

# **New Life Takes on the Emporium Model for Redesign**

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# Outline ...

- What is the Emporium model?
- What is the New Life model?
- Comparison
- Professional Standards
- Data and Research
- Summary

# Think ...

- When a student knows about good writing, how can we tell?
- When a student knows about good mathematics, how can we tell?

# What is the Emporium model?

- The National Center for Academic Transformation (NCAT) <http://thencat.org>
- NCAT lists 6 models – emporium is fairly popular (especially in mathematics)
- Replaces lectures with learning resource center
- Computers, on-demand personal assistance

# The Emporium model: Methods

- Eliminate instructor-led class time
- Require lab hours (computer work)
- Instructor as tutor
- Reduce cost: Reallocate instructor time

# The Student Experience: Emporium



Anne Arundel Community College

# The Student Experience: Emporium



Kent State University

# What is the New Life model?

- Project of AMATYC's Developmental Mathematics Committee
- Based on ***Beyond Crossroads***, as well as other professional work (MAA CRAFTY, etc)
- Multi-dimensions: Student needs, content, learning, assessment and support
- Faculty as professionals



# The New Life model: Methods

- Address the needs of ALL students
- Reflect accumulated wisdom about mathematics
- Reflect accumulated wisdom about learning mathematics
- One developmental course for most students
- Second course for those needing 'college algebra' (Transitions)

# The Student Experience: New Life



Columbus State CC – Collaborative Learning

# The Student Experience: New Life



Rock Valley College

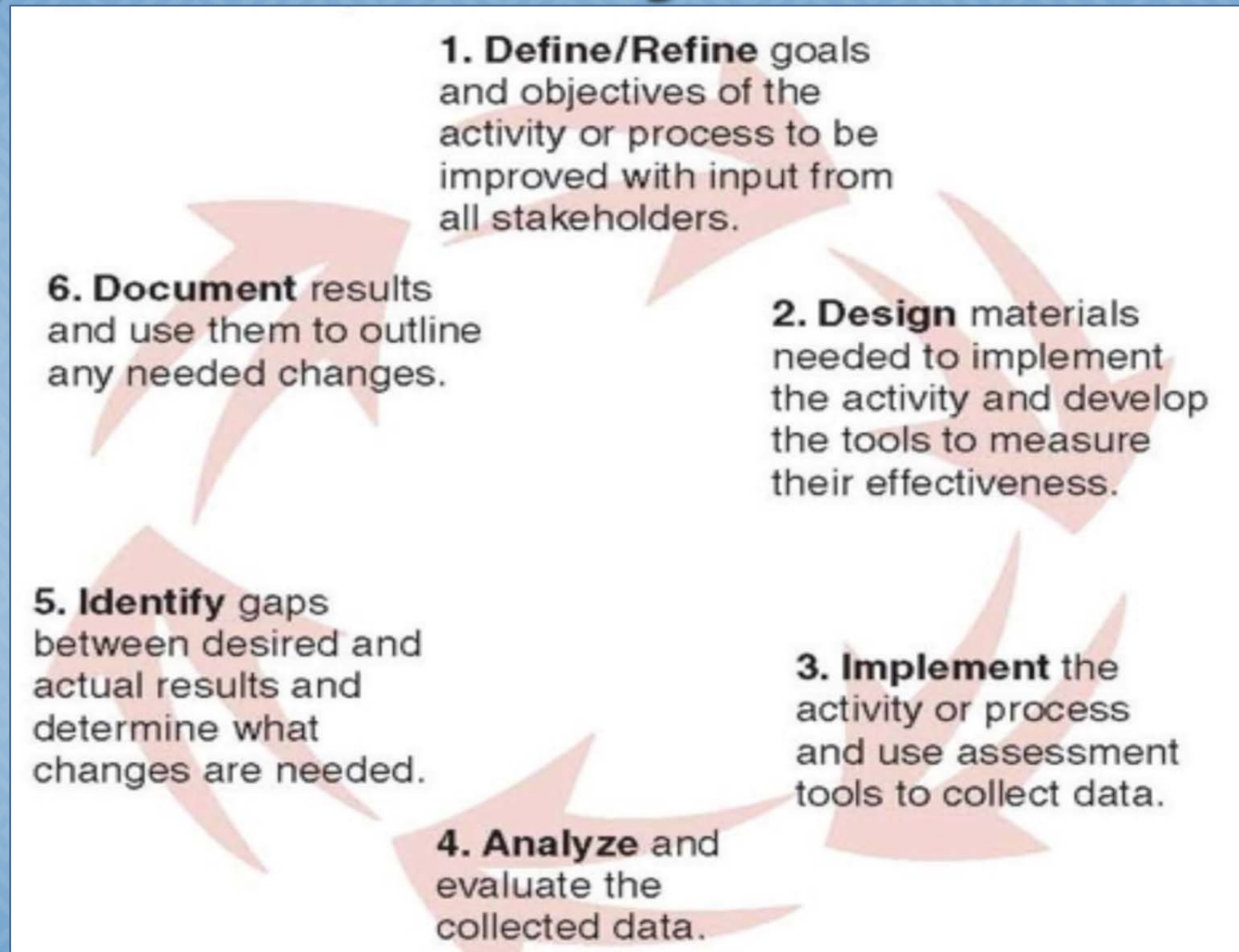
# Side-by-Side

|                      | Emporium Model  | New Life Model  |
|----------------------|---|---|
| Goals                | Reduce Cost,<br>Increase retention,<br>Increase Consistency across sections | Appropriate content,<br>Advance the profession,<br>Reduce number of courses |
| Primary solution     | Intensive use of technology   | Local faculty build curriculum reflecting national standards                |
| Professional history | Educause  | AMATYC, MAA, NADE   |
| Curriculum change    | Emphasis on packaging and efficiency (modules)                              | Emphasis on creating a new and appropriate curriculum                       |
| Student Activity     | Doing problems at computer,<br>Asking questions                             | Multiple (class discussion, exploration, technology, online, etc)           |

# Professional Standards

- Beyond Crossroads emphasizes the improvement cycle (see next slide)
- The New Life model is based on applying that thinking to the developmental mathematics problem
- The Emporium model is not based on professional standards

# Improvement Cycle



# Professional Standards for Active Learning

(Beyond Crossroads, Chapter 7: pg 54)

- Collaborative/Cooperative Learning
- Discovery Learning
- Interactive Lecturing & Question-Posing
- Writing to learn

The New Life model includes these methods as part of the learning process

The Emporium model de-emphasizes instructor-led learning

# Data and Research

- Reminder: Research involves the statistical process of answering a question
- The Emporium model has more data (due to the model being older)
- The New Life pilot courses started this year



# Emporium Model Data from “CCR” (Colleagues Committed to Redesign) – Math

| Institution  | Learning Outcomes | Completion    |
|--|-------------------|---------------|
| <b>Auburn University</b>   | No Difference     | No Difference |
| <b>Morehead State University</b>                                   | No Difference     | No Difference |
| <b>Oklahoma State University</b>                                   | Higher            | No Difference |
| <b>Santa Fe College</b><br>(intermediate algebra)                  | Higher            | Higher        |
| <b>Southeastern Louisiana University</b><br>(intermediate algebra) | No Difference     | No Difference |
| <b>University of Central Florida</b>                               | Higher            | Higher        |

[http://www.thencat.org/RedesignAlliance/C2R/C2R\\_SavingsSummary.html](http://www.thencat.org/RedesignAlliance/C2R/C2R_SavingsSummary.html)

# Research

- Emporium models emphasize technology – online homework systems in particular:  
*“Little research has been conducted on these strategies despite their popularity, and the research that exists shows mixed results.”*  
<http://www.mdrc.org/publications/601/full.pdf> , page ES-7
- **Qualitative study on which students succeed:**  
*“The theme of self-regulation emerged as the most consistently noted skill necessary to succeed in an emporium environment.”*  
[http://www.eeraonline.org/journal/files/v16/JRE\\_v16n1\\_Article\\_7\\_Hodges.pdf](http://www.eeraonline.org/journal/files/v16/JRE_v16n1_Article_7_Hodges.pdf) , pg 74 (Virginia Tech)

# Research – what it means

- Research can not ‘prove’ that one method or idea is better than another
- Data and research can inform parts of our decision on redesign models
- Your professional judgment on ‘good mathematics’ is more fundamental
- I suggest that we need a new content in developmental mathematics ... our existing content is an historical artifact which would not survive professional vetting.

# Summary

## Emporium

- Curriculum not changed (delivery is)
- Faculty as tutors
- Modules, software
- Student's do not do optional

## New Life

Curriculum changed  
in basic ways

Faculty as professionals

Course, class

Students develop  
needed abilities

# Wrap Up

- The two models differ significantly in their goals
- Emporium is a change ... New Life is directed towards progress
- How can we tell if a student knows good mathematics?

<http://www.devmathrevival.net/>

<http://jackrotman.devmathrevival.net/>