The purpose of this project was to determine the effectiveness of educational materials for occupational therapy graduate students. The educational materials developed through this project are videos to teach students how to assess range of motion (ROM) and manual muscle testing (MMT).

Learning styles
- Defined as “the manner in which individuals choose to or are inclined to approach a learning situation” (Cassidy, 2004, p. 420)
- In a study conducted by Titiloye and Scott in 2002, the preferred learning styles of occupational therapy students in an accredited two and a half year upper division program in an urban setting were convergers and assimilators according to the Kolb LSI
  - Convergers’ strengths involve problem solving and decision making, and assimilators use more abstract reasoning (Titiloye & Scott, 2002)

ROM & MMT Videos
- Videos of manual muscle testing and range of motion techniques were developed, posted on YouTube as well as the learning program Moodle for MOT students (McAlister, 2014)
- Students used the videos as a supplement to the lecture and lab for 6 weeks (McAlister, 2014)
- After 6 weeks, a questionnaire was completed based on:
  - Frequency of viewing videos
  - Student perceptions of the videos
  - Student input on how to improve the videos (McAlister, 2014)
- 2.573 YouTube views of the videos between 43 participants (McAlister, 2014)
- Students liked:
  - How they could start and stop the videos, access them outside of class, and comfort with using YouTube (McAlister, 2014)
- Students reported improvements:
  - Using a videographer and microphone for improved audio quality (McAlister, 2014)

Instructional Technology (IT)
- Gee & Salazar explored instructional technology (IT) in occupational therapy master’s students’ educational experience
- 13-question survey with 8 demographic questions was used to determine the type of IT used in lectures and labs (Gee & Salazar, 2017)
- 27 of the 121 available MOT program administrators completed the survey
- They reported using IT in their lecture and lab courses as a supplemental resource
- Less use of IT in lab courses than lecture (Gee & Salazar, 2017)
- Over 80% of respondents reported that IT is a “moderately to highly effective tool for an entry-level MOT program” (Gee & Salazar, 2017, p. 4)
- The biggest barrier to using IT reported was lack of time (Gee & Salazar, 2017).

Focus group 1: 14 first year OTD participants discussed their experience in anatomy/kinesiology class and what to include in educational videos
  - Method of learning in anatomy/kinesiology
  - Textbook & videos from classmates of in-class demonstrations
  - Student suggestions for what to include in videos:
    - Documentation of ROM/MMT
    - Positioning of goniometer
    - Muscles being tested
    - Professionalism

Focus group 2: 9 first year OTD participants watched 6 video samples and completed a questionnaire about their opinions of the videos
  - All participants said the videos would have been beneficial in their anatomy/kinesiology lab
  - Pros of videos:
    - Documentation examples
    - List of muscles involved for MMT
    - Visual demonstrations
  - Suggested improvements:
    - Closed captioning
    - Showing gravity eliminated positions

Acknowledgements
Faculty Mentor: Emmy Dagnan, OTD, OTR/L, CLT, HFS
Expert mentor: Piper Sesnan, OTD, OTR/L
Agency & Site: Belmont University

Thank you to the Belmont University Department of Media Studies Professor Rick Bengston & students: Devin Garrett, Taylor Helton, Joshua Satory, Sarah Dame, Ryan Citrino