OCLC Connexion Page 1 of 2

## OCLC 946445887 Held by WAU - no other holdings

text file #b PDF #2 rda

#b Ph. D. #c University of Washington #d 2015

347 502

Rec stat c	Entered 20160411			Replaced 20241118			
Type a	ELvi		Srce	d	Audn	Ctrl	Lang eng
<b>BLvI</b> m	Form	Form o		0	Biog	MRec	Ctry wau
	Cont	bm	GPub	1	LitF 0	Indx 0	
Desc i	IIIs	а	Fest	0	DtSt t	<b>Dates</b> 2015 ,	2015
006 m	o d s	i					
	≠b r						
040 W	AU ‡b	eng ‡e r	da ‡c	WAU	#d OCLCF #	d OCLCQ #d OC	LCO #d OCLCQ #d OCLCO #d OCLCQ #d
W	AU						
090 +b							
	WAUW						
	Wiggins, Benjamin L., ‡e author. ‡1 <a href="http://www.wikidata.org/entity/Q131155137">http://www.wikidata.org/entity/Q131155137</a>						
	irge-enro iggins.	ollment S1	TEM lea	rning	environments :	+b cultural and ex	xperimental perspectives / ‡c Benjamin L.
	[Seattle]: +b [University of Washington Libraries], +c [2015]						
264 4 ‡0	‡c ©2015						
	1 online resource (87 unnumbered pages): ‡b illustrations (chiefly color)						
	text +b txt +2 rdacontent						
	•	‡b c ‡2					
338 or	line reso	ource +b	cr ‡2	rdaca	rrier		

- Includes bibliographical references.
   505 0 0 ‡t Undergraduate science learners show comparable outcomes whether taught by undergraduate or graduate teaching assistants / ‡r by Hannah C. Chapin, Benjamin L. Wiggins, and Linda E. Martin-Morris -- ‡t Understanding classrooms through social network analysis : a primer for social network analysis in education research / ‡r Daniel Z. Grunspan, Benjamin L. Wiggins, and Steven M. Goodreau -- ‡t Development of a grounded survey to measure student engagement in large active-learning classrooms / ‡r Benjamin L Wiggins, Sarah L Eddy, Leah S Wener-Fligner, Daniel Z Grunspan, Jerry P Timbrook, Karen Friesem, Alison J Crowe -- ‡t The ICAP active learning framework predicts experimentally assessed learning gains for intensely active classroom experiences.
- 520 3 Post-secondary STEM education forces students through an experiential bottleneck in the form of large-enrollment lecture courses. At colleges and universities around the world, talented students who have already passed through several academic filtering processes are challenged with coursework in environments that are impersonal, intimidatingly large, and typically taught using traditional passive lecture techniques. This is no way to educate the next generation of scientists, researchers, doctors, and innovators. Calls for improvement are frequent and loud, but the research on improvement in this unique arena is seldom conclusive useful for practitioners. This dissertation focuses on the large-enrollment STEM classroom as an opportunity for inspection and change. This dissertation seeks a wide-spectrum view across several key issues. Comprised of peer-reviewed articles, this work will examine the large-enrollment STEM classroom from four angles. First, an analysis of interactions between different types of teaching assistants will inform the student-instructor relationship and speak to important attributes in instructor teams. Secondly, the methods for modeling large education environments through social network analysis are developed. Third, a qualitative deep dive into student experiences is used to develop a survey instrument focused on student engagement with active teaching practices in a large-enrollment classroom; these mixed methods triangulate similar conclusions about the important factors for students. Lastly, predictions at the apex of the ICAP framework for active learning practices developed by Chi and Wylie (2014) are validated through an experimental use of split large-lecture courses as a model system. This dissertation is intentionally broad. As this learning environment is yet poorly understood, the author intends to address change in future work through a wider scope on multiple avenues for positive change. While this does not address any particular issues in the depth of multiple peer reviewed papers, it is agreed by the committee that a group-authored and collaborative look at multiple issues is a useful education for potential needs of post-secondary STEM education overall.
- 588 0 Online resource; title from PDF title page (ResearchWorks Archive, viewed April 4, 2016).
- 650 0 Science ±x Study and teaching (Higher)
- 650 0 Graduate teaching assistants ±z United States ±x Case studies.
- 650 0 Social sciences +x Network analysis.
- 650 0 Active learning +z United States +x Case studies.
- 653 0 Active learning
- 653 0 Interactive
- 653 0 Large classrooms
- 653 0 Networks
- 653 0 Sociocultural

about:blank 12/6/2024

Page 2 of 2 **OCLC** Connexion

- 653 0 STEM
- 655 4 Theses ‡x Education - Seattle.

- 7 dissertations. \$\pm\$2 aat \$\pm\$0 (CStmoGRI)aatgf300028029

  7 Academic theses \$\pm\$2 fast \$\pm\$0 (OCoLC)fst01726453

  7 Academic theses. \$\pm\$2 lcgft

  7 Theses et ecrits academiques. \$\pm\$2 rvmgf \$\pm\$0 (CaQQLa)RVMGF-000001173
- 700 1 <u>Bell, Philip.</u> ‡d <u>1966-</u> ‡e degree supervisor. ‡1 <u>http://www.wikidata.org/entity/Q126964035</u> 856 4 0 ‡u <u>http://hdl.handle.net/1773/35172</u>

Delete Holdings- Export- Label- Produce- Submit- Replace- Report Error- Update Holdings-Validate-My Status-CP - DFW Student Workflow-In Process

12/6/2024 about:blank