

Lasting Effects of a Graduate Pedagogy Course on the Development of Teacher-Scholars

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Graduate students' progression from excellent to scholarly teachers

Aspect	New graduate student ←→ Junior colleague		
Teaching & research skills	Survival	Developing skills	Outcomes oriented
Disciplinary language	Simplistic	Insider	Jargon-free
Interpersonal reliance	Dependent	Independent or counter-dependent	Interdependent

A new course for future STEM faculty: MSCI M620: Pedagogical Methods in Health Sciences

- Student learning styles
- Classroom presentation
- Classroom research
- Scholarship of teaching
- Teaching philosophy statement
- Teaching portfolio



Pedagogy Class Demographics Spring 2007

- Ten participants (7 women, 3 men)
- Elective participation
- Multiple disciplines (medical sciences, anthropology, kinesiology, applied health, biology)
- Varied teaching backgrounds

Did our students develop as teacher-scholars?

As a result of taking the pedagogy course, did our students:

1. Develop a more complex attitude regarding student learning?
2. Evaluate their teaching methods and explore alternative teaching strategies?
3. Assess their teaching effectiveness?
4. Envision themselves becoming involved in a public teaching resource network?
5. Develop lasting attitudes about scholarly teaching?

Our SOTL Research Website:

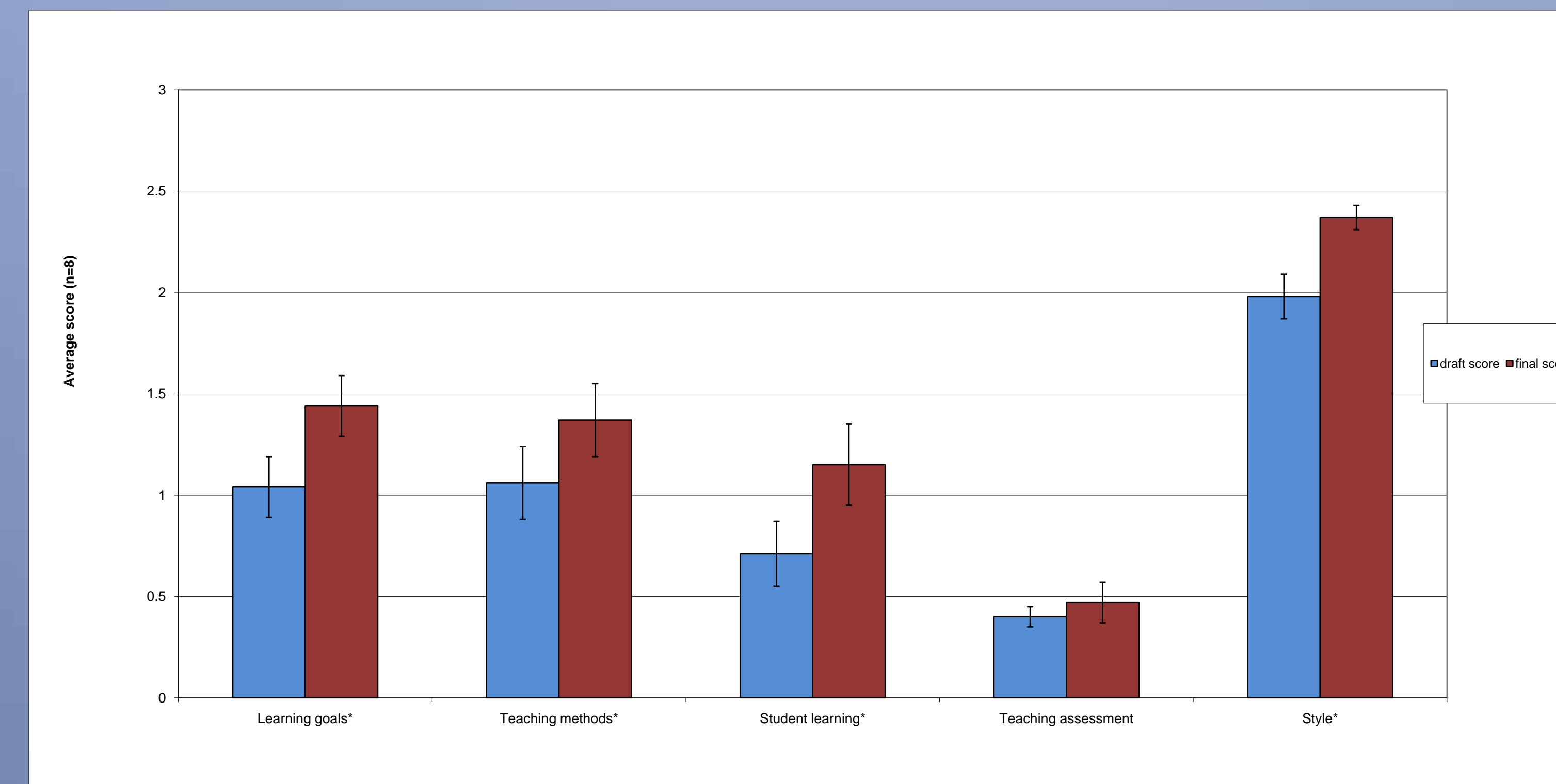
http://medsci.indiana.edu/m620/sotl_08/start.htm

Evidence of scholarly teaching: draft versus final teaching statements

Teaching Statement Scoring Rubric

- Five dimensions, scored from 0 (absent) to 3 (exceptional)
- Multiple criteria within each dimension (total of 27)
- Statements scored by four independent graduate student researchers (raters)

Comparison of draft and final teaching statements



Evidence of lasting scholarly teaching: six-month follow-up interviews

Students said they enhanced their teaching skills:

- Developed increased confidence in the classroom
- Gained a deeper understanding of their students
- Examined how to evaluate student learning
- Evaluated their own teaching effectiveness
- Discovered an array of teaching techniques and styles

"I think I really grew as a teacher...it made me a lot more conscientious about what I should be doing overall so that I actually am more aware of reaching out to everybody."

Students said they progressed as teacher-scholars:

- Engaged in a forum to discuss their teaching
- Received collaboration, communication, feedback re: teaching statements and teaching portfolios
- Developed an interest in pedagogical research
- Learned to multi-task with respect to teaching, research, and service

"I think it can be a real eye opener that...being a teacher doesn't mean giving up research at all. In fact, you're still expected to do both."

Disconnects: Our students said they:

- Struggled with how to measure and document teaching effectiveness
- Lacked some documentation from past TA experiences for use in their portfolios
- Had difficulty justifying time spent on teaching improvement with the competing demands of coursework and research

"I have the additional challenge of trying to convince [my advisor] that no, this is really something that I need to do for my own professional development and I can balance it with research."

Interview themes regarding graduate students' self-awareness as teacher-scholars

Themes	Subthemes	Description	Frequency
Teaching		Changing definitions of what constitutes teaching	23
Training		How interviewees claim to have received their training	
	Informal Teaching	Everything from summer camps to mentoring	27
	M620 Pedagogy Course	The pedagogy course described here	22
	Campus Resources	Other pedagogy courses, scholarship of teaching and learning events, campus consulting offices	17
	Mimicking	Copying what they have seen; following a mentor's lead	13
	TA Experience	Experience as a grader, discussion leader or course instructor	13
Outcomes		Learning from other graduate students	11
		The results of taking the M620 graduate pedagogy course	
	Interest in Pedagogy	How the pedagogy course influenced anticipated career activities	25
	Application	Using techniques from the pedagogy course in the classroom	23
	Teaching Philosophy Statement	Statement of teaching philosophy	18
	Teaching Portfolio	Teaching portfolio	15
Effectiveness		Changes in students' beliefs about their teaching	
	Self-Evaluation	Interviewees self-report conscious awareness of themselves as teachers or model reflexive thinking during the interview	10
	• Reflexivity	Interviewees report feeling more confident and comfortable in the classroom	8
	• Confidence	Interviewees report a better understanding of their students	6
	• Understanding of students	How interviewees measure teaching effectiveness	6
	Student Performance	Improved performance as evidence of effectiveness	16
Disconnects	Evaluations	Student feedback of instructor performance	12
	Reviews	Reviews from professors/ supervisors	4
		Areas in which students are unable to utilize/ apply info from the class	
	Time Constraints	Interviewees report time constraints that interfere with implementation of what was learned	12
	Lack of Teaching Portfolio Materials	Interviewees have failed to produce or save components needed for the teaching portfolio	8
	Forgotten Aspects	Memory lapses	3

Evidence of lasting scholarly teaching: activities and mindsets

- Participation in multiple extracurricular pedagogical activities well after completing course
 - Teaching portfolio share fair
 - Attendance at SOTL talks
 - Use of instructional support services

"The pedagogy course got me thinking about practical ways to help students and also ways to evaluate it."

As a result of taking M620, did students:

	Develop complex attitudes regarding learning?	Evaluate teaching methods?	Explore methods of evaluating teaching?	Envision becoming involved in a teaching network?	Demonstrate lasting scholarly approaches?
Evaluations	✓	✓	✓		
Survey	✓	✓	✓		
Teaching statement	✓	✓	✓		
Portfolio	✓	✓	✓	✓	
Interview	✓	✓	✓	✓	✓
Extracurricular activities	✓	✓	✓	✓	✓

Our research team: A novel intersection of graduate student development and the scholarship of teaching and learning

- Multidisciplinary team of graduate students (science, social science and humanities)
- Students involved from inception to presentation of research:
 - Developed teaching statement rubric
 - Scored teaching statements
 - Conducted student interviews
 - Transcribed and coded interview data
 - Performed inductive analysis of qualitative data
 - Prepared research papers and posters as co-authors

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