

Learning and Study Strategies in Bridge Doctor of Physical Therapy Students

HANNAH BAKER, PT, DPT, GCS, PHD

CONCORDIA UNIVERSITY WISCONSIN

2025 WISCONSIN INTERDISCIPLINARY
RESEARCH SYMPOSIUM

JUNE 4, 2025

FUNDING: AY24 CONCORDIA INTRAMURAL
TEACHING GRANT (CITG)

IRB: #IRB-FY24-75

DPT Program

2009: master's to doctoral level

2021: bridge program added

2025: 3 years to 2.5 years

Blended delivery

Flipped classrooms

Student Characteristics

TRADITIONAL

Recent undergraduates

Cohort size: 28

3-4 8-hour days/week in class

Early 20s

Poor learning strategies

BRIDGE

Licensed PTAs

Cohort size: increase by year (cap at 20)

One 16-hour weekend/month

Late 20s

Poor learning strategies

LASSI

Scales MH, Vallabhajosula S. Learning and study strategies of students in the first year of an entry-level physical therapist program. *JOPTE*. 2023;37(2):132-137. doi:10.1097/JTE.0000000000000275
Acee TW, Hodges R. The many legacies of Claire Ellen Weinstein, part 2 tribute: strategic learning assessment. *Promis Pract Devel Educ*. 2017:49.

New to use in DPT education

Past uses:

- Retention
- Advising
- Academic support

No data for bridge DPT education

Weinstein CE, Palmer DR, Acee TW. User's manual: Learning and Study Strategies Inventory, Third Edition. H&H Publishing Company. 2016. Accessed 30 May 2025 from <https://www.hhpublishing.com/LASSImanual.pdf>

LASSI 3rd Edition

Subscale	Sample Statement
Anxiety	"I feel very panicky when I take an important test."
Attitude	"I only study the subjects I like."
Concentration	"If I get distracted in class, I am able to refocus my attention."
Information processing	"I try to find relationships between what I am learning and what I already know."
Motivation	"I set goals for the grades I want to get in my classes."
Selecting main ideas	"I have difficulty identifying the important points in my reading."
Self testing	"I stop periodically while reading and mentally go over or review what was said."
Test strategies	"I have difficulty adapting my studying to different types of courses."
Time management	"I find it hard to stick to a study schedule."
Using academic resources	"I am not comfortable asking for help from instructors in my courses."

Fong CJ, Krou MR, Johnston-Ashton K, Hoff MA, Lin S, Gonzales C. LASSI's great adventure: A meta-analysis of the Learning and Study Strategies Inventory and academic outcomes. *Educ Res Rev.* 2021;34:100407. doi:10.1016/j.edurev.2021.100407
Khalil MK, Williams SE, Hawkins HG. The use of Learning and Study Strategies Inventory (LASSI) to investigate differences between low vs high academically performing medical students. *Med Sci Educ.* 2020;30:287-292. doi:10.1007/s40670-019-00897-w

Past Research: Non-DPT Education

Weaker correlations with GPA by age

GPA/academic persistence always related to motivation

Test scores:

- Test strategies
- Anxiety
- Selecting main ideas

Medical student high/low performance:

- Anxiety
- Motivation
- Test strategies

Past Research: DPT Education

Admissions criteria unrelated to LASSI skills?

No correlation to program GPA

Anatomy/neuroscience:

- Positive: anxiety coping, test strategies
- Negative: information processing, self-testing

Minimal detectable change not established

Minahan CA, Reynolds B, Martin JG, Seale J. Strategic learning strategies of doctor of physical therapy students. *JOPTE*. 2024;38(4):311-321. doi:10.1097/JTE.0000000000000345

Pucillo EM, Kiernan E, Shotwell MP, Crossen-Stills J. Learning strategies and academic difficulty in occupational and physical therapy online education. *J Occup Ther Educ*. 2020;4(2):Art. 5. doi:10.26681/jote.2020.040205

Harmon DJ, Attardi SM, Waite JG, Topp KS, Smoot BJ, Farkas GJ. Predictive factors of academic success in neuromusculoskeletal anatomy among doctor of physical therapy students. *Anat Sci Educ*. 2023;16(2):323-333. doi:10.1002/ase.2202

Methods: Sample

Bridge cohort

- N = 14 (50% female), age 29 +/- 5 years
- Took LASSI in Spring 2024

Traditional cohort

- N = 28, age 21 +/- SD
- Took LASSI in Summer 2024

Methods: Intervention/Measurement

Introduction to Professional Practice

- All students in both cohorts consented to study

Week 1

- Take LASSI
- Instructional videos on studying/procrastination/note-taking
- Reflection: how plan to use new knowledge

Week 8

- Reflection: success story of week 1 plan

Cornell Notes

Title section at top

Notes section in middle right (70%)

Questions/key points section in middle left (30%)

Summary section in bottom 5-7 lines

The Cornell Method for Note-taking

Complete your notes and cues during class, then summarise immediately after

Page 1	Date:	
NOTES – The Cornell Method		
TOPIC 1		
	Main idea 1	<ul style="list-style-type: none">Add your details on the right hand side
		<ul style="list-style-type: none">Add supporting evidence, ideas, data points, facts, examples and opinions here
	Keyword 2	<ul style="list-style-type: none">
		<ul style="list-style-type: none">
	Question 3	<ul style="list-style-type: none">You can also add charts and diagrams here
		<ul style="list-style-type: none">
		<ul style="list-style-type: none">
	Key point 4	<ul style="list-style-type: none">Start a new bullet point for each detail you note
		<ul style="list-style-type: none">
		<ul style="list-style-type: none">
	Prompt 5	<ul style="list-style-type: none">Keep each subsection separate for clarity
SUMMARY		
		<ul style="list-style-type: none">Keep it brief and high level
		<ul style="list-style-type: none">Cover all the key concepts in your own words





Avoid full sentences – keep it short


Complete the notes column during your class

Add cues during or afterwards – your choice!

Summarize after class!

ExamStudyExpert.com/cornell-notes-method

 EXAM STUDY EXPERT

Methods: Academic Indicators

Tutoring

- Course/exam < 80%
- Multi-semester course threads
- Offer vs accept

Academic probation

- Semester GPA < 3.0 with all courses C or above

Academic dismissal

- Cumulative or semester GPA < 3.0 for 2 semesters OR < C in course

Results: Bridge

Areas of high concern: anxiety, concentration, selecting main ideas, test strategies

Academic: 3 probation (21.4%), 4 dismissed (28.6%), 12 tutoring in year 1 (85.7%)

Subscale	Indicator	Pearson r
Information processing	Tutoring	-0.500
Selecting main ideas	Dismissal	-0.477
Testing strategies	Dismissal	-0.464
Using resources	Dismissal	-0.519

Logistic regression modeling not significant

Self-reported benefits, decreased dismissal %

Discussion

Consistent, distinct areas of high concern

Bridge student diversity

Improved retention?

Next steps:

- Multi-cohort pretest-posttest
- Incorporate LASSI as line item (~\$4.50/test)
- Instructional module in IPP course

Questions?

Hannah Baker hannah.baker@cuw.edu

Thank you!