MAKING MATH LITERACY WORK
MANAGING GROUPS AND STUDENT EXPECTATIONS
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OLD COURSE SEQUENCE

Pre-Algebra → Beginning Algebra → Intermediate Algebra → Gen Ed Math or Intro to Stat → College Algebra or Pre-Calculus

COURSE SEQUENCE – FIRST REVISION

Pre-Algebra → Math Literacy → Intro to Statistics or Gen Ed Math → Intermediate Algebra → College Algebra or Pre-Calculus

COURSE SEQUENCE – CURRENT VERSION

Pre-Algebra → Math Literacy → Intro to Statistics or Gen Ed Math → Intermediate Algebra → College Algebra or Pre-Calculus

MATHEMATICAL LITERACY

• Topics chosen to prepare students for General Education Mathematics and Statistics, and Life
  – Numeracy, functions, data analysis
  – Reading, writing, technology
• Group-based problem-solving pedagogy

http://dm-live.wikispaces.com/
**A TRADITIONAL CLASSROOM**

**A MATH LITERACY CLASSROOM**

**MANAGING STUDENT EXPECTATIONS**

- Explain why the course is set up the way it is
  - Why do we work in groups? Don’t you teach?
  - Why do we have to write so much? Can’t I just give the answer?
- Give clear expectations on the first day that set the tone for the whole semester
- Remind students often throughout the semester

**PRODUCTIVE STRUGGLE**

- Real problems don’t follow cookie-cutter patterns; they take work
- Take responsibility
- Persistence will pay off

**MANAGING GROUP WORK**

- Students do not already know how to work productively in groups
- Students are not already skilled at managing personality conflicts

Effective group work skills need to be explicitly taught and coached throughout the semester

**ASSIGNING GROUPS**

- 3-4 students per group
- Random?
- Mix of abilities
- Spread out unreliable students
- Adjust for personality and potential issues

Don’t let students pick their own groups!
ENCOURAGING PRODUCTIVE GROUPS

• Require full participation
  – Do not allow students to opt out of groups
  – Give points for quality participation
  – Keep students engaged with checkpoints
  – Groups that finish early can help others

ENCOURAGING PRODUCTIVE GROUPS

• Provide structure to support productive work
  – Assign roles within the group
  – Outline specific goals and required outcomes for each day/activity
  – Discuss the types of questions that should be asked of others in the group – “exploratory talk”
  – Coach groups on how to work together when students work at different paces

MANAGING GROUP DYNAMICS

• Don’t honor requests to change groups
• Coach students in conflict management
• Help groups learn how to distribute tasks evenly
  – Everyone do your own part
  – Allow others to do their part
• Have students evaluate each other
• Change groups every unit for a fresh start

OUR EXPERIENCE

• Has changed our whole philosophy about teaching
• Most fun we’ve had since we started teaching
• Get to know students much better
• We can’t go back

CONTACT INFO

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