



# CREATING A CHANGE IN THE MATH MINDSET

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I've missed more than 9000  
shots in my career... I've  
**failed over and over and  
over again** in my life. And  
that is why I succeed.



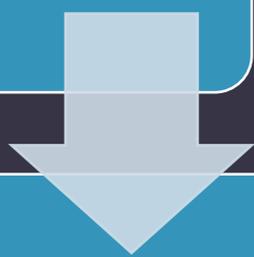
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- Michael Jordan

# Focus Courses

## Learning Support courses

- Math 0997 Support for Quantitative Reasoning
- Math 0998 Support for Mathematical Modeling
- Math 0999 Support for College Algebra



Anyone in the department is welcome to send it to their students

# Course Layout

- Pre & Post Survey
- Meet the Professor
  - Email or Face to Face
- Discussion Boards
- Dropbox Assignments
  - Time Management
  - Goal Setting
- Tutoring
  - Test Corrections
- Just in time remediations

“ The problem isn't the problem. The problem is **your attitude** about the problem. ”

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- Captain Jack Sparrow

# Discussion Assignments Topics



# Dropbox Assignment Example

- **INDIVIDUAL DROPBOX ASSIGNMENT [Follow-up to Previous Discussion boards]:**

- Think about how your values, strengths, and weakness that we've explored in the discussion forums over the last couple weeks align with this course. Use what you've learned about yourself in order to come up with your own personal learning goal(s) for this course. A learning goal isn't something like "I want to get a good grade" (that's a performance goal, not a learning goal), but rather would be things like "I want to learn how to apply these topics to my future career in X" or "I want to improve my problem-solving abilities" or "I want to leverage my people skills in order to learn from others some better study skills." You can create as many learning goals as you'd like, but for at least one of your learning goals, explain what you plan to do over the next month to work toward achieving this goal. Note that we'll revisit your learning goal a couple times during the remainder of the semester through the discussion boards.

# Example Discussion Assignment

- Week 2: Strengths and Weaknesses
  - What specific strengths do you bring to our class community? How have these strengths helped you in previous classes? What specific weaknesses do you have? How have these caused barriers to your success in the past? To get your creative juices flowing, below are some examples of strengths.
    - Examples: I am a great team leader; I write very well; I participate frequently in class; I am an excellent notetaker; I am motivated; I have great study skills; I have a positive attitude and know I can accomplish anything I set my mind to.
  - After you have posted your submission, please read your classmate's posts. Then respond to two of your classmates' posts with some feedback or encouragement addressing the prompts below. Your replies should be a minimum of 50 words long.
    - Your first comment to a classmate should describe how you feel their strengths could benefit you or your fellow classmates throughout this course. Choose a classmate where no one has commented on this yet.
    - Your second comment, which should be to a different classmate, should describe how you feel you or your classmates can help them with their specific weakness. Choose a classmate where no one has commented on this yet.

# Future improvements

Post Survey Results

Low student participation



D2L Course Page

Both Course + Support in one D2L



Additional Interventions

student engagement

New resources

let's  
**DISCUSS**

“ Love Challenges, be  
intrigued by mistakes, enjoy  
effort, and keep on learning.”

- Carol Dweck

any questions?





# Abstract

- In several sections of MATH 0999 and MATH 0998, we have implemented a series of assignments targeting ways to help students improve their academic mindsets and motivation for learning mathematics. These assignments, in the form of surveys with automated feedback based on responses, dropbox assignments, and discussion prompts, all begin with self-reflection and are reinforced with peer feedback that further builds students' sense of belonging. Specific topics include relating personal values to math class, goal setting, time management, growth mindset, self-efficacy, and motivation. In this presentation, we'll share the framework for these assignments as well as their place in the overall course structure, and end with an open discussion on methods to facilitate engagement in online discussion boards in a mathematics course.