Professional Education in an Online Environment: Opportunities, Pitfalls, and Assessment
Who we are

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- Served 5 years as Chairman of the Commission for Accreditation in Physical Therapy Education
- CAPTE site visitor and team leader
- Sacred Heart University:
  - Department Chair
  - Associate Dean of the College
  - Founding DPT program director of the physical therapy program
- Director of Business Development for Rehab Essentials

Timothy Miller, PT, DPT, EdD, GCS

- DPT (Elon University)
- EdD in Educational Technology (University of Florida)
- Nova Southeastern University
  - Over 7 years blended learning experience as faculty
- Director of Education and Faculty Development for Rehab Essentials
Outline of Session

1. Navigating the Paradigm Shift
2. Pitfalls to avoid & solutions
3. Opportunities of online education
4. Assessment
5. Teaching, Learning, and Assessing Psychomotor Skills
6. Lessons Learned
Navigating the Paradigm Shift to Online

Students and content didn’t disappear

Comfortable knowing the students are still going to learn

Learning was already done outside of the classroom

Focus on how to transition the face-to-face classroom time to engaged learning (synchronous & asynchronous)
Elements of Successful Distance Education

Learner-centered

Students are active participants

Instructor as facilitator – “Guide on the Side”

Instructor stays present online

Collaborative learning rather than working independently online

Organization of content into logical units around a central topic

- Chunking of material
- Digest the chunks providing opportunity for recall or application
Teaching Presence

Considered paramount to successful distance education experiences

Maintains learners’ interest, motivation, and engagement

Contributes to self-efficacy and learning

Very influential on the success of the class

Examples include:

- Response time to student questions
- Discussion post interaction
- Assignment feedback
- Accessibility to instructor
Pitfalls
Pitfalls

Lack of Teaching Presence

Consider:

- Response time to student questions
- Discussion post interaction
- Assignment feedback
- Accessibility to the Instructor
- Virtual office hours
Pitfalls

Don’t build everything at once

Attempting to exactly replicate face-to-face class

Lecturing for hours

1 class session = 1 video

Too much independent work

The pregnant classroom
Pitfalls

Unclear or muddy instructions

Consider Multiple forms of communication

- Video-based and text-based announcements (MMM)
- Written instructions for assignments
- Screen capture videos of “how-to”
Pitfalls

1-way instructor to student communications - being the eye of the needle

Consider:

- Engaging students with each other
- Use group communications such as discussion boards and chats
- Offer student office hours (require questions be submitted beforehand)
Opportunities
Opportunities

Collaborative learning opportunities for students

- Discussion boards
- Small group chats, case studies, application activities

Focus on the learning, not the medium

Flexible study times for students

Slower pace

Opportunities for redundancy/review
Opportunities

Emergence of new student leaders

Different participation rates and greater inclusion

Quiet students emerge

Enhanced student interaction/engagement

- Opportunities for instructor observation of student learning & engagement
Opportunities

More feedback

Greater learning activity documentation

Student grading facilitated

Promotes curriculum review and assessment

Provides evidence for accreditation requirements
Assessment
Assessing Learning Online

Assessment as a learning activity, not just evaluation
- Differentiate cognitive, affective and psychomotor learning assessment

No-Stakes/Low-Stakes/High-Stakes opportunities
Optimize self and peer assessment activities
Consider pass/fail approach to assessment
Rubrics are essential
Assessing Learning Online

Clarity of instructions for assessment is key

- Time limits
- Resource use
- Student collaboration
- Academic integrity policies
The ‘What’ of Online Assessment

Think of assessment as continuous and ongoing, just different assessment activities at different times in the learning process.

Link to learning objectives, learning activities and expected outcomes.

Tools and activities can be developed to assess:

- Cognitive - knowledge and application
- Affective - values and attitudes
- Psychomotor learning - skills acquisition
The ‘What’ of Online Assessment

Assessment In General:

Assessment events create a cadence for students as learning occurs asynchronously

Establish this cadence with common due dates

Consider

- Consistent due dates (i.e. 11:59pm Sunday of each week)
The ‘Why’ of Online Assessment

No-Stakes Assessment:

- Valuable as a learning tool
- Assessment to reinforce learning
- Identify ‘muddy’ points and misconceptions
- Allows instructor to monitor student progress

Examples:

- Student polling systems
- Online gaming
- Student group competitions
- ‘Open book’ activities
The ‘Why’ of Online Assessment

Low-Stakes Assessment:

- Frequent feedback to student and instructor
- Builds confidence in the online environment

Examples:

- Self-assessment
- Peer assessment
- Weekly quizzes
- Participation events
The ‘Why’ of Online Assessment

High-Stakes Assessment:
Consider
- LMS resources
- Exam security measures
- Academic integrity policies
- Exam software systems

Examples:
- Online midterm
- Online Final Examinations
- Application Projects
- Written Assignments
The ‘How’ of Online Assessment

“No Stakes” & “Low Stakes”

Example technologies

○ Kahoot (synchronous)

○ Quizlet (asynchronous)
  ■ Post links in class-wide discussion board
The ‘How’ of Online Assessment

“No Stakes” & “Low Stakes”

Canvas Examples

○ Quizzing function as study guide
  ■ Beyond just Multiple choice
  ■ consider allowing multiple attempts

○ Discussion boards
  ■ Video & text

○ Peer review of assignments
The ‘How’ of Online Assessment

“No Stakes” & “Low Stakes”

Canvas Examples

○ Individual or Group Assignments
  ■ Mind-maps
  ■ Decision trees
  ■ Flow charts
  ■ Voice threads
  ■ Reflections

○ Faculty feedback
  ■ Typed
  ■ Voicethread
  ■ Post answer key
  ■ Summative class announcement

  ● Video
  ● Voice
  ● Text
Psychomotor Skills: Facilitate Learning & Practice
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Video example

Encourage practice both cognitively and hands-on

Cognitively:

- Making study guides breaking down the skills step-by-step
- Visualize the skills
- Verbalize the skills (and the steps of the skills)
- Catch me if you can videos

Hands-on:

- With others if possible
- Stuffed animals
- Imaginary Friend
Psychomotor Skills: Facilitate Learning & Practice

Collaborative check-ins:

Self-created video of performing the skill, or teaching others the skill

Small group discussion board

Teaching others the skill - verbalize all steps

Instructor feedback

Peer feedback using a rubric

Reflection on own video, and what was learned from watching peer videos
Psychomotor Assessment

Make asynchronous discussion board low-stakes graded activity

- Participation of video & substantive feedback
- Written self reflection

Catch me if you can Assignment

- Error
- Correction
  - Participation - post answer key for self-assessment
Psychomotor Assessment

Higher-stakes = Skills checks

- Simplified rubrics (yes/no)
- Detailed instructions on logistics
- Security (scan the room)
- Immediate feedback
- Delayed self reflection
Lessons Learned
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Very clear instructions & expectations

Reassurance from faculty that students can safely, adequately learn the skills when not always supervised

It’s no different than practicing outside of lab
Lessons Learned

Students will have opportunity for feedback and to correct errors

Relay that feedback is increased but not always instantaneous

Preparation before synchronous group time is very important
Lessons Learned

Online environment lends itself to:

- Increased repetition & practice (both cognitive and psychomotor)
- More opportunities for peer-teaching/collaboration
- More opportunities for feedback overall
Thank you!

Open forum for Questions and Answers
Contact us

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