UNIVERSITY OF WISCONSIN-MILWAUKEE

DEVELOPMENTAL MATH REFORM

PHYLLIS KING, PH.D.
KYLE SWANSON, PH.D.
December 5, 2013
Dropouts Tell No Tales
An African American journalist returns to his college alma mater to find out why so many students like him never make it out.
By Jamaal Abdul-alim
### New Freshmen Profile 2013

#### Remedial Math Placement

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Freshmen</th>
<th>% Remedial Math</th>
<th>% math 90</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>4,100</td>
<td>41.54</td>
<td>15.46</td>
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<tr>
<td>2010</td>
<td>3,760</td>
<td>42.53</td>
<td>14.87</td>
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<tr>
<td>2011</td>
<td>3,678</td>
<td>46.71</td>
<td>18.76</td>
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<tr>
<td>2012</td>
<td>3,435</td>
<td>44.10</td>
<td>16.10</td>
</tr>
<tr>
<td>2013</td>
<td>3,256</td>
<td>48.40</td>
<td>25.37</td>
</tr>
</tbody>
</table>

- **Total Freshmen** decreased from 4,100 in 2009 to 3,256 in 2013.
- **% Remedial Math** increased from 41.54 in 2009 to 48.40 in 2013.
- **% math 90** also increased from 15.46 in 2009 to 25.37 in 2013.
Most remedial students never graduate!

35.1% graduate within 6 years (Complete College America 2013)
Of all 2004 new freshmen needing remedial math, only 31% graduated in 6 years.
MATH READINESS REFORM MENU

Instructional Reform
- Modularized courses
- Compressed courses
- Contextualized courses
- Non-academic supports

Placement Reform
- New placement tests
- New placement policies

Pathways Reforms
- Statistics-based pathways
- Quantitative literacy-based pathways
Oversight

• Remedial Education Steering Committee
• Development math coordinator

Pre-college activities

• Common core standards and curricular alignment
• Common definitions and transfer policy between MPS, MATC and UWM (Milwaukee Connected Community)
Policies

• Placement Testing
  Consider new algorithm(s) for placing students

• Enforce Board of Regents 30 credit policy by fall 2014.

• Early warning system

• Math attendance policy
  - Math 090 and 095 have 2-week attendance policy.
  - Math department can drop students for non-attendance in the first week of classes.
Preparedness and Instruction

- Summer Bridge Program (PantherMath Prep)
- Curricular Design
  - UW Colleges math pilot (implemented fall 2013)
  - Math pathways
- Instructor training
Your initial math course at UWM is determined by your score on the UWM placement test and your Math ACT score.

**All courses require a C or better to advance!**

1. **Mathematical Literacy Pathway: All students**
   - Mathematical Literacy for College Students (MLCS I and II) is a two-semester pathway based on real life applications.
   - **Math Level**: MATH 92 MLCS I 3 Hours 1 Semester
   - **Math Level**: MATH 102 MLCS II 3 SCH 1 Semester
   - Students who change their major can take MATH 105 or 175 after MATH 102.
   - QL-A Donel Many QL-I prerequisites satisfied.

2. **Accelerated Pathway: Motivated self-starters**
   - This pathway is for students whose major requires meeting the QL-A GER quickly!
   - **Math Level**: MATH 94 6 Hours 1 Semester
   - **Math Level**: MATH 105 3 SCH 1 Semester
   - QL-A Donel MATH 116 MATH 211 CHEM 100 CHEM 102 ECON 210 Math prerequisites satisfied.

3. **Algebraic Literacy Pathway:**
   - Business, Sciences, Nursing, and Health Sciences
   - Algebraic Literacy (AL I and II) is a two-semester pathway for those students whose majors require Algebra.
   - **Math Level**: MATH 98 AL I 3 Hours 1 Semester
   - **Math Level**: MATH 108 AL II 3 SCH 1 Semester
   - QL-A Donel MATH 103 similar to Pathway 1.
   - QL-A Donel MATH 105 similar to Pathway 3.

4. **Placement Pathway**
   - Unless your major requires Algebra, or you want to be a teacher, MATH 104 is your best bet. Talk to your advisor!
   - **Math Level**: MATH 103 Contemp. Apps. of Math 3 SCH
   - **Math Level**: MATH 105 Intermediate Algebra 3 SCH
   - **Math Level**: MATH 175 Math for Elem. Teachers 3 SCH 1 Semester
   - MATH 175 is the first math course for teachers.

**Key:**
- SCH = Student Credit Hours
- MATH 116: College Algebra
- MATH 211: Survey in Calculus
- CHEM 100: Chemical Science
- CHEM 102: General Chemistry
- ECON 210: Economic Statistics
“We are confronted with the fierce urgency of now.”

Rev. Martin Luther King Jr.