

# Accelerated Math

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December 2, 2011



# Developmental Education Initiative

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- Funded by the Bill and Melinda Gates Foundation
- Goals are to reduce or eliminate the need for developmental education
- Includes four major initiatives:
  - Accelerated Math
  - Accelerated English
  - Boot Camps
  - Early Support Program

# The Research & Planning Phase

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- Faculty visited Cleveland State in Tennessee
- Attended NCAT's redesign conference
- Faculty prepared modules
- Worked with local high school teachers to develop assessments

# Launching Program

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- Hired Valerie Cope in fall of 2011 to teach four of five classes
- Tenure track faculty member taught fifth class
- Hired professional tutors
- Visited additional campuses: Virginia Tech, Eastern Gateway, Jackson State

# Accelerated Math (Math Modules)

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- Covers basic arithmetic and introductory algebra
- Students proceed at their own pace, but work to deadlines
- Pre-test allows students to demonstrate competence and skip modules
- Must take paper & pencil tests and comprehensive final
- Staffed by instructors, professional tutors and student tutors to work with and support the students' learning.

# Success Rates

	<b>MM/ 085</b>	<b>Trad/ 085</b>	<b>MM/ 108</b>	<b>Trad/ 108</b>	<b>Comp. 085 &amp;108</b>	<b>n*</b>
<b>Fall 2010</b>	58%	53%	N/A	55%	4	83
<b>Winter 2011</b>	51%	52%	56%	55%	5	107
<b>Spring 2011</b>	29%	52%	39%	54%	7	272
<b>Summer 2011</b>	66%	50%	52%	61%	1	108
<b>TOTAL</b>					17	570

\*n=number of students served in the Math Academy modules

# Student Voices

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- “I like how I can pre-test out of certain modules and work at my own pace.”
- “I like how my instructor and the tutors work with me individually.”
- “I feel more comfortable asking my instructor questions because it is one on one.”

# Student Voices

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- “I am able to work on it at home when my kids are asleep.”
- “The lab has great hours and I love working with the teachers.”
- “You aren’t pushed to learn things on a strict schedule.”



# Faculty Voices

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- “The professional tutor is an integral part of the program. Their opinions/ideas are taken into consideration in the running of the lab and the materials the students use.”
- “The students are actively involved with math when they are in the lab; it is a task-oriented program.”
- “The lab is a positive environment and students are encouraged to ask questions.”

# Faculty Voices

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- “Sinclair Community College consists of a very diverse student population. Therefore, that diversity must be accommodated. There are three modalities of instruction in developmental mathematics: traditional, online, and math modules. The math modules work well for those students who enjoy working at their own pace but prefer guided practice from time to time.”

# Accelerated Math Lessons Learned

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## 1. More structure is needed

- Students expected to come at scheduled times, which has increased to four hours/week
- Students expected to adhere to minimum deadlines
- Students given additional deadlines/goals in order to complete content from two courses

# Accelerated Math Lessons Learned

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## 2. Systems approach is key

- Constant communication with advising and registration is imperative
- Structure and guidelines are needed for the lab, faculty, and tutors to maintain consistency

## 3. Ongoing efforts to improve instrumental validity.

# Ideas for future change

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- One book and one access code for all Developmental Math classes
- Add in-house video lectures
- Create a stand-alone workbook that contains notes and problem sets
- Include practice tests for each module that are embedded in MyMathLab

# Questions?

**Thank You**