

Keynote Debate 2: Remediation vs. Integration May 26th, 2017

We are all familiar with the students that enter college programs and lack the required mathematics background. Perhaps they have not completed the high school prerequisite math courses because they are entering as a “mature student” or perhaps they have the completed requirement but were not strong in high school and continue to struggle. The lack of understanding is evident early in the first semester math courses or on the math assessments that are administered in order to place students in the right level of math. Our colleges want those students to continue, so..... Should the students continue in the first semester 'college level' math courses and hope that they succeed? Or should the students with the lack of background knowledge be required to take some remedial math so they can be successful moving forward? Which is the better approach and why? Join the debate with your own comments!

Initial vote:

- Remediation: 35
- Integration: 7

Integration: Derek (Confederation), Trevor (Confederation)

- Cannot win a race starting in the back of the pack riding a slower car.
- You need a faster car. At a school setting, this looks like support.
- Integrated students will have the same support from teachers, tutors and support services as remedial students
- Students also help each other through a course/program
 - Sharing resources, dates and deadlines
 - Stronger students help weaker students
 - Placing students in a remedial math course tears apart these peer support groups
- Integrate students with their peers and provide the normal additional supports
- The most important thing we do as a professor is to have student success
- If remediation meant student success, then it would certainly be the path to take, but...
- Columbia university study shows that students put into a developmental education program have zero to negative effects from that developmental program
- Remediation costs students more time and money
- Anecdotal evidence for success in remedial programs, but...
 - Would students in an integrated course with the same teacher have seen the same success?
- Success has a lot to do with the student and the teacher, not the course design

Remediation: Cameron (Humber), Stephanie (George Brown)

- Imagine you're in a large body of water and holding on to a raft because you've never learned to swim and someone comes by and tells you to swim to shore. Remedial math allows students to learn to swim first.
- Remedial math reduces math anxiety and gives students
- Demands on students now are already too high
 - Dense curriculum - setting students up to fail

- 80% of college students experience high to very high math anxiety
- Anxiety doesn't go away by dumping "inexperienced swimmers" with "Olympic swimmers"
- Math students who have never succeeded before have low self-efficacy and motivation
- We must meet student where they are and teach/inspire them to grow
- Can't place under-prepared learners in non-remedial math courses and expect them to catch up
- There's a gap between students who've never learned basic material and teachers' expectations that students already learned the material
- Doing well in remedial math can boost confidence
- The people looking for help will find help, but the people who have significant knowledge gaps don't know where to start
- Have remediation before the program so students end up remaining with peers

Rebuttals

- Integration
 - If I couldn't swim, I'd feel more confident knowing I was in a pool full of Olympic swimmers
 - Remediation is not the same as upgrading/preparatory programs
 - Remediation identifies students as "not smart" to their peer group
 - Maybe they'll catch up, but probably not
 - Does it make sense that they'll catch up to their peers by going slower?
- Remediation
 - Do weak swimmers want to swim in a pool full of Olympic swimmers swimming around them?
 - Peer support only helps with small gaps, not large gaps
 - Large gaps make students feel stupid – boost confidence through remediation to help them fit in with peers better
 - A failing student in an integrated course may cost more money than a successful student in a remedial course
 - Preparatory programs/academic upgrading IS remediation
 - We have a responsibility to make sure students can complete their programs

Comments from the floor

- Integration
 - Once students have met admission requirements for a program, we need to assume they've met basic skill levels
 - Isolating a student only integrates them with students who don't have the proper behaviours
 - Integration is the whole idea behind language immersion schools
 - College supports are provided to students in an integrated environment without separating them from their peers
 - Really trying and studying is not usually the reason behind failure – usually it has nothing to do with mathematical skill level
 - MAESD does not financially support remedial courses

- International, WSIB students aren't funded for remedial programs
- Our first semester courses are already remedial programs. Removing them from these IS isolating them from their peers and "labelling" them
- Exposure to a positive math experience CAN happen in an integrated math class
 - Have remedial elements in all of our first-semester math classes
- If a huge skills gap exists, whether or not they're successful in a remedial course is arguable
- Putting students in a slower route ends up disadvantaging students across all courses and subjects in a program
- Lowering the bar of expectations is a worse problem than raising the bar of expectations
- Remedial courses rehash old secondary school material – not as much motivation as actually being in a program-specific integrated course applying the math to a vocation
- Success rates in the long run with remedial courses don't always change for a program
- Slowing students down initially means they have to speed up later
- Teachers can create an environment where strong students DO help weaker students.
- Secondary schools tend to run "lower-level" math courses only due to enrollment concerns
- Colleges keep creating remedial course/programs and that may be an enabling behaviour for keeping applicants unprepared
- Sometimes we can't run remedial courses because the enrollment would be so low
- Remediation
 - Students in remediation aren't removed from their peers – they can join them "on stream" later
 - Remediated students still meet program requirements by the end of the program
 - Students re-taking an integrated course are already isolated from peers since they're held back a year
 - Which is worse, failing and being held back or take remedial courses to re-join peers?
 - Major skills gaps in an integrated course still can't be made up, regardless of the amount of extra support
 - Remediation does not mean lowering the bar of expectations, removing students from their friends or slowing progression through a program
 - Math courses aren't competitions – there can be many winners
 - Weak students form peer groups with weak students, strong students form peer groups with strong students
 - Remediation isn't always removing students from courses, but splitting courses into two courses to give students more time to succeed
 - Students needing remediation not only come to us with skill gaps but FEEL they have significant challenges
 - This may lead to them working even harder than students in the "regular" classes

- After remediation their success rates can be significantly better than students who are integrated
 - The students who keep failing keep paying for courses – student support can only do so much
 - Students in remedial classes feel more comfortable with this peer group
- Our job is not only to teach skills but to turn students' belief around that they're not strong in mathematics
- We're under great pressure to increase enrollment and take in less-qualified people all the time
- Students have been integrated through secondary school and didn't learn the material
- Mathematics is a key enabling skill for most programs. Not having the skills leads to poor success in a program. Remediation is required before they get in the other courses in their programs.
- Remedial course run at the same time as the integrated course may be a good model
- Colleges are admitting unprepared applicants anyway, so why not create more remedial courses?
- So many different models of remediation – you can choose one that leads to success in your program
- How remediation happens is the trick – even with low enrollment, there may be a non-course-based strategy
- Another trick to remediation is identifying what the difficulty is that students have with the material/learning and individualize the support

Closing statements

- Remediation
 - The problem isn't should we remediate, but how we remediate
 - Remediation can have a high bar of expectations, can have context, can have the ability to work with peers
 - Remediation can be low cost and customizable to programs and individuals
- Integration
 - Should we be excluding people from this debate because their debate skills aren't up-to-speed?
 - Should we welcome everyone to the debate in an integrated environment

Final vote

- Remediation: 35
- Integration: 14