

FOUR ENGAGING STORIES FROM THE FIELD



Adult Education ISD 709 and Lake Superior College (LSC) Partnership

Story Contributors and/or Partnership Team:

Steven Gallagher, English Faculty, Lake Superior College, steven.dalager@lsc.edu

Keri Rakes, ABE Instructor, Adult Education ISD 709/Lake Superior College, keri.rakes@lsc.edu

Jody Greniger, ABE Pathways, Adult Education ISD 709/Lake Superior College, Jody.greniger@lsc.edu

1. What was the history of your partnership; how did you get started, how's it going in general?

ABE had been on the LSC campus for a number of years offering Pathways to College Success, which fed into LSC's previous Developmental Ed Reading and Writing offerings. Prior to 2015, LSC offered Writing 1, Writing 2, Reading 1, and Reading 2 – all of which were 3 credit courses. Students testing into the lowest level, therefore, would take 12 credits before earning a single “college level” credit. Fall of 2015, LSC and ABE partnered more closely as we overhauled our Developmental Reading/Writing curriculum. We now have integrated Reading and Writing into two non-sequential offerings – **READ/WRITE College Prep: Intermediate** (5 credits) and **READ/WRITE College Prep: Advanced** (4 credits). ABE faculty are integrated into the Intermediate course 6 hours/week. One of those hours is a lab taught by ABE faculty.

2. What benefits did you initially imagine?

The benefits sought were many:

- Fewer exit points along the way to college level
- Closer alignment of Reading and Writing
- Shorter time spent in Developmental Ed
- Lower overall cost

3. What initial or ongoing barriers did you encounter?

There are always challenges with the MinnState registration management system when merging courses from multiple departments. The courses appear as both READ and ENGL courses on the schedule, and students can register for either. Another barrier was coordinating curriculum and finding planning time. A final challenge was determining the role of the ABE faculty.

4. Which level of integration or model for collaborative teaching are you using in your partnership?

LSC's READ/WRITE curriculum grows out of Katie Hern's IRW work at Chobot College. The Intermediate course meets six hours/week, with three hours of Reading instruction, two hours of Writing Instruction, and one hour of Lab instruction. The ABE faculty is present for all six hours, team-teaching with both the Reading and Writing faculty and providing a bridge between the content areas. The ABE faculty plans Lab time in accordance with student needs as they arise. Simply put, the Reading and Writing faculty are co-teaching, while the ABE faculty team-teaches with both the Reading and Writing faculty. The three faculty meet weekly to plan and coordinate.

LSC's READ/WRITE courses started out as described above. One of the primary catalysts for this change was financial. We discovered that students taking our lowest level Reading and Writing courses were ineligible for Federal Financial Aid because the course outcomes did not result in "college level." The outcomes for both Intermediate and Advanced were rewritten to meet this requirement, and the resulting courses are no longer sequential. In other words, students passing either course are free to enroll in college level courses. Overall, things have gone well. The data supports that students who complete either course are as successful--or often more successful--in college level coursework than are students who place directly into college level.

5. Did you formally define your roles? How did you decide who would do what?

ABE and LSC faculty met and formally decided roles. Curriculum materials and documents are primarily generated by LSC faculty. ABE faculty have input into curriculum during joint planning meetings. ABE faculty are solely responsible for curriculum during lab time. For example, ABE faculty have including increasing amounts of curriculum regarding Professional Fluency during the lab component. LSC and ABE faculty share grading responsibilities.

6. Is the ABE partner on site or in the classroom? If so, what are they doing with the students?

The ABE faculty is in the classroom, contributing to content discussion and lecture, and then working one-on-one with students when required. The ABE faculty also often functions as a student advocate, clarifying student needs that the LSC faculty may not be aware of.

7. How much curriculum or other design time was initially needed for each course, and how much time has been needed on an ongoing basis to continue the partnership?

During the summer of 2015, the partners met intensively for two full days to prepare for the first course offerings. Since then, the partners have met occasionally during the summer as needed. For example, summer 2021 has included two mornings of meetings to help in the creation of an OER for Fall 2021.

8. How did you tweak or modify things over time?

We incorporated two major tweaks over time:

1. The 2020-2021 Covid 19 pandemic disrupted LSC's ACCUPLACER® Testing system. The partners worked together to create a Guided Self-Placement process which is in place to this day.
2. For the Fall of 2021, the partners are replacing a traditional textbook with an OER (see Glossary) created by the team from various resources.

9. Has there been money provided for the design time or additional hours required for the partnership courses?

There was stipend money for LSC faculty for the 2015 original curriculum design work, and the ABE faculty were compensated for that work as well by ABE. Summer 2021, the LSC faculty are compensated for the OER work via a MinnState OER grant.

10. Benefits Realized

As LSC and ABE had hoped indicated in question 2 above, the following benefits have been realized:

- Fewer exit points along the way to college level
- Closer alignment of Reading and Writing
- Shorter time spent in Developmental Ed
- Lower overall cost

Our data shows that LSC students moving from our READ/WRITE courses into college level are as successful and even more successful than students who place directly into college level.

11. How do you measure outcomes of the partnership courses?

LSC's Institutional research tracks the college level success of students who begin in Developmental Ed as they progress into college level. Measuring the success of the partnership is more difficult, but the fact that the initial LSC and ABE core faculty are still committed to the project and going strong speaks for itself.

12. Describe your experience during COVID – how has the teaching model changed or shifted and has your case load altered? Also have you put any new practices in place, including attending to students via distance learning?

Covid definitely changed the teaching format. READ/WRITE moved to completely digital via Zoom Spring 2020, and then to hybrid (F2F and Internet) Fall 2020 and Spring 2021. The plan, with CDC protocols in place, is to proceed as "normally" as possible Fall 2021. That said, the case load between the LSC and ABE faculty has remained virtually the same as in pre-Covid times. Moving

forward, as the situation continues to evolve, virtual formats such as Zoom and D2L, will be used to a greater extent than before, but F2F will remain the primary format as long as it is safe.

13. Lessons Learned/Plans Going Forward

We have learned that developmental readers and writers can be successful at college level with a foundation that integrates the two skills. We have learned that developmental readers and writers are resilient in the face of adversity. We have learned that a co-teaching/team-teaching model allows a team to maximize the collective strengths of the individuals, giving students an even better academic experience. Our plan is to move forward with our new OER text and to continue to build on past successes.

14. Final Thoughts

It's important to note that all of our success has happened because of a good working relationship between administrators at both LSC and ABE. The LSC Dean and ABE Director have enabled, supported, and advocated for the program and continue to do so in creating ways.



AEOA (Arrowhead Economic Opportunity Agency) Adult Basic Education and Hibbing Community College Partnership

Story contributors and/or Partnership Team:

Jill Carlson- AEOA, Adult Education Instructor

Terri Ferris- AEOA, Adult Education Lead Instructor

Donna Groettum- Hibbing Community College, Counselor, Advisor and Learning Community Faculty

Jessalyn Sabin- Hibbing Community College, Interim Dean of Academics

Tracy Chase- AEOA, Adult Education Manager

1. What was the history of your partnership; how did you get started, how's it going in general?

The college provost attended a meeting and was introduced to something called, Learning Communities. ABE was invited to a two-day training alongside college faculty which introduced the concept of Learning Communities and best practices of integrating ABE into DevEd classes, and precollege coursework prep.

We started as a small collaboration because there was only a small part offered to ABE. Although ABE was already on campus, our presence was basically assigned to those who were not advancing academically in DevEd classes, GED students and other community members who found they needed ABE services. We started small as it was as big as we could think, and we didn't know if it would be successful.

Our collaboration started strong, and continuously morphed into what we have today.

- Spring 2011 ABE and Hibbing Community College (HCC) held the first meeting to partner with learning communities
- ABE was given office space, computer access, telephone, and copy codes. HCC supplies the ABE instructors with all the coursework textbooks, classroom space and storage space
- ABE staff provided supplemental instruction and support for all courses within the learning community
- Students attended a required weekly 50-minute lab session coordinated by the ABE staff. ABE staff also attended the weekly team meetings with faculty
- HCC began the first learning community fall semester 2011 with three sections: 2 general education and 1 health careers section
- The goal was to improve retention and increase course completion rates for students who were considered at-risk
- Weekly team meetings were held with learning community's faculty for collaboration and student intervention
- Three learning communities were identified and started:
 - Level 1- students who test into PREP Reading/English and PREP math
 - Level 2 – mostly undecided majors
 - Health Careers (also a level 2) – This includes students interested in HCC's RN program and exploring a variety of health careers: RN, LPN, dental assisting, medical lab technician
- Fall of 2013- Law Enforcement learning community was added
 - Learners who test into two or more developmental courses who are enrolled in the law enforcement program
 - The law enforcement program is designed as a two-year program with 72 credits. The learning community law enforcement program is a three-year program. Students take fewer credits each semester
 - First semester courses include developmental reading and English classes, study skills, and two law enforcement classes
 - Reading class is taught by a law enforcement instructor. During the lab time material and assignments from the reading class are reviewed with the ABE instructor
 - 13 students enrolled; 9 completed the semester with a 2.76 gpa (grade point average)
- Level 1 learning community lab session was expanded to include daily study lab

- Lab would begin meeting four times a week for 50 minutes from 8:00 a.m. – 8:50 a.m. with ABE instructor
- Purpose: review homework and daily assignments and prepare for tests
- Five students enrolled; 3 returned for spring semester; 2.91 gpa
- Students who test into developmental courses have an opportunity before classes begin in the fall, to attend summer math boot camp or reading boot camp
- Classes are taught by an ABE instructor. This is no cost to the student
- After the classes are completed, the students are allowed to take the ACCUPLACER® again to improve their scores and test out of developmental courses
- Summer 2015 HCC Summer Science prep was added
- Fall 2015 Athletes learning community was added
 - This learning community is designed for varsity athletes who test into two or more developmental courses
 - First semester courses include Reading, English, Math, wellness and study skills courses.
 - Reading class is taught by the women's' volleyball/men's' basketball coach. Reading material is sports related
 - Wellness class is taught by the women's' basketball coach. Subjects include healthy living for college athletes
 - Lab session with the ABE instructor is expanded to four days a week for 50 minutes. The instructor can provide daily assistance with homework, motivation and encouragement.
 - Nine students enrolled; eight returned for spring semester; 2.37 gpa
- Learning communities have expanded to the culinary arts and automotive programs
- Students who test into level one reading or math are required to attend a weekly 50-minute lab session coordinated by the ABE instructor
- Course instructors, ABE instructors and college counselors meet once a week to collaborate on course work and student interventions. Currently, there are 3 Dev Ed learning communities, one college math prep, one college reading prep and OVERTIME study lab for athletes, there are two full time ABE staff on campus.

2. What benefits did you initially imagine?

We strived for consistent retention, persistence and passing grades of those students who were placed in developmental education classes. We also hoped to prepare those students who were placed into ABE classes from the ACCUPLACER® so they would have success in the developmental courses.

3. What initial or ongoing barriers did you encounter?

Our collaboration is very successful. All the players from ABE- faculty-staff-coaching-management to administrators have to be on board and want the same end goal. If there is a hiccup with any one player, it can cause problems. Weekly meetings are a must, and attendance is very important. If you have an instructor that is not interested in these meetings, things can fall apart very quickly. Staff changes because of retirements, and or job switching can be a barrier, but when the group is united in the cause, a welcoming atmosphere goes a long way. Flexibility is also key to a successful group. There are many times when we hear from students or staff after hours, and although it is not required, we will step up.

Guiding a student on how to navigate things like hunger, homelessness, job skills, healthcare and mental health issues often extend beyond 9-5pm, and we are all very cognizant of that and try and eliminate their barriers, even when they happen after hours.

4. Which level of integration or model for collaborative teaching are you using in your partnership?

The partnership utilizes the four levels of integration, described below. All students have a PEP (Personalized Education Plan, see Glossary) on file and have individual time with an ABE instructor to discuss goals and needs.

A. Level 1 – ABE instructor is the sole instructor

We offer College Prep Reading/Writing, College Prep Math, and College Prep Science. The goals of the prep classes are for students to work on basic skills in the disciplines and to retake the ACCUPLACER® and gain a better score, or to get a score that will allow entrance into programs with that prerequisite. The supplemental goal is to prepare the students for credit bearing classes and to guide the student in the many different aspects of being a successful student. The ABE instructor creates the curriculum and is constantly adjusting it to student needs. This requires flexibility and creativity. The ABE instructor will use various teaching techniques that benefit many learning styles and uses a hands-on approach. Besides the core of the discipline being taught, the ABE instructor also works on time management, learning styles, navigating systems, soft skills, and any noticeable basic skills that can help their students.

B. Level 2- College faculty are the main instructors, with ABE instructors present in the classroom

ABE instructors are present in Elementary Algebra and Developmental Reading/Writing classes, and College Success Strategies. We are there to add an additional level of support. We work closely with the instructors and are very flexible with what the instructors want from our presence in the classroom. Typically, the instructor leads the lecture, and will ask the ABE instructor for additional input as necessary. There is work time for the students after the lecture, and this is the time for the ABE instructor to help those students who are struggling with the content, and or need extra instruction. There is an added component to this cohort and that is a Level 1 lab class. Students are required to attend one lab class per week that is taught by the ABE instructor. This time is used to work on assignments, enrich understanding, and work on basic skills as necessary.

C. Level 3- ABE and college instructor provide shared instruction

ABE teaches at this level for the Law Enforcement, 3-year program. Students in this cohort are taking three years for a two-year program because they tested into Dev Ed but want to be in the program. This allows them to feel a part of the law program but work on Dev Ed and a few Law Enforcement classes. This cohort has evolved substantially, and as the ABE instructor has been in this program for many years, she is very familiar with the content. She has created study guides and additional content that supplement the college instructors' materials. There is an added component to this cohort and that is a Level 1 lab class. Students are required to attend two classes per week that are taught by the ABE instructor. This time is used to work on assignments, enrich understanding, and work on basic skills as necessary.

D. Level 4- One-room schoolhouse setting for members of varsity athletic teams or clubs typically known to struggle with academics and persistence

Class is called OVERTIME. There are two ABE instructors in the class as there can be as many as 20 students per class. Individuals come to class with specific work from their classes that they are working on. The levels of the students range from Dev Ed students to college level ready students, but that show a need for ABE through TABE testing. There is not an ABE curriculum that is followed as the students' needs vary, but there are opportunities for ABE to address the entire class with resources available to them, and many times this turns into guided instruction. ABE instructors are in the classroom and work with students. Groups are created for those students working on the same assignments. We have an attached computer lab to our classroom and typically there is one instructor working in each area. Distance learning and papers are usually being worked on in the computer lab.

5. Did you formally define your roles? How did you decide who would do what?

We have clearly defined roles. The ABE instructor is here to support students at the bequest of the HCC instructor, and Adult Ed takes their lead as to what they want from ABE. We have open lines of communication and weekly meetings. As time has passed, HCC staff have found Adult Ed's presence to be beneficial and are more inclined to ask ABE to be more involved.

6. Is the ABE partner on site or in the classroom? If so, what are they doing with the students?

The ABE partner is onsite, and in the classroom for levels 1 & 2. ABE has a designated classroom that has the capacity of 25 students, and there is typically one instructor in that room all day, depending on the Level 2-3 classes. Level 1 classes are taught in this classroom, or ABE instructor can sign out rooms for labs and such if the classroom is being used by another ABE instructor. ABE is offered copying privileges, library, D2L accounts and mailboxes as well. The HCC campus is very generous with ABE, and ABE feels very welcome and are asked often if there is anything that administrators can do to help the ABE program as the college sees the benefits to their students with ABE's presence.

7. How much curriculum or other design time was initially needed for each course, and how much time has been needed on an ongoing basis to continue the partnership?

We started with a couple of weeks to prepare for the first collaboration semester. ABE was not given much direction and just went with it and hoped for the best. ABE fit very well with the needs of the DevEd students and ABE's additions to each class they were involved in really evolved with each new day and continue to do so. Between the two ABE instructors there are 14 hours of prep time allotted. This time is used for planning, curriculum development and data input. Each semester can bring different instructors, different needs, and new ideas to try out. After the initial few weeks of testing and data collection, most of the prep time allotted is given to the classes.

8. How did you tweak or modify things over time?

We have changed many things over time. ABE started this with a couple of summer prep classes, it morphed into a couple lab classes as a supplement to DevEd classes, to inclusion into those classes, to full integration. HCC and ABE have an open relationship. We both have our program limitations, but together we can hit the needs of all students. ABE has a solid mission of educating students not only in academics needed for a degree at HCC, but also to work preparedness. ABE can include this part of the curriculum into lab classes in the form of resume writing, interviewing skills, soft skills, and job searching skills.

We touch on things like calling into work, daycare solutions and the possible repercussions of missing work and classes. As the college found out about all the things we do offer, they ask us to share this knowledge with their students. Each year we have meetings in the Spring and talk about what worked, and what didn't, and start brainstorming different ideas. We set our schedules for the Fall semester, and in the weeks leading up to fall semester, new ideas are tweaked and implemented, this typically looks like a new learning community being offered, or a new instructor on campus to work with. An example of this is in the Fall of 2019 Learning communities expanded to include Overtime. All athletes must attend study sessions at least 2 hours per week.

Overtime was started because we found out athletes were coming to ABE math classes that were not for credit or GPA but were not attending all of their credit bearing classes. We knew we had something that this population enjoyed and thrived on. So, we morphed our EMPOWER study session to a weekly check in option, with the invitation to access ABE instructor during open classroom times and concentrated on the athletes.

We have incredible counseling and advising staff and one counselor was constantly pondering what we could do for our athletes as they do not have an outstanding amount of returning, or even completing the first semester. It was born out of her dream to retain our athletes that OVERTIME was born. We have OVERTIME scheduled for Monday-Thursday from 2-4pm, and the athletes are required to be there 2 hours per week. It is on their printed schedule so there is no doubt about where they are supposed to be.

Not only do we have amazing attendance, but many come at different times throughout the day, and for many, more than 2 hours. Most of them start the first semester in Dev Ed classes, so they get to know ABE instructors from the classes that we are a part of. It is seamless to have them come to our room as they are familiar with us already, and they get to hang out with their teammates. WE HAVE A BLAST. It is non-structured, but they are required to write down what they are working on in the sign-in book. It is not a time for visiting and playing, it is about academics, but we also do much more in the way of community action program information, conflict management, volunteering, and just about anything you can think of.

We are given information from instructors if they are missing assignments or are struggling, we then work with them one on one as needed. The baseball coach has a 100% buy in and he comes to Overtime quite often to hold the athletes accountable. Snacks are always offered, along with coffee and hot chocolate. We have money set aside for snacks from the college and they have purchased hundreds of dollars of items for the room. Many students are coming here without anything, without family, and certainly not a lot of money. Within the first week, we have many of them signed up for SNAP and then we can sigh a breath of relief knowing that they at least have food. If we have any community food distributions, we offer to bring them.

Terri and Jill, although having no intentions of it being this way, are considered aunt figures to these kids. And it's true, Jill has had many team members to her house for Thanksgiving since many don't have a place to go. It is rewarding and the relationships are lasting to the next group that comes in, brings in the smiling newbies and we get to start the process all over again.

The success numbers are staggering and the return rate from first to second semester was remarkable. Terri, Donna, and Jill try to go to the athlete's home games as well, and when they see us in the stands, it is appreciated, and they are so excited to have us cheering them on. Jill takes pictures and puts them on the back of a bookcase, which we call the "fridge." The athletes love to see themselves on it and it is a source of pride for them.

We had one student transfer to another college last year. We tried to get him to go to ABE at his new college, but he didn't want to leave. We worked all year online, and he did awesome. We also have a generous college that gives us textbooks for classes we help with, and we know that many students don't buy books, so we let them use ours to do homework. When we are in class, we bring the textbooks, and they will sit with us and use them while there.

9. Has there been money provided for the design time or additional hours required for the partnership courses?

Adult Basic Education has used dollars from their state and federal funds to help off-set the ABE costs. The state funds used are part of the general dollars and the federal funds used are part of Regional Transitions dollars. The college system has used dollars from their budget to pay for their staff time. The college has also utilized grant dollars in some cases to support specific related projects. Each entity is responsible for their own costs.

10. How do you measure outcomes of the partnership courses?

Starting with the fall of 2012, when ABE started a student-centered collaboration at the Hibbing Community College campus, the rate of full-time students completing developmental education in one year went from 18.2% to 48.3% by 2017 as measured by Minnesota State. Two HCC coaches have written letters to the learning community staff commending the work we do with our athletes including the retention rate from the year before we offered Overtime as a supplement to the current year. The baseball coach stated, "The team posted a 2.86 average GPA and we lost only one student to ineligibility, where last year we lost 8-10, and it is because of the start of Overtime."

Our students are required to take a TABE pre-test upon entering and a post-test after 40 hours. This is another way of measuring student success. We utilize the Reports function on the MN SID database to measure ABE requirements and successes. Donna G does some data mining in her HCC database and puts together some loose data that addresses persistence from semester to semester and average GPAs. We also measure student success by their completing the semester with at least a 2.0, so that they remain eligible to register and stay in good academic standing.

11. Describe your experience during COVID – how has the teaching model changed or shifted and has your case load altered? Also have you put any new practices in place, including attending to students via distance learning?

Covid was a game changer. Our students left for Spring Break in 2020 and did not return. Completing Spring semester was a lesson in perseverance, dedication, and flexibility. ABE instructors were navigated to ZOOM along with the Hibbing Community College staff. ABE instructors continued teaching their prep classes on-line and it worked out quite well.

Our students already had the materials in hand, and we used technology to guide them through the remainder of the curriculum. ABE instructors were invited to attend the DevEd classes via Zoom with their students and college faculty. Break out rooms were used quite often, and the faculty would place the ABE instructor in the rooms for group work with the students. The ABE instructors observed that our students that were already struggling with face-to-face instruction, were falling behind dramatically with online instruction.

The ABE staff decided to open their schedules to include nights and weekends. If a student called or emailed, it was answered. If students needed a couple hours of tutoring on a Sunday, that is what they got. We all felt it was in the best interest of the students to go above and beyond to help them have a successful semester against all odds.

Starting Fall semester 2020 was difficult. Although we knew that it would all be at a distance, we didn't know what that would look like for new students coming in that didn't have the experience with ABE being in the classroom. We didn't really know what our role would be as it is really being in the classroom with the students, having our classroom available for them to come and work on their homework together, and getting to know our students on a personal level, all of which our students find appealing and beneficial. Our students proved to be diligent and worked very hard to adapt to distance learning.

The faculty maintained ABE presence in their Zoom classrooms with breakout sessions, and again, ABE staff kept their schedules open. ABE was allowed to continue OVERTIME but had to maintain the strict rules of social distancing, masks, and handwashing regime, along with on campus and agency rules. In February of 2021, ABE discontinued on campus OVERTIME class, and it was continued online. All the classes we were involved in continued online for the duration of Spring semester. We felt we did the best we could under the circumstances, but it also reiterated the importance of face-to-face instruction to our students.

12. Lessons Learned/Plans Going Forward

Plans come from people in our profession who have goals, dreams, and visions; and allowing for these ideas to be supported, validated, and realized. When we keep our plans fluid but based on the same goals, they progress almost organically. We continue to grow and expand our base and it has morphed into a student-centered approach, and we are always open and excited to see how much farther, and how many more students we can help.

The lessons learned are many. Start small, don't bite off more than you can chew. ABE support is based on the needs of scholars who function at a grade level lower than 12th. When we are in and out of the classroom, we are there to support the students who need more than a lecture to gain understanding of material. We are not there to replace faculty, to diminish the need for the campus academic center and their tutors, or to criticize teaching styles or techniques. If our students don't understand something, the ABE instructor has the time to take with them to create a deeper level of understanding. ABE is an addition, not a replacement.

13. Final Thoughts

As we continue this journey with the collaboration of HCC and ABE, we find ourselves very lucky to have found such a symbiotic relationship. We are entering our 10th year of this cohort and are very comfortable with our roles and responsibilities. We are always open to additional ideas, new plans, new curriculums, new staff and find it exciting to see our student successes increase.



Brainerd Adult Basic Education and Central Lakes College Partnership

Story contributors and/or Partnership Team:

Erica Henke, Brainerd ABE instructor, erica.henke@isd181.org

Deana Bobzien, Central Lakes College Instructor, deana.bobzien@clcmn.edu

1. What was the history of your partnership; how did you get started, how's it going in general?

When I began my journey as an ABE instructor 2 years ago, I started with several college classes and 3 college faculty members. All college faculty were accepting of ABE support. To begin with I was mainly support in the lab. I spent my first year learning how the developmental education classes work, developing a system for lab time and creating my own binder/materials for class. At first CLC instructors enrolled me in their D2L classes as a student so I was able to see what students were working on, homework assignments and due dates. As our relationships progressed several instructors gave me instructor access. This allowed me to see the entire semester course and I was able to know ahead of time what students would be learning. This was very beneficial to me as an instructor because I could create additional lessons for lab time to differentiate instruction for those that needed it. I was also able to create classes in Khan Academy for students who wanted extra practice with specific skills outside of class and lab time.

As our relationships progressed, I was given more responsibility and granted instructor access to classes in D2L. This has been beneficial to both myself and the college faculty because I can monitor

students assignments, tests and view upcoming lessons that are hidden for students until the day of the lesson. I can also view test questions to help students prepare and create study sessions.

2. What benefits did you initially imagine?

The initial benefit is student success and program growth. Within our ABE program we gage success on students passing their classes and attaining their degree or certificate. Our goal is to create a partnership that will allow students to learn and grow over time without the intimidation of jumping right into college classes. The flow of classes allows students to create a relationship with an ABE instructor that is then available to them as they move through their college experience.

Another benefit is students' ability to register for college classes after completing ABE class(es). This is a benefit for ABE as well as the college. The greatest benefit being for the student that needed extra support and time. With the extra support and time, they can find success in college and then in the workforce.

We have had several students complete an ABE math or reading class in our program and register for college classes the next semester. One student that began in ABE math, then progressed to developmental education math just finished her AA spring 2021 and is going on to BSU for her social work degree. She is the perfect example of how our programs can work together toward student success.

3. What initial or ongoing barriers did you encounter?

The barriers that we have had to overcome include scheduling, staffing and lab time. The administration and staff at CLC have continually worked to ensure that developmental education class times are offered when ABE support is available. The challenge is scheduling a variety of classes and instructors to work with (currently) 1.25 ABE instructors. When supporting several classes, it lends to a full day and we also need staff in our GED classrooms.

Another barrier is selecting the right classes to support. Some classes lend themselves better to level gains on the TABE. Finding the classes that fit ABE criteria and will be beneficial to students can be a challenge.

Technology has also been a challenge. In the last year and a half ensuring that students have the correct calculator and have the computer skills necessary to be successful with distance learning has proved to be challenging. The developmental education committee at CLC was able to use grant money to purchase Ti83 calculators that students can check out. Initiatives like this have helped many students gain access to the technology they need while working from home.

4. Which level of integration or model for collaborative teaching are you using in your partnership?

Currently I am working with 2 college faculty. As we monitor college classes and determine what classes are appropriate to support, our program has grown. Supporting our college's developmental education classes has been beneficial for many ABE and college students.

Going into 2021-2022 I will be supporting our Fundamentals of Math and Math Pathways class. These classes consist of 1 hour of instruction and 1 hour of lab time with the lab dedicated to only students in Fundamentals and Math Pathways and attendance is required. In these classes the CLC instructor teaches the materials, and I am in the room during instruction observing and monitoring student mastery of topics, answering questions and helping students that are struggling with

technology. I also assist with finding/creating projects that students can complete during lab time. Projects are designed to help students make connections with each other, reinforce what is being taught in class and also gives students an opportunity to master the technology we are using whether that be their computer, their D2L class uploads or calculator use. It is a great way to build community and connections between students and staff.

I will also be offering support for a newly created class. The Pathways to Statistics class is designed to pre-teach skills and vocabulary for the Statistics class. To begin supporting this class I have been working on a curriculum over the summer that I will add to each week while the class is being taught. I am using the Statistics textbook, and instructor syllabus to create the curriculum for the Pathways class. This Pathway class will also have a CLC instructor and we will work together to tweak the curriculum as the semester progresses. It is my hope to have a curriculum I can use in our ABE lab to help prep students for Statistics if they are unable to take the Pathways class due to scheduling conflicts, or possibly use the curriculum online or as distance learning if needed.

5. Did you formally define your roles? How did you decide who would do what?

Defining roles in our partnership was important for both parties. To begin ABE was solely a support in class and lab time for homework completion, support and access to computers if needed. As we have progressed our roles have changed. ABE staff now monitor student progress on D2L, understanding of materials during class and re-teach concepts during lab time. ABE staff also proctor tests, create and initiate class projects, and offer additional study times before tests. ABE staff are also able to offer additional lab time to students who need extra help or who have missed class.

6. Is the ABE partner on site or in the classroom? If so, what are they doing with the students?

ABE staff are located on site, in the classroom and in the lab at CLC. In the classroom ABE staff are listening to the college faculty lecture and monitoring students for questions and level of understanding. After class if lab time is available, the ABE staff are re-teaching and helping students achieve mastery of the concepts taught. ABE staff can also assist students who have been absent with assignments they need to complete. Test proctoring can also be completed by ABE staff if needed. Knowledge of technology is another important skill that ABE instructors can implement into classroom or lab time.

7. How much curriculum or other design time was initially needed for each course, and how much time has been needed on an ongoing basis to continue the partnership?

When I began as an ABE instructor the classes I was supporting were already created, but there was no ABE curriculum/binder to work with. During my first semester I created a binder for each class with all of the necessary materials, including study guides, homework, tests, and projects. Finding additional curriculum and projects for differentiation was needed for struggling students. Having this resource made teaching the next semester easier and with much less prep time needed.

As we have progressed and have gained additional Pathways classes (new to the college and new to ABE) more curriculum is needed. We are currently creating and designing the curriculum for a Pathways to Statistics class. This is scheduled for 40 hours of curriculum writing time. This curriculum will be designed over the summer, with many holes to fill during the first semester that

it's being taught. Our hope is that after the first semester we will have a curriculum that any ABE instructor can use to prep students for the course.

8. How did you tweak or modify things over time?

Modifying curriculum is an ongoing process that will continue over time. After the initial curriculum is designed small changes can be quick and seamless. When a lesson doesn't go as planned, notes can be made and that lesson changed without creating an entirely new lesson. ABE staff and CLC staff work together to make changes.

9. Has there been money provided for the design time or additional hours required for the partnership courses?

We have received grant money to develop curriculums. The Pathways to Statistics is the first curriculum that I have worked on designing through a grant.

10. How do you measure outcomes of the partnership courses?

We measure partnership outcomes by student mastery of the class(es) we partner in. Success is also measured by student numbers that enroll in college classes after successfully completing a developmental education class. Students earning an AA or certificate through CLC is also a way we measure success.

11. Describe your experience during COVID – how has the teaching model changed or shifted and has your case load altered? Also have you put any new practices in place, including attending to students via distance learning?

Our model of teaching changed during Covid in multiple ways. Our in-person classes at CLC went to distance learning. We needed to adapt our lab time to distance learning also. We began by setting up repeating Zoom times for class. The CLC instructor set up the class period Zoom, and I set up the lab time Zoom. We created our Zoom meetings to repeat for the semester so the student could use the same link and code all semester. We did this for the second half of Spring semester 2019, and for portions of the 2020-2021 school year.

For the most part our college students were very adaptable. We had periods where the college was closed and/or when limited numbers of students were allowed on campus. One accommodation made was dividing the class into small groups and allowing six students at a time to come to class in person. The instructor would lecture to them and the other students attended Zoom. Having ABE support during these times worked out great. I was able to monitor the Zoom video for tech problems and chat questions while the instructor continued to teach.

Our lab time during Covid was much different. I was able to use the white board feature to show students how to work out problems, and we also used it for group study sessions before tests. I was able to use break out rooms for groups that wanted to review together. With Zoom, if students wanted to continue working together, but I needed to log on to another class, I was able to make one of the students the host of the meeting and they could continue working together. Often during lab time, the CLC instructor would have office hours so students who needed to meet with her could leave the lab session, go to office hours, and then easily return to lab.

12. Lessons Learned/Plans Going Forward

Going forward we plan to continue and grow our relationship with CLC. Our ABE program has developed a great relationship with the Liberal Arts department at CLC. We plan to continue supporting as many developmental education classes as we can depending on ABE staff availability and college enrollment. We will continue offering our ABE math and reading classes that will lead to increased enrollment in college classes after successful completion. We will also encourage our students completing their GED's to look into career programs at CLC and connect them up with the correct CLC staff to begin their journey.



Northwest Service Cooperative -NWSVC Adult Basic Education and Northland Community and Technical College (NCTC) Math Partnership

Story contributors and/or Partnership Team:

Ralph Cox, Northland Community and Technical College Math Faculty

Ann Dziengel, Adult Basic Education Instructor

Lynn Bastian, Adult Basic Education Instructor

Kirsten Fuglseth, NWSVC Adult Education Coordinator, kfuglseth@nw-service.k12.mn.us

1. What was the history of your partnership; how did you get started, how's it going in general?

The process began with developing a shared vision and ended with developing, implementing, and assessing the action plan after attending a Northwest Regional Transitions sponsored Developmental Education Summit in the fall of 2014 in Detroit Lakes, MN. One of the main focuses of the summit was the importance of building partnerships between MinnState and ABE. Over the next few weeks, the math faculty member and the ABE instructor continued to have conversations about starting a partnership in his Developmental Math Foundation 0080 class. With support from

both Northland and ABE program administrators, the partnership began in the spring semester of 2015.

The collaboration started with individuals who had a vested interest in the success of students enrolled in Developmental Education courses. After establishing a trusting relationship between partners, a shared vision and content goals were determined and instructional materials, strategies, and assessments were developed. This required open communication among motivated partners, and a sufficient means to implement and sustain the collaborative effort for the success of the students.

It is unique that the Northland math faculty member's father had been an ABE instructor in northeastern Minnesota for more than 30 years, providing a good understanding and appreciation of how ABE worked and the benefits it provided. In fact, prior to the partnership, several of the "Contemporary" math textbooks used by ABE were adopted by the math instructor for use in the Math Foundations developmental education courses.

2. What benefits did you initially imagine?

The primary benefit was to provide students with as much assistance as was needed to understand the course content. The thought was that a struggling student might understand a different approach used by a different instructor when solving a math problem. ABE also provided additional contact hours for practice and supplementary instruction and student support. The fact that ABE requires a minimum of 40 hours of instruction before retesting was seen positive motivation for students to commit to spending time on task.

Northland and ABE have been co-located since 2003 and each party is somewhat familiar with the programs and services each other provides. Because of the prior collaborative working relationship of those involved, it was easy to build upon that relationship to establish a partnership which would better serve each student's academic, technological, emotional, and socio-economic needs.

3. What initial or ongoing barriers did you encounter?

There may be more, but the primary ones encountered were/are:

- a. There is a stigma sometimes associated with Adult Basic Education. Not all college faculty see the value of ABE in the classroom, nor respect what they have to offer. This may be an issue of turf protection. In addition, a few students had a problem with receiving help from the ABE program.
- b. There was a lack of continuity in college leadership. During this time frame, we endured three different Presidents, two different Chief Academic Officers, three different deans in charge of developmental education, and several different directors of the Academic Success Center.
- c. There have been several changes to the TABE and ACCUPLACER® assessments forcing experimentation with several different assessment packages, including using locally developed tests, in order to pre- and post- assess student performance to track their progress.
- d. There are ongoing scheduling issues. The ABE program year ends prior to the end of college courses in the spring semester. ABE and college instructor schedules need to be adjusted to

cover the partnership courses and still continue to support the ABE classroom. Staffing issues are affected by developmental course enrollment.

4. Which level of integration or model for collaborative teaching are you using in your partnership?

In the beginning, MATH 0080 Math Foundations was offered as the course of focus for the partnership with supplemental support embedded within the classroom. The classes were offered for one hour each day, four days a week. The college content instructor took the lead and introduced the topic(s) of the day. The ABE instructor was in the classroom at the same time, providing a second set of eyes and ears to monitor student understanding.

Due to scheduling conflicts, it was necessary to have two ABE instructors split time in the math classroom. Each ABE instructor spent two days a week in the class. Students were invited to come to the ABE classroom for help outside of scheduled hours whenever they needed it.

ABE also provided students with access to an online platform, *SkillsTutor* (see *Glossary*), which allowed for extra practice at home with the course content. Before each test, students were invited to attend review sessions in the ABE classroom and the ABE instructors also scheduled and monitored make-up tests.

In addition, the partnership had a working relationship with the college's Academic Success Center staff to help with any additional support the students needed beyond the partnership.

5. Did you formally define your roles? How did you decide who would do what?

Initially, roles were not clearly defined, but rather assumed. The college content instructor took the lead role in demonstrating the process and preparing the handouts, homework, and tests. The ABE instructor took attendance and monitored student understanding, providing additional support as needed. Subsequently, our model of the partnership evolved during the years after the initial formation.

The college instructor's role is to provide all the content area instruction and materials. All grades are determined by the instructor.

Initially, the ABE instructor's role was to support the content instructor, provide textbooks and additional curriculum, pre/post assessments with diagnosis, and tutoring outside of classroom for those students with skills below the course content level.

Later, the ABE instructor's role expanded to that of a co-instructor in the course. ABE stepped in to continue instruction and support for students when the content instructor was absent from the course or if students needed extra time.

6. Is the ABE partner on site or in the classroom? If so, what are they doing with the students?

ABE is co-located on the Northland - Thief River Falls campus. One ABE faculty member is in the college classroom during each scheduled class hour while the other ABE faculty member monitors

the ABE classroom. An ABE faculty member is embedded in each course offered in the partnership and Northland students are co-enrolled in ABE in order to access the supplemental services provided.

7. How much curriculum or other design time was initially needed for each course, and how much time has been needed on an ongoing basis to continue the partnership?

As with any collaborative effort, time was needed for the planning and development of strategies and curriculum. After a course schedule was agreed upon, we adapted many of the handouts, worksheets, homework, assessments, and tests already in use by the college faculty member. Supplemental support material was then identified and/or developed and shared. There was also additional time spent on the choice and administration of assessments, and on the collection and organization of student data.

8. How did you tweak or modify things over time?

As we have grown familiar with the process and developed more trust in the partnership, we have expanded our collaboration to include the entire sequence of developmental math course offerings. This, in turn, has resulted in the inclusion of new ABE faculty within the partnership.

In the willingness of the partners to continually enhance teamwork strategies, we expanded the partnership to include additional developmental courses such as MATH 0090 Introduction to Algebra, MATH 0094 Pre-College Algebra, and MATH 0098 Intermediate Algebra courses in the Fall 2018. This strengthened the collaboration and helped ensure its success as the students continued their educational pathway in the Developmental Education courses. In Fall of 2020, we further expanded the collaborative effort to include MATH 1003 Math Applications for Nurses, a credit-bearing course in the medical careers program.

In the future, the reading and writing courses could be other opportunities for Developmental Education partnerships, as many English as a Second Language (ESL) students continue their educational pathway in Northland nursing, sports medicine, auto mechanics, autobody and welding programs.

When *SkillsTutor* was retired, we began using *Edmentum* online (known previously as *Academic Systems* and *PLATO*) as additional supplemental curriculum to provide them with extra practice at home on the course content for all the Developmental Education courses offered by Northland. ABE instructors continued to provide support to any student who was struggling in the ABE classroom or through Zoom online study sessions after hours, especially during COVID. It was really important to students in the medical field or athletes to have additional access to support.

9. Has there been money provided for the design time or additional hours required for the partnership courses?

Funding allocations and budgets are established at the start of the fiscal year. Therefore, initial and additional staffing hours (when new instructors came on board) were supported with Regional

Transitions funding during the establishment of the first cohort of each new class. Following the initial cohort, regular state and federal grants have been used to continue the partnership and pay for extra hours of ABE instructors.

No additional funding for design time was provided by the college in support of the partnership, however, the college did provide access to instructional tools for the classes through a MinnState grant.

10. Benefits Realized

In any educational endeavor, student success should be viewed as the ultimate determining factor. However, as with any instructor initiative in the classroom, the success of the effort really is dependent upon the student choosing to access what is provided. For those who have engaged in this new learning environment, student feedback has been generally positive and supportive of the process. Analysis of student pre- and post- assessment data also indicates positive results.

11. How do you measure outcomes of the partnership courses?

Strictly by the numbers, the Northland ABE Collaboration has provided support to nearly 500 students in 32 different classes. However, since several of those students are repeat customers having enrolled in multiple courses, it is safe to say that roughly 400 different students benefited from the partnership. In the summer session 2021, we had an additional eleven students enrolled in Math 1003 course.

What follows are a variety of images and tables, demonstrating data elements collected in the different courses taught under this partnership umbrella.

See charts next few pages.

MATH 0080

Math Foundations

3 credits

Topics include problem solving, whole numbers, fractions, decimals, percents, ratios, proportions, and basic algebraic manipulations.

The Northland ABE Collaboration began in Spring semester 2015 with co-enrollment in MATH 0080 on the Thief River Falls campus. Pre and Post test data was collected for both TABE and ACCUPLACER Arithmetic assessments.

Northland ABE Collaboration

Total Co-enrollment Numbers:

Spr 15 = 8

Fall 15 = 32

Spr 16 = 11

Spr 17 = 20

Fall 17 = 35

Spr 18 = 10

MATH 0094 Pre-College Algebra

4 credits

Topics include algebraic expressions and equations, factoring, properties of exponents, polynomial operations, graphing linear equations and inequalities, solving systems of linear equations, rational expressions, roots and radicals, complex numbers, and solving quadratic equations.

In Spring of 2020, the Northland ABE Collaboration was expanded once more to include MATH 0094 on the Thief River Falls campus.

Total Co-enrollment Numbers:

	MATH 0080	MATH 0090	MATH 0094	MATH 0098	TOTAL
Spr 20	1	11	7	7	26

MATH 1003 Math Applications for Nurses

2 credits

Topics include a review of fractions, decimals, percentages, ratios, proportions, conversions, and dimensional analysis with an emphasis on applications as they apply to the nursing field.

In Fall of 2020, the Northland ABE Collaboration was expanded to include MATH 1003. Most recently, in Spring 2021, the Collaboration was further expanded to include the East Grand Forks Campus and two online sections of MATH 1003.

Total Co-enrollment Numbers:

	MATH 0080	MATH 0090	MATH 0094	MATH 0098	MATH 1003	TOTAL
Fall 20	14	9	8	5	28	64
Spr 21	14	6	12	4	76	112

Please note in the tables below:

- Data that was not available due to Covid is marked *
- Instances where no ACCUPLACER® data was recorded are marked **
- After Spring 2020 and forward, the instructional hours are average ABE contact hours recorded and don't include D2L instructional hours or Zoom office hours with instructor.

TABLE 1: MATH FOUNDATIONS 0080 - CLASS AVERAGES

Course Name	Math Foundations 0080 (class averages by column)								
Schedule	MTWR for 12 weeks								
Semester & Year	TABE Raw Score @ Pre-Test	TABE Raw Score @ Post-Test	TABE Grade Level @ Pre-Test	TABE Grade Level @ Post-Test	Classic ACCUPLACER® Pre-Test	Classic ACCUPLACER® Post-Test	Instructional Hours	Instructor Designed Pre-Test	Instructor Designed Post-Test
Spring 2015	513.9	562.9	6.6	9.1	25	77	45.9		
Fall 2015	524.5	562.7	7.1	9.2	33	71	47.5		
Spring 2016	526.1	538.2	7.2	8.4	33	65	43.9		
Fall 2016	511.5	550.1	6.7	8.0	**	**	44.8		
Spring 2017	501.2	549.2	6.3	8.0	31	62	47.5		
Fall 2017	526.8	552.1	7.1	8.6	31	69	44.7		
Spring 2018	500.9	544.4	6.1	8.2	28	64	44.3		
Fall 2018 Session 1	511.2	550.9	6.7	8.0	29	63	47.1		
Fall 2018 Session 2	488.4	526.7	5.5	7.2	28	59	47.1		
Spring 2019	494.8	515.8	6.7	8.2	**	**	48.7		
Fall 2019	512.6	533.5	6.7	8.3	**	**	44.4		
Spring 2020 (COVID Impact)	476	*	5.0	*	*	*	45.7		
Fall 2020 (COVID Impact)	*	*	*	*	*	*	12.5	47%	86%
Spring 2021 (COVID Impact)	*	*	*	*	*	*	6.5	55%	84%

TABLE 2: MATH 0090 INTRODUCTORY ALGEBRA - CLASS AVERAGES

Course Name	Math 0090 Introductory Algebra (class averages by column)								
Schedule	MTWR for 8 weeks								
Semester & Year	TABE Raw Score @ Pre-Test	TABE Raw Score @ Post-Test	TABE Grade Level @ Pre-Test	TABE Grade Level @ Post-Test	Classic ACCUPLACER® Pre-Test	Classic ACCUPLACER® Post-Test	Instructional Hours	Instructor Designed Pre-Test	Instructor Designed Post-Test
Fall 2018	566.1	577.9	7.1	8.4	36	**	46.2		
Spring 2019	517.5	561.2	6.6	7.1	**	**	41.25		
Fall 2019	543.4	546.5	8.1	8.2	**	**	45.5		
Spring 2020 (COVID Impact)	537.0	545	8.1	8.2	**	**	44.13		
Fall 2020 (COVID Impact)	*	*	*	*	*	*	7	46%	71%
Spring 2021 (COVID Impact)	*	*	*	*	*	*	8	50%	80%

TABLE 3: MATH 0098 INTERMEDIATE ALGEBRA - CLASS AVERAGES

Course Name	Math 0098 Intermediate Algebra (class averages by column)								
Schedule	MTWR for 8 weeks								
Semester & Year	TABE Raw Score @ Pre-Test	TABE Raw Score @ Post-Test	TABE Grade Level @ Pre-Test	TABE Grade Level @ Post-Test	Classic ACCUPLACER® Pre-Test	Classic ACCUPLACER® Post-Test	Instructional Hours	Instructor Designed Pre-Test	Instructor Designed Post-Test
Fall 2018	582.2	587.3	8.3	8.6	34	**	31.9		
Spring 2019	545.6	552.8	7.1	7.3	**	**	55.1		
Fall 2019	554	552.8	8.1	8.2	**	**	39.8		
Spring 2020 (COVID Impact)	545	*	8.1	*	**	**	44.13		
Fall 2020	*	*	*	*	*	*	5.5	67%	90%

Course Name	Math 0098 Intermediate Algebra (class averages by column)								
Schedule	MTWR for 8 weeks								
Semester & Year	TABE Raw Score @ Pre-Test	TABE Raw Score @ Post-Test	TABE Grade Level @ Pre-Test	TABE Grade Level @ Post-Test	Classic ACCUPLACER® Pre-Test	Classic ACCUPLACER® Post-Test	Instructional Hours	Instructor Designed Pre-Test	Instructor Designed Post-Test
(COVID Impact)									
Spring 2021 (COVID Impact)	*	*	*	*	*	*	10.5	82%	92%

12. Describe your experience during COVID – how has the teaching model changed or shifted and has your case load altered? Also have you put any new practices in place, including attending to students via distance learning?

Due to COVID the partnership was forced to adapt the courses as they were transitioned to an online environment. As part of this process, materials and instructional videos were uploaded into D2L Brightspace. One challenge was finding ways to assess students and collect outcome data for the courses. Instructor developed pre- and post-tests were administered, as well as and the pre and post-tests offered in Edmentum. Other adjustments included ABE shifting to conducting intakes virtually, virtual office hours offered by the Northland and ABE instructors, and bandwidth & technology issues identified and addressed.

Each partner encouraged student engagement and participation, however the average amount of contact hours per student declined compared to face-to-face instruction. This was in spite of ABE offering virtual and in person tutoring, as well as make up sessions and Zoom pop up study sessions.

One the of practices we will continue is uploading materials and videos in the D2L classroom, even if the course is offered as an in-person course. Student feedback was that they benefitted from having access to the videos and worksheets following the days instruction. They could revisit the material as often as they wanted. In addition, if a student was absent, the information was accessible at a later date.

This flexible schedule was advantageous for students, but we needed to set deadlines to promote self-management and good study skills. ABE instructors will continue in-person and virtual study sessions outside of class time and instructor's office hours. Students expressed it was beneficial to their success. They enjoyed the curriculum structure, materials, and access to academic support.

13. Lessons Learned/Plans Going Forward

The primary assessment tools (TABE, ACCUPLACER®, etc.) were changed dramatically due to an update during the course of the partnership, making it difficult to compare and contrast data

collected overtime. In addition, we may have overwhelmed students with the multiple platforms we were using during this period of transition as we were searching for an appropriate assessment tool.

Over the past year or so, the new placement standards have negatively affected developmental course enrollment at Northland. Since ABE staffing is somewhat dependent upon developmental course enrollment, it is very important for college and ABE administrators to be in close communication during the semester planning process.

By further analyzing the demographic data collected in this partnership we may be able to identify any performance differences based on gender, race, age, and/or program of study, and then take steps to address those differences.

14. Final Thoughts

As more states have moved to mandatory college readiness testing, higher education institutions across the nation have seen a significant increase in the numbers of 'at risk' students needing developmental education over the past several years. However, at the same time, the additional cost of providing developmental education at public higher education institutions has come under increasing scrutiny leading to the general public questioning the necessity and validity of such developmental courses. From students, to parents, to high school counselors, to state and federal legislators, many see the proliferation of developmental courses on college campuses across the nation as nothing more than a money grab on the part of higher education institutions.

But what if the student truly is un-prepared or under-prepared for the rigors of college life? It is important to note that the open enrollment and access policies governing many public colleges mandate that anyone be allowed to enroll in the institution. If they come to the institution inadequately prepared, with gaps in their knowledge, skills, and abilities, how then can the institution be expected to adequately prepare them for their future careers without first filling those gaps? This puts additional burden on these institutions by requiring them to respond to the diverse educational needs of the students. The response tends to result in 'gap filling' pre-requisite courses that often fall into the realm of developmental education, sometimes also referred to as remedial education.

This is the educational climate that we find ourselves in today. Legislatures and college administrators alike are emphasizing accountability and efficiency every step of the way. The question really comes down to how effective are developmental courses in closing those 'gaps' and preparing the 'at risk' students to be successful in their chosen careers. There are many different existing studies that have asked that very question and that have examined many different aspects of the issue, with many different results, conclusions, and recommendations, several of which have not been very positive. Our collaborative partnership has always been focused on meeting the needs of the individual student. Since that is the case, it may be best to begin by describing the typical developmental math student enrolled in our program.

Most students have had several previous negative experiences in math and, therefore, have confidence and self-esteem issues involving their abilities in math. In short, they don't think they are, or ever will be, any good at math. They tend to be frustrated, overwhelmed, and angry. They generally don't like math, and, therefore, don't like math instructors. Most struggle with basic math computations without the use of a calculator, in particular multiplying and dividing. They tend to be

ashamed of this and think they are all alone in this regard. About half have forgotten the basics and just need a refresher, while the other half never really learned the basics.

Many are high risk (high need) and are also enrolled in a developmental reading and/or writing course. Too many are enrolled in a full credit load above and beyond their developmental courses. Many struggle with regular attendance, and most work part-time and have children.

The typical age is between 18 and 25 years, though there are several older students. Depending on the semester, the class can be quite geographically, ethnically, and racially diverse though usually most are Caucasian from northwestern Minnesota. It is usually fairly evenly split regarding gender. The course is also fairly evenly split regarding the students' program majors, vocational/technical vs. liberal arts/transfer. Most are in the class because it is required for their degree or diploma program. Perhaps most importantly, most of our students enrolled do have the ability to overcome their previous failures and frustrations in math and to be successful in the course.

In such a developmental environment, we believe that positive student-instructor interaction is extremely important. When there are more than one set of eyes monitoring the classroom, it is much easier to read the blank stares, sense the frustration, and monitor and adjust the steps being used. By the end of the course, each student enrolled needs to demonstrate skill mastery at the individual level, independent of assistance and/or guidance. In short, they have to be able to demonstrate that they can do it, not in a small group, not with assistance, but by themselves. The students need to understand and accept that they are responsible for their own learning. Those who choose to engage are those who have the greatest opportunity for success.

In addition, a collaborative partnership needs to be flexible in order to handle any future changes in developmental education involving new course development, sequencing, and/or changes to placement parameters and procedures (DESR, multiple measures, Math Pathways initiative, etc.).

Finally, trust and mutual respect among all parties involved is essential to the success of any partnership. Without trust and respect, people often hold back and are reluctant to share their time, talents, and resources. A shared vision, with long term goals and accountability from everyone involved, helps to bring focus and, hopefully, success to the students.