



Lessons Learned: Planning Corequisite Content



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- ★ Start from scratch: Reconsider the gateway course content, pacing, and sequencing; layer in the support content.
- ★ Promote and honor departmental collaboration
 - How much does your department (or do subsets of your department) collaborate on practices such as common course calendars and assessments?
 - How often do you participate in shared professional learning experiences?
 - What does academic freedom mean in your department and what are its boundaries?
- ★ Incorporate regular student input/feedback into departmental work.
- ★ Inspect aggregate and disaggregated data throughout



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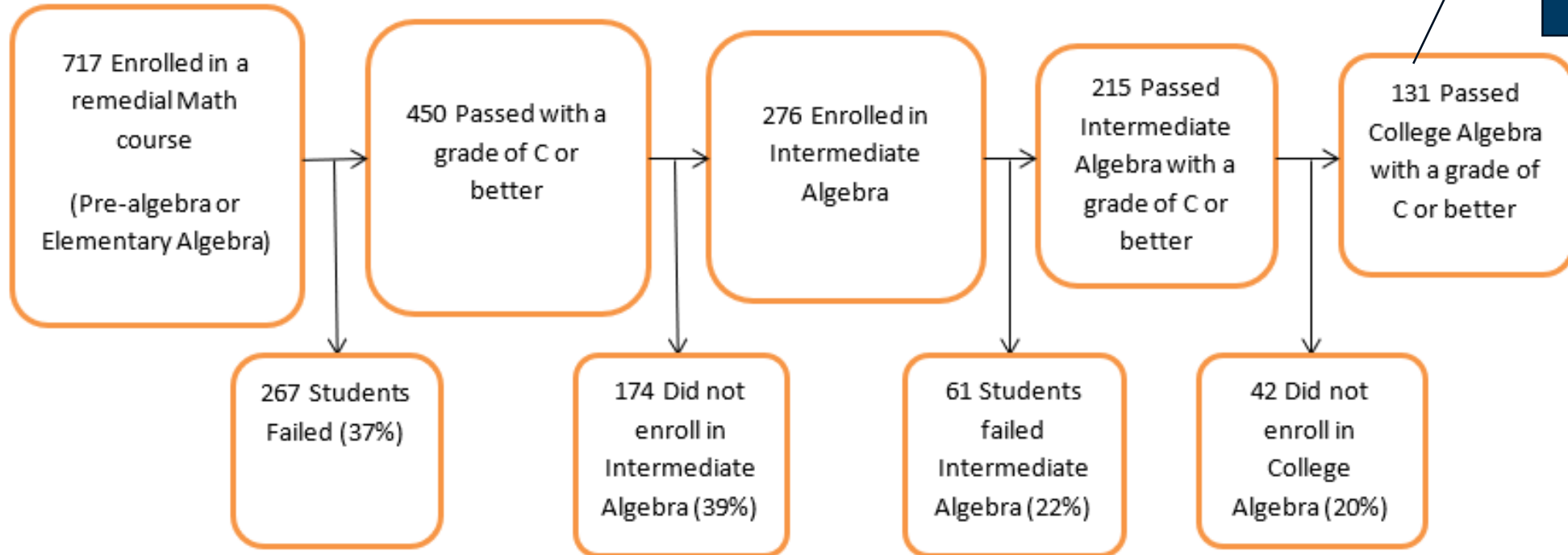




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Student Success in Remedial Math

Baseline data for academic years 2008—2009, 2009—2010, 2010—2011

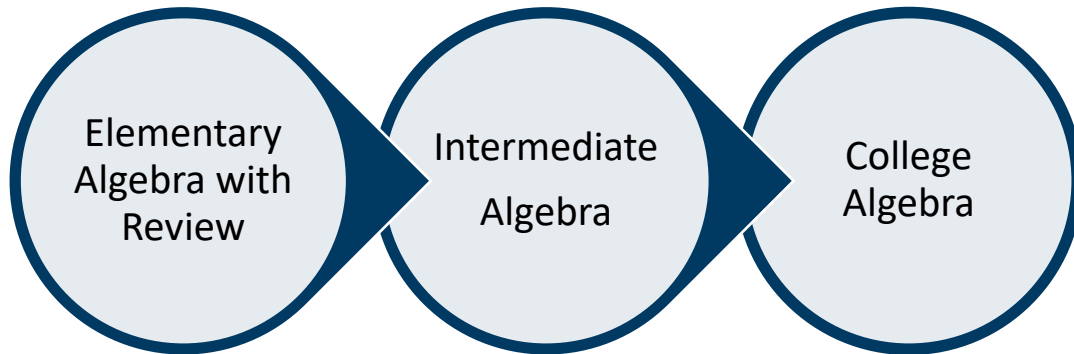


18% of the original 717 completed the sequence

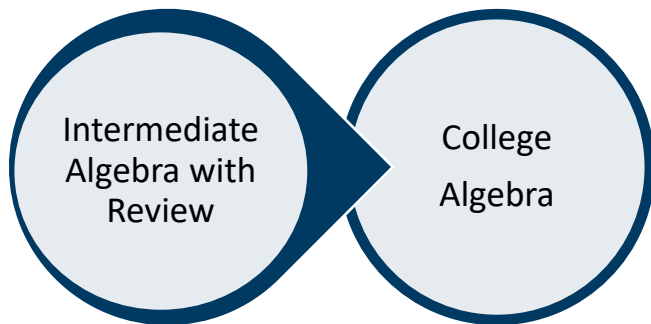


Cowley Past Sequence

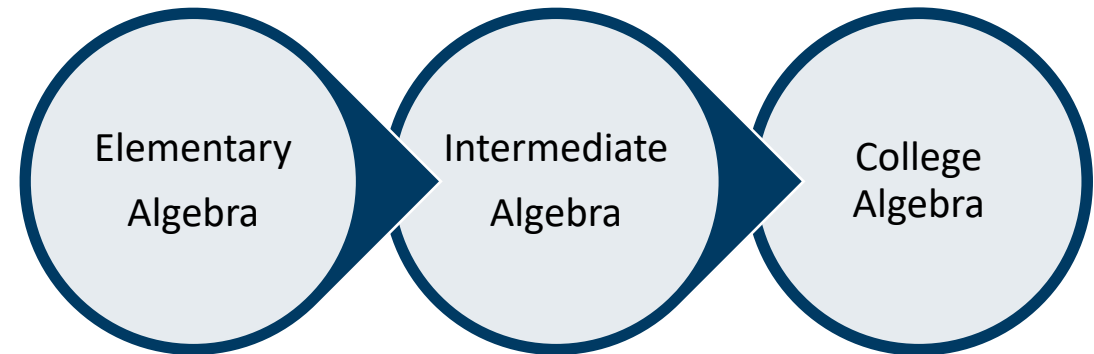
Option: 1



Option: 2



Option: 3

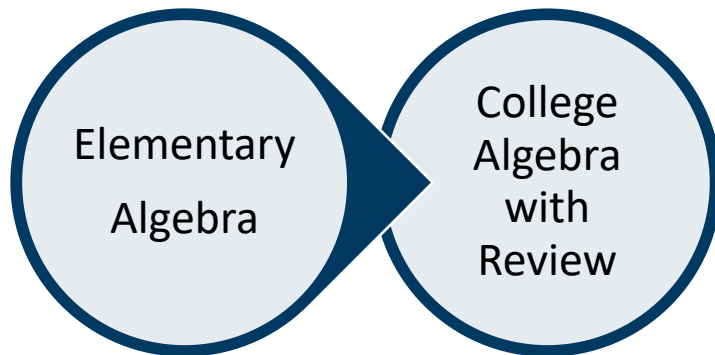


Intermediate with review (IAR) has not been as successful as we would like and has a 45-50% DFW rate.

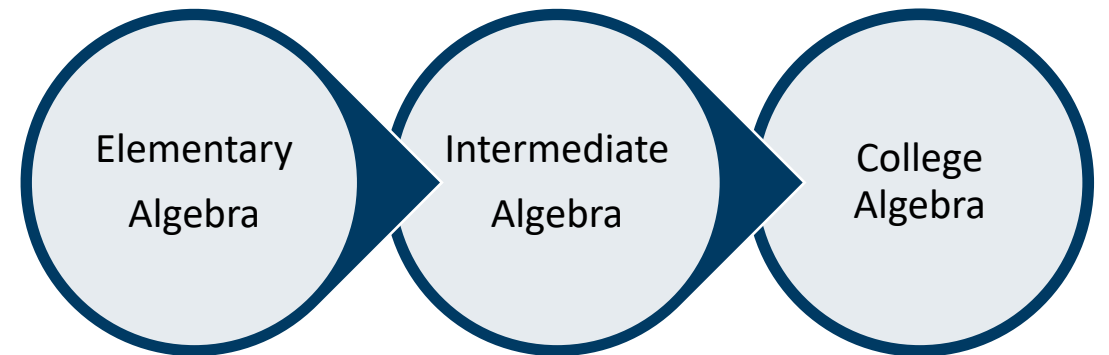


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OR





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- Fall 2017 – attended PD at Stanford University, Dr. Jo Boaler
- <https://www.youcubed.org/higher-ed/>
- Holistic and hands-on project based learning
- Bungee Barbie
- Begun Journals as a way to support reflective learning
 - Example: We have been spending time learning about quadratics, what they look like, their different forms, how to solve them, etc. What have you struggled with the most and how have you overcome this struggle? Where have you found success in learning about quadratics? How might you continue to deepen your understanding? What do I need to know as your instructor that will support you in your educational goals?



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- Faculty have academic freedom to teach their classes as they need to.
- Teaching Topics has allowed us to have additional time to invest where needed with learners.
- Not all classes look the same, but we have the same benchmarks
 - You should be halfway through the content by 8 weeks
- Math Faculty collaborate informally with each other to ensure alignment with the KCOGs
- All CAR and CA classes take the same final exam.



Common Calendars and Consistent Expectations

- Support aligned to gateway course
- Just-in-time content
- Embedded success strategies

Introduction to Statistics and Co-requisite Support Course Sample Timeline
Adapted from and with thanks to Roane State Community College

| Day | Co-requisite Notebook Topics | On-line Lab | <i>Essentials of Statistics</i> Triola 5 th ed. | | MyLabsPlus Assignment |
|-----|--|-------------|--|---|-----------------------|
| 1 | Orientation, study habits, time mgmt.; converting between fractions, decimals, percentages; finding a percentage of a number | 1 | 1.1 – 1.2 | Orientation; introduction to statistical terms and statistical thinking | 1 |
| 2 | Rounding; estimating; calculating means, | 2 | 1.3 – 1.4 | Types of data; collecting sample data | 2 |
| 3 | Decimals, ratios, percent, conversions | 3 | 2.2 – 2.3 | Frequency distributions; histograms | 3 |
| 4 | Applications of percent, squares, square roots; order of operations | 4 | 2.4 | Graphs that enlighten and graphs that deceive | 4 |
| 5 | Operations on real numbers | 5 | 3.2 | Measures of center | 5 |
| 6 | Review of types of data, sampling methods, types of graphs | 6 | 3.3 – 3.4 | Measures of variation; measures of relative standing and boxplots | 6 |
| 7 | Review of measures of center and variation | 7 | Practice Test 1 | | |
| 8 | Comprehensive review of chapters 1 – 3 & basic skills | 8 | Test 1 | | |
| 9 | Review basic skills and concepts of probability | 9 | 4.1 – 4.2 | | 7 |
| 10 | Review fractions, complements, contingency tables | 10 | 4.3 – 4.5 | Probability rules: addition, multiplication | 8 |
| 11 | Probability distributions, discrete vs. continuous, Inequalities | 11 | 5.2 | Probability distributions | 9 |
| 12 | Discrete probability distributions, maximum and minimum usual values | 12 | 5.3 – 5.4 | Binomial distributions; parameters | 10 |
| 13 | Review of probability and discrete probability distributions | 13 | Practice Test 2 | | |
| 14 | Comprehensive review: chapters 4 – 5 & basic skills | 14 | Test 2 | | |



Further departmental collaboration:

- Common assessments or portions of assessments
- Common strategies for students who end up over- or under-placed.
- Collaboration on reframing syllabi
- Professional learning
 - Sharing results, resources, and strategies
 - Universal Design for Learning
 - Teaching, learning, and assessment



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