Ithaka S+R

TPSE  Math
Duke University
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Observations

• Foundational math is REALLY important
• Many students are not well prepared and need lots of help
• Too many fail or drop out
• Few institutions have the resources to provide the individualized help these students need
• So far at least, online courses have not done much better
Possible components of a new strategy for teaching foundational math: connecting the dots

• Knowledge of local student needs and perspectives

• A conscious strategy for delivering content that takes advantage of adaptive learning knowledge and tools

• Real time feedback for instructors about what is working and what is not

• Sophisticated, responsive, real-time tutoring based on individual student needs

• Capacity to add students without requiring additional resources or diluting the value of the course for everyone else

• Ability to capture lessons learned and repeat the course even more successfully in the future
Our Hypothesis

• That the COMBINATION of a truly robust adaptive learning platform, including effective automated tutoring and real-time feedback to the instructors, and a locally designed and delivered course can significantly improve student results; and, moreover,

• That these courses can be designed in such a way that they can be taken to scale within and across institutions and repeated over time even with very limited resources per student – i.e., very low marginal cost per student
Proposed Project Team

INSTITUTIONAL PARTNERS

ASSESSMENT TEAM

ITHAKA

TECHNOLOGY PARTNER

FUNDING PARTNERS

CONTENT ADVISORS