

# Coping with Learning Disabilities in the College Math Classroom

Replacement session (Roundtable) for S129

AMATYC Minneapolis, Nov. 2007

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General things learned about students with learning disabilities:

- Ideas that help students with specific learning disabilities will often also benefit others. Tips for students with hearing limitations, like repeating a classmate's question, using clear diction, and not speaking one word while writing another, are of general use.
- Don't answer a question simply by repeating the same answer at increased volume. Try to explain it a different way. Watch the eyes to see if you have connected.
- Idea: use of colored paper for tests/handouts.
  1. Black lettering on white paper is the most difficult contrast to see, and also can have glare. Try using pastel colored paper
  2. Can print test on two different colors (ordinary white and also blue, for instance); Let students choose.
  3. There is no one color that is universally best, though visual acuity is said to be strongest with yellow.
  4. For some students, a copy with **larger print** helps.
- Full-spectrum lighting instead of fluorescent or incandescent can help some students.
  1. Some studies suggest this lighting helps people subject to epilepsy and migraines
  2. This lighting also can help with SADD (seasonal affective disorder)
  3. The bulbs, which fit ordinary light fixtures, seem to last longer (offsets cost)

Dyslexia:

- Use light photocopy of grid paper (1/2" or 1/4") for students to take notes on
- Be aware that 10%-30% of the general population is dyslexic, and this may be higher in community colleges.
- Dyslexia is a language processing disorder, sometimes shown by:
  1. Skipping words
  2. Adding in words
  3. Reading in a different order
  4. Reversing letters
- Some tips to help students with dyslexia are:
  1. Ask students not to take notes while instructor is putting them up on the board (but give time to copy the notes afterward, or possibly have a note-taker)
  2. Use a card with a slot cut out to help student focus only on the words in the immediate neighborhood (so words aren't so likely to be skipped, and students can key in on the important information in the selection).
- Dyscalculia is similar, but with numbers instead of letters or words
  1. With documented dyscalculia, students in developmental classes can use 4-function calculators (in a separate testing environment if needed)
  2. Suggest students work vertically instead of horizontally to do problems
  3. Leave lots of space between problems on tests or assignments.

Questions for further study:

- What course substitution(s) are use(d), if any, to accommodate math learning disabilities?
- How are math learning disabilities diagnosed? Who does this? With what tests?
- What are some accommodations that teachers have used to overcome math blocks?

Follow-up: AMATYC 2008 would like to have some good proposals for talks in these areas.