

# BLOCKED SCHEDULING IN PHYSICAL THERAPIST EDUCATION AS A CURRICULAR ADJUSTMENT IN RESPONSE TO COVID-19

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Physical Therapy

SCHOOL OF MEDICINE

UNIVERSITY OF COLORADO  
ANSCHUTZ MEDICAL CAMPUS

## BACKGROUND

- COVID-19 caused widespread modifications in DPT education, requiring adoption of different instructional models and course scheduling alterations
- To minimize student burden and cognitive load, the University of Colorado entry-level DPT program implemented a blocked schedule for Year 1 Spring 2021 semester
- Though deemed satisfactory for students in educational programs outside DPT education, minimal evidence exists describing both student and faculty perspectives of blocked scheduling in DPT education

## PURPOSE

To assess student and faculty perspectives of the Spring 2021 blocked schedule.

## METHODS

### Design

- Retrospective, cross-sectional survey study

### Participants

- 53 (79%) first year students, 21 (77%) faculty who participated in the Spring 2021 blocked schedule (Figure 1)

3 weeks	3 weeks	3 weeks	2 weeks	2 weeks	3 weeks
Course 1 (2)	Course 3 (4)*	Course 4 (4)*	Course 5 (3)*	CAPE	Course 6 (1)
Course 2 (1)					Course 7 (1)

**Figure 1:** Blocked Schedule Spring 1 2021 Course (credit hour) \*clinical management courses

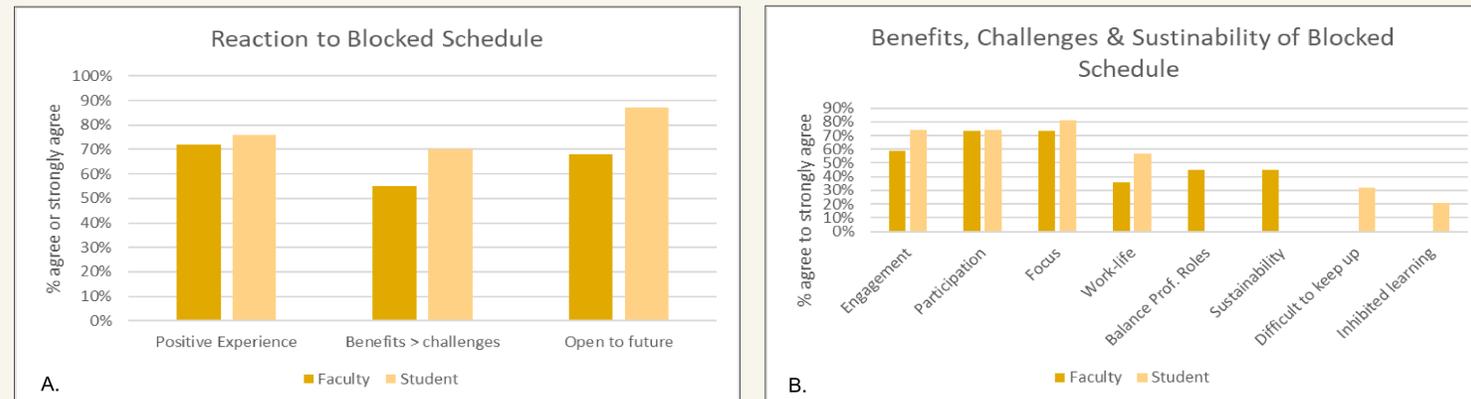
### Data Collection and outcome measures

- Electronic survey development guided by:
  - Kirkpatrick Model
  - Implementation science measurement tools
  - Specific faculty curiosities
- Captured quantitative and qualitative data in the domains: 1) reaction (acceptability, fit, sustainability), 2) challenges (demands), 3) benefits (focus, engagement), and 4) recommendations
- Survey distribution to students and faculty occurred upon semester completion

### Data Analysis

- Quantitative and qualitative data were analyzed using descriptive statistics and content analysis, respectively

## RESULTS



**Figure 2A-B.** Quantitative data representing student and faculty feedback on the spring 2021 blocked schedule. Benefits > challenges = benefits outweigh challenges; Balance Prof. Roles = Balance Professional Roles

### Qualitative Findings: Benefits

#### Students:

1. Focus and organization
2. Depth and immersion
3. Balance of demands

*"I loved this format so much. I feel like I was able to focus in and devote myself to studying more than ever before and a lot of my anxiety surrounding school decreased because I was better able to manage my time and maintain my own health and wellness"*

*"The greatest benefits with the organization and expectations. We knew what was expected of us for 3-4 weeks with each block and this allowed for greater organization and engagement for our courses".*

*"Immersion with content. Easier to focus. Deeper learning and opportunity for refinement"*

*"Students were focused on content and not distracted by other courses, easier to manage scheduling and time off requests at my clinical/full-time job"*

*"...recall information for applied focus better than when spread across a semester or when juggling competing demands of other courses"*

#### Faculty:

1. Student focus, preparation, engagement
2. Less demands foster recall
3. Scheduling

*"For earlier learners, it is easier to focus on one subject at a time and less overlap...when another course is having a comp or test"*

*"Allowed for more consolidated schedule... good for research faculty instructor"*

### Qualitative Findings: Challenges

#### Students:

1. Pace inhibits time to process
2. Flexibility
3. Attention span
4. Negative emotions
5. Retention and integration

*"Need to consider challenges with students who need "more time" to process/ reflect on content; there is little to no time for remediation; need to consider impact of weather (imagine if that snow storm had hit in the middle of the week and not on the weekend!)"*

*"lack of knowledge retention, not enough assignments make it stressful, not enough time to practice skills"*

*"opportunity to lose significant course content if there is a need to miss even part of a single lab session"*

#### Faculty:

1. Faculty load
2. Limited flexibility
3. Concerns for students: retention, burnout, integration, assimilation
4. Cognitive fatigue

*"Once students were identified as having challenges- the course was nearly over, A great deal of time needed for grading while the intense course was occurring"*

*"long learning sessions, cognitive fatigue"*

*"As students move through their learning, they will need to be able to split their focus and apply the overlap in content. We don't practice in content silos and should encourage the integration of content which, will facilitate better professional development and clinical reasoning"*

### Qualitative Findings: Recommendations

*"...if the classes were all the same length and we knew what to expect" (need for consistency, student)*

*"Some course could have been placed together, to allow for one more dedicated week each to [track] courses" (Vary approach by course, student)*

*"...i do see the challenges of the aggressive blocking/Spring 1, and I think the more "gentle" blocking of Spring 2 and Fall is possibly better" (Less aggressive, faculty)*

## CONCLUSIONS

- Faculty and student perspectives differed, but overall reaction to the blocked schedule was positive
- Findings support evidence outside of DPT education of high student satisfaction and support the decision to adopt a blocked schedule to address students' cognitive load of managing multiple courses
- However, results suggest the need for less aggressive blocking of higher credit hour courses and need for consistency
- Additional work is critical to:
  - Evaluate learning outcomes to better understand the impact, benefits and challenges of a blocked schedule
  - Understand strategies for optimal implementation and execution fostering sustainability, learning outcomes and satisfaction

## RELEVANCE

This is a critical first step in the process of understanding implementation of alternative scheduling structures and providing options for future curricular modifications, while also providing a model for development of an evaluation plan assessing educational innovation in DPT education.

## REFERENCES

- References available here or upon request



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