the technology necessary for successful class engagement. Students in rural areas, in particular, often need help accessing a stable internet connection. Students who do have access to computers or laptops often have out-of-date devices that can't keep up with the demands of online learning. Others need video cameras and/or microphones so that they can fully engage in the course. Assistive technology would benefit some students; identifying these needs and connecting students to resources early in the term has been a challenge. Moving forward, we are redeveloping a pre-course technology survey that should address some of these needs.

Additionally, we need institutional support to identify and perform outreach to students who would benefit from this type of ABSE math class. We know that mathematics completion is a struggle for many students and a common barrier to program completion. As fewer developmental math classes are offered by the math department, students who need to refresh basic skills, build confidence, and try college math in a low stakes environment could benefit immensely from ABSE courses. Institutional support with funding, marketing, and advising would allow us to reach students who would benefit from developmental math and expand the number of sections we can offer. This would provide capacity to offer sections at various times of day and in different modalities to meet the needs of students who cannot attend in person classes.

We'd like to express our gratitude to the JDEI Curriculum Development Fund; this funding allowed us to adapt our math curriculum to meet the changing needs of our students and provide more equitable access to mathematics and college success programming.