Transitioning Co-requisite Math Courses to the Online Environment

Dr. Sonia Ford Petch & Taylor Darwin

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Please enter the following information in the chat box:
- Where you teach (institution)
- What you teach (subject)
- How you heard about this forum

— Equity — Access — Excellence —

Objectives

- Address challenges to teaching and learning in the online environment
- Explore the Community of Inquiry model and factors of online student connectedness
- Explore strategies to decrease students' feelings of isolation
- Explore strategies to assess student learning
- Explore strategies to assist students in time management in the online environment
- Share ideas among participants

Keep in Mind...

Learning online can increase students' feelings of isolation especially when the transition has been abrupt

- Be supportive and flexible
- Reach students where they are - synchronously and/or asynchronously
- Provide support
- Keep it simple

Community of Inquiry Model (Garrison, Anderson, Archer, 2000)
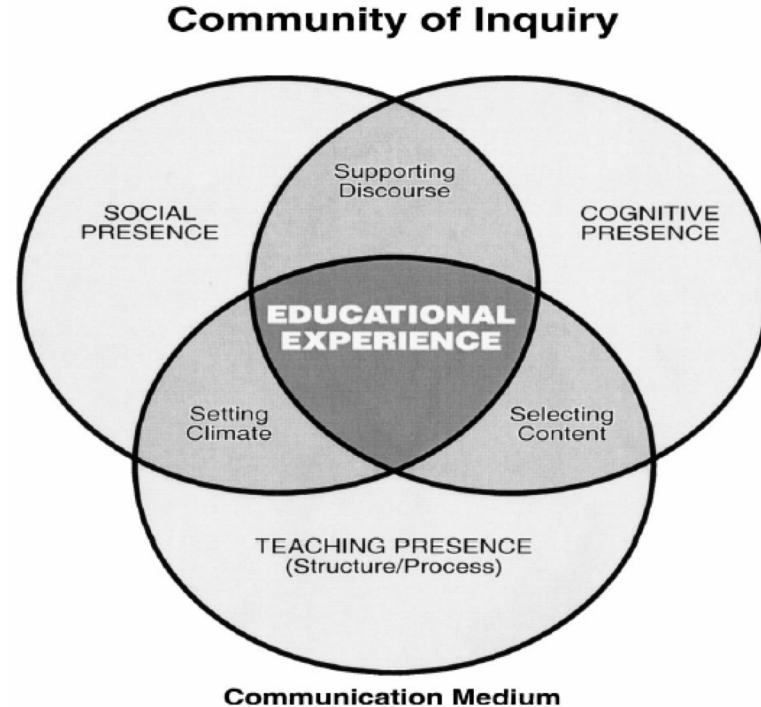
Factors of Online Student Connectedness (Bolliger & Inan, 2012)

- Comfort

- Community and Social Presence

- Instructor Facilitation

- Interaction and Collaboration

Strategies to Decrease Students' Feelings of Isolation

- **Make navigation easy**
  - Group material into "chunks"
  - If possible, hide extra tabs in the course learning management system (LMS)
  - Demonstrate where to locate course materials

- **Present material in "chunks"**
  - Record short videos and then meet as a class at least once a week to answer questions and work additional problems

- **Provide multiple avenues to contact the instructor**
  - Utilize messaging apps and notification tools in the LMS

Strategies to Decrease Students' Feelings of Isolation

- Provide opportunities for discussion
  - Create a "Virtual Cafe" space
  - Create an "Ask Questions" space
  - Use discussion forums or other collaborative tools to share time management and other study skill strategies

- Assign "support groups" to meet once a week
  - Encourage video

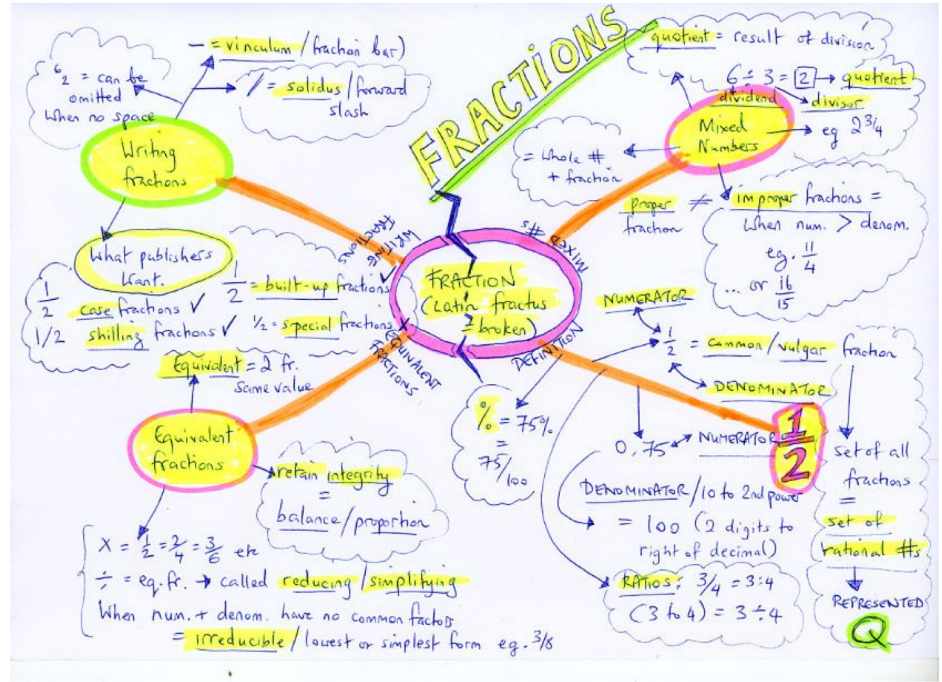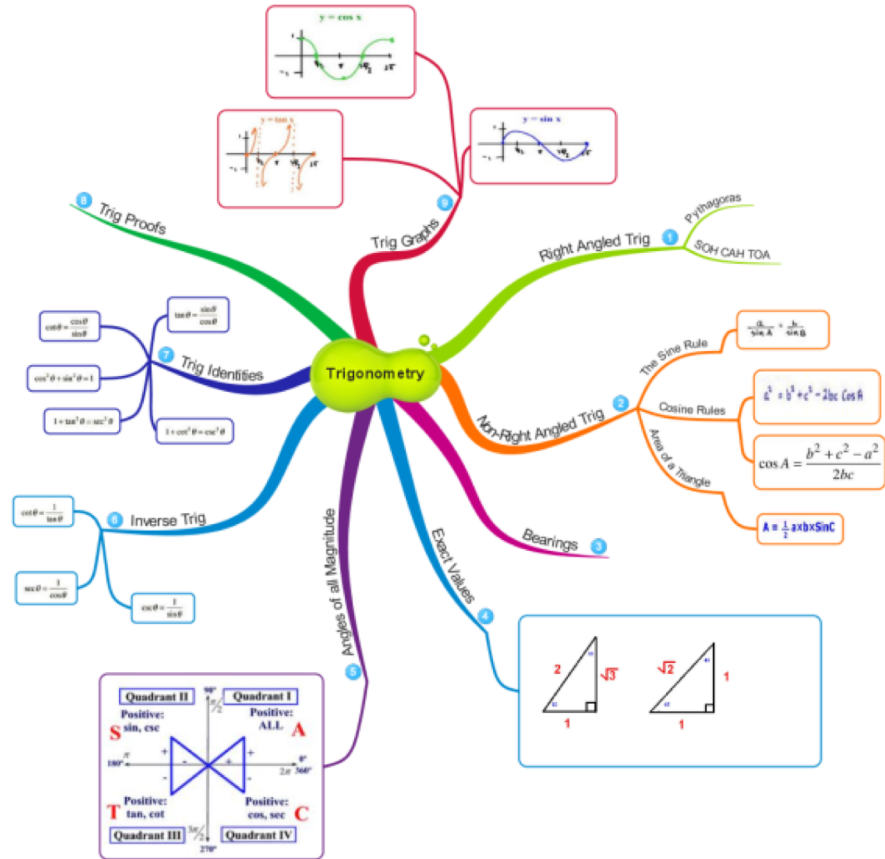# Strategies to Decrease Students' Feelings of Isolation

Share in the chat box:

Name one strategy, not already mentioned, that has worked well in transitioning online this semester for your co-requisite class.

Strategies to Assess Student Learning

- The goal of assessment is for students to display their knowledge and retention of the material
  - But we also want to measure engagement in our co-requisite classes
- Help students feel comfortable with assignment submission
  - Create "low stakes" assignments for student to practice the submission process.
- Mind Maps
  - Gives the instructor the opportunity to see what content the student understands and where the student may be struggling.
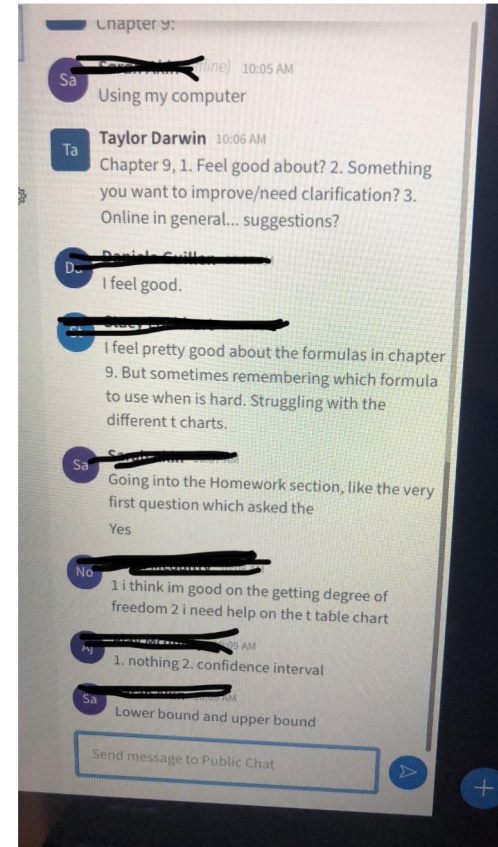
Strategies to Assess Student Learning

https://www.biggerplate.com/education-mindmaps/36/mathematics

Strategies to Assess Student Learning

- **An example of assessing co-requisite students virtually**
  - Audio/video capabilities
  - Able to gauge where each student feels they have strengths/weaknesses for the chapter
  - Able to build groups for the week based on responses

Strategies to Assess Student Learning

Share in the chat box:

Name one assessment strategy, not already mentioned, that has worked well in transitioning online this semester for your co-requisite class.

Strategies to Address Time Management

- Instructor should have a minimum response time
  - Will help create a sense of structure for the students
- Set up your LMS to display due dates several different ways
  - Calendar
  - Weekly "to do" lists
  - Tentative Schedule
- Group Work
  - Creates accountability within the group
- Break Assignments into smaller chunks

Strategies to Address Time Management

Share in the chat box:

Name one time management strategy, not already mentioned, that has worked well in transitioning online this semester for your co-requisite class.

Tools

Technology tools to assist in transitioning your course online:

- Annotations/Screen Capture Applications
  - Screencast-O-Matic
  - Record It!
  - Komoto
- Document Camera
  - iPevo

- Scanner Applications
  - Genius Scan
  - Cam Scanner
- Google Applications
  - Google Voice
  - Google Hangouts

Discussion Questions:

- Anything not addressed that you want to add?

- Any helpful resources or advice you would like to share?

- Any additional questions?

Resources and References

- Bolliger, D. U., & Inan, F. A. (2012). Development and validation of the online student connectedness survey (OSCS). The International Review of Research in Open and Distance Learning, 13(3), 41-65.

- Chronicle of Higher Ed. (2020) Moving online now. Retrieved from https://connect.chronicle.com/rs/931-EKA-218/images/CoronaVirus_ArticlesCollection.pdf

- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. The Internet and Higher Education, 2(2-3), 87-105.

Resources

- Dana Center Blogs:

  - https://www.utdanacenter.org/blog/dana-center-launches-new-transitioning-mathematics-courses-virtual-teaching-webinars

  - https://www.utdanacenter.org/blog/making-switch-virtual-learning

  - https://www.utdanacenter.org/blog/shifting-virtual-teaching-higher-ed-mathematics-part-1

Resources

- The Dana Center is compiling resources here: https://tinyurl.com/Teaching-Online-Resources

- Transitioning to Remote Instruction Forums: April 9, April 16, 1pm (Pacific) https://utdanacenter.zoom.us/j/402089993

- "How to Zoom" office hours: April 15, 11am (Pacific) https://utdanacenter.zoom.us/j/937538377

- Transitioning Co-requisite Courses to the Online Environment Forum: April 8, 1pm (Pacific) https://utdanacenter.zoom.us/j/229888049

To Learn More…

Dr. Sonia Ford Petch

sford@midland.edu

Taylor Darwin

tdarwin@midland.edu

UTDanaCenter.org

Facebook.com/utdanacenter

Twitter.com/utdanacenter