

2016-05

# Engaging Students Through Creative Classroom Design

Holec, Victoria

---

Holec, Victoria, and Janay Nugent. (2016). Engaging Students Through Creative Classroom Design. University of Calgary Conference on Postsecondary Learning and Teaching: Exploring Creativity in Postsecondary Learning and Teaching, Calgary, May 10-11. Calgary, AB: University of Calgary.

<http://hdl.handle.net/1880/51502>

*Downloaded from PRISM Repository, University of Calgary*

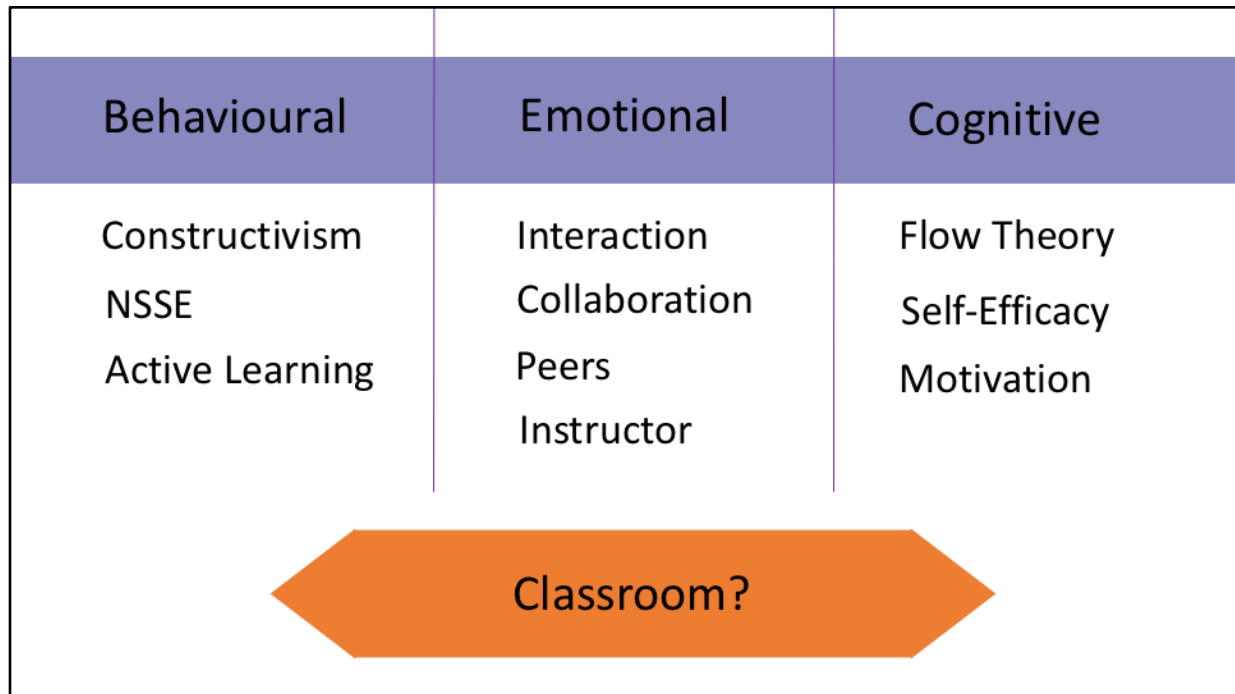
# ENGAGING STUDENTS *through* CREATIVE CLASSROOM DESIGN

Victoria Holec & Janay Nugent

University of Lethbridge

Taylor Institute Conference on Postsecondary Learning and Teaching  
University of Calgary, May 11, 2016

Slide 1



## Slide 2

Student engagement is generally talked about as institution-level engagement, or individual-level engagement. We were interested in engagement on the individual level, wanting to know what happens in the classroom. Individual-level student engagement is a complex construct and can refer to many concepts, which can be grouped according to researchers have recent frameworks into Behavioural, Emotional (Psychosocial), and Cognitive aspects (Fredricks et al., 2004; Kuh 2009).

Our study asked: What is the contribution of the learning environment (i.e., classroom) to student engagement? We compared students in a traditional classroom (n = 12) to students in an active learning classroom (n = 15), with both classes being taught by the same instructor (JN). We implemented a novel survey instrument encompassing behavioural, emotional (psychosocial), and cognitive aspects.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109.

Kuh, G. D. (2009). The National Survey of Student Engagement: Conceptual and empirical foundations. *New Directions for Institutional Research*, 141, 5-20.

## SETTING THE SCENE

### HIST 4010: Youth Culture in Early Modern Europe

- 4<sup>th</sup>-year course
- seminar format
- 18 students
- history majors
- very strong group

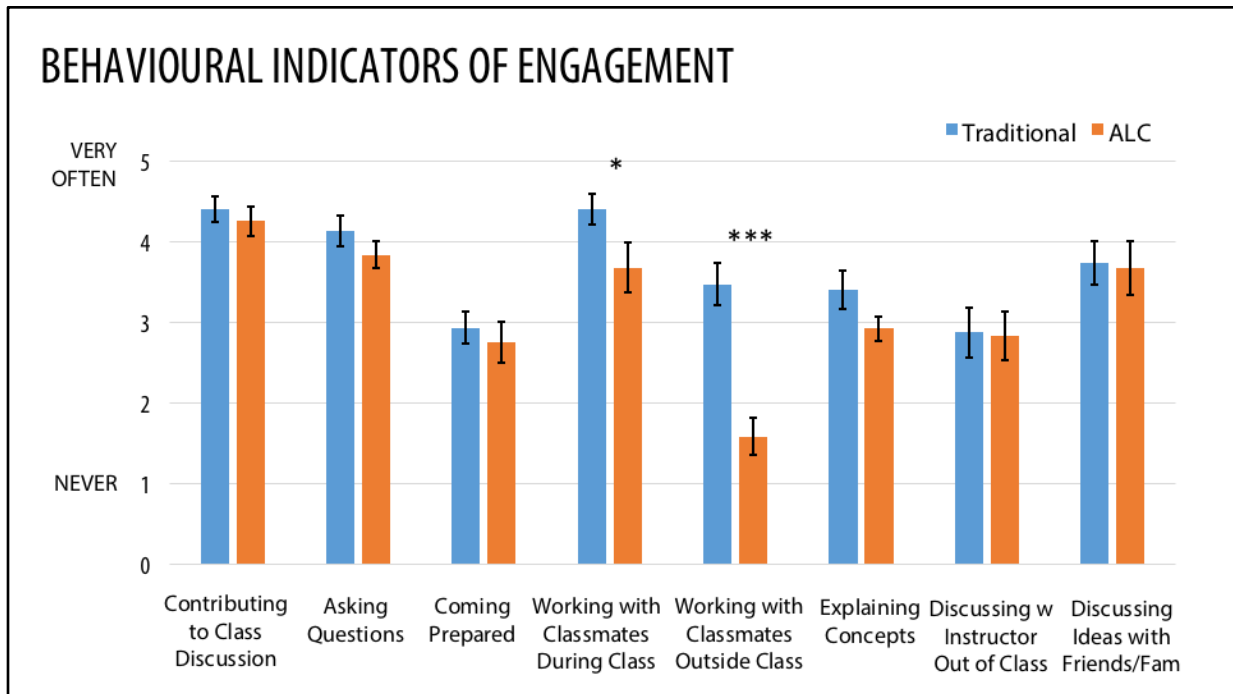
### WGST 3040: Representations of Parenthood

- 3<sup>rd</sup>-year course
- seminar format & some lecture
- 21 students
- across disciplines

Slide 3



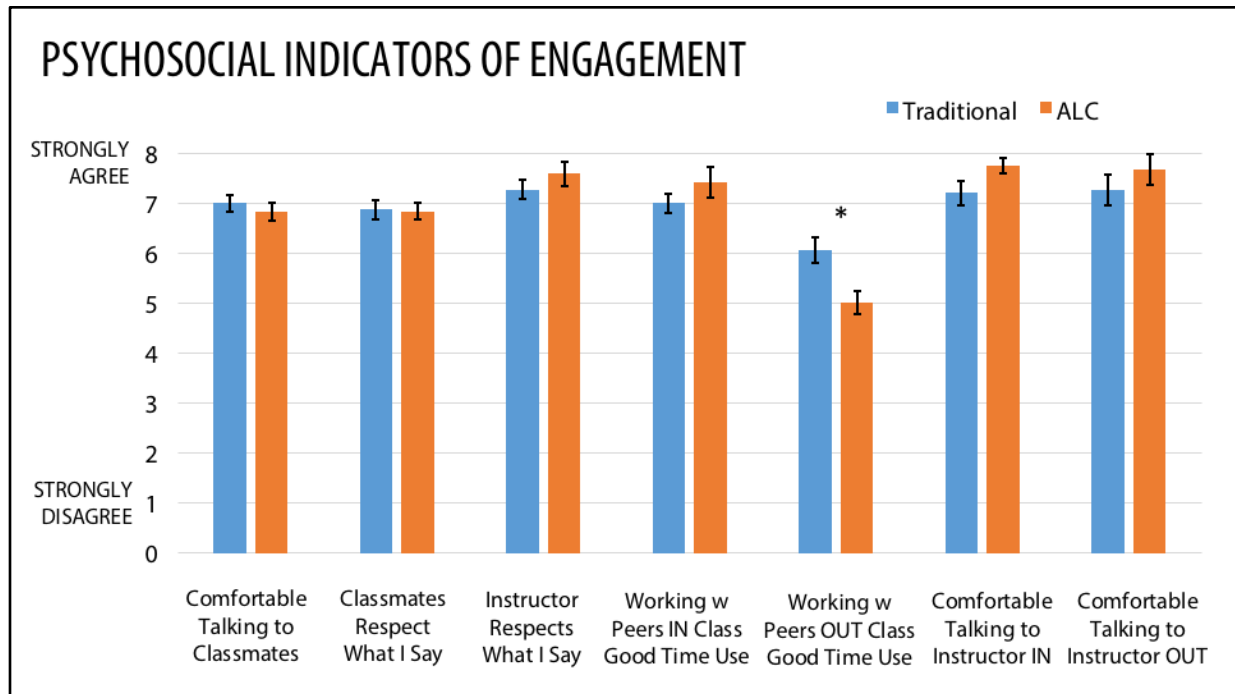
Slide 4



#### Slide 5

In the traditional classroom, two indicators of behavioural engagement were rated as occurring MORE FREQUENTLY than in the Active Learning Classroom (ALC). This is because students in the traditional classroom were required to complete a group project that was worth 15% of their marks. Additionally, half the class chose to complete another assignment worth 10% in pairs. The instructor explained that students were expected to get together in their groups outside of class. Behavioural indicators of engagement were moderate to high across the board.

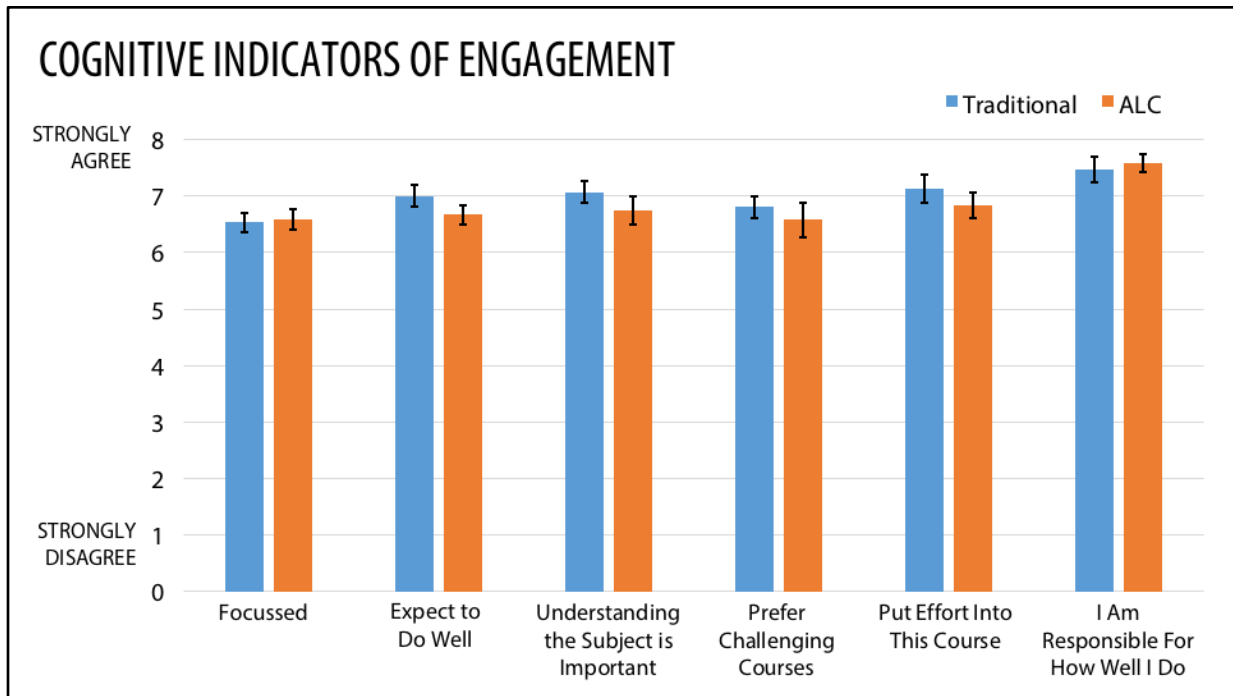
Asterisks denote the conventional p values: \* =  $p < .05$ ; \*\* =  $p < .01$ ; \*\*\* =  $p < .001$



#### Slide 6

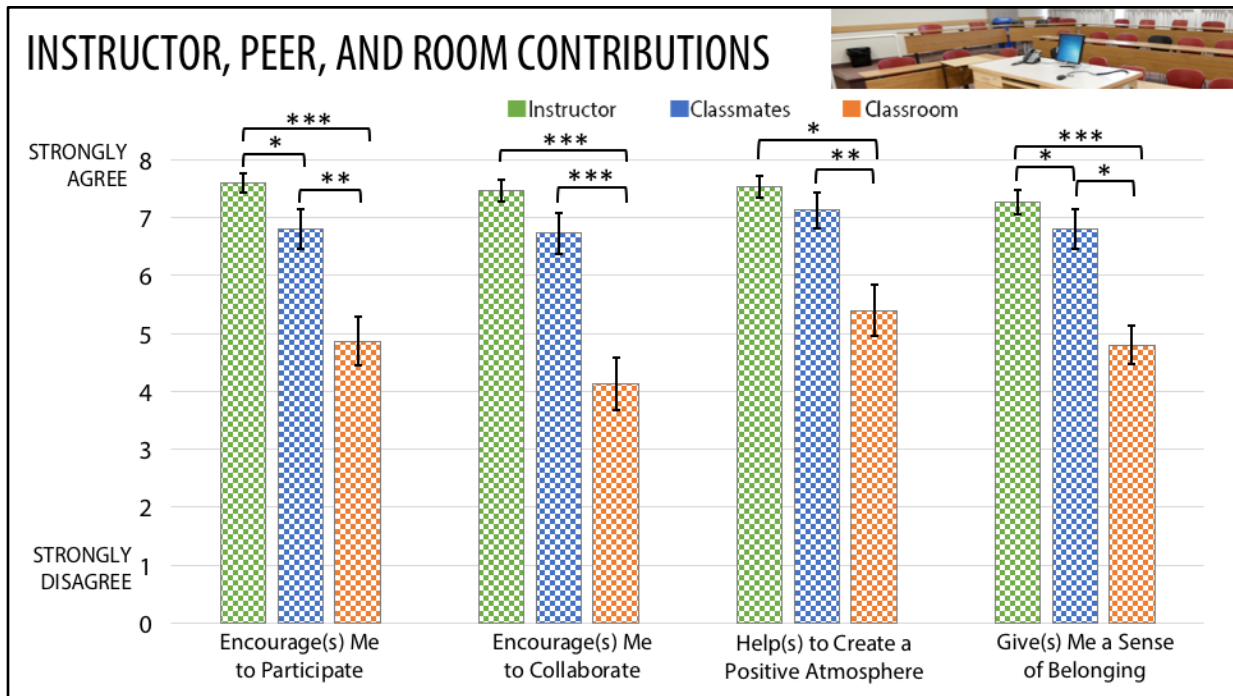
As indicated in the previous slide, students in the traditional classroom were required to work on a group project outside of class. Students in the ALC did not work together outside of class very often. Psychosocial indicators of engagement were high across the board.

Asterisks denote the conventional p values: \* =  $p < .05$ ; \*\* =  $p < .01$ ; \*\*\* =  $p < .001$



Slide 7

Cognitive indicators of engagement were very high across the board.

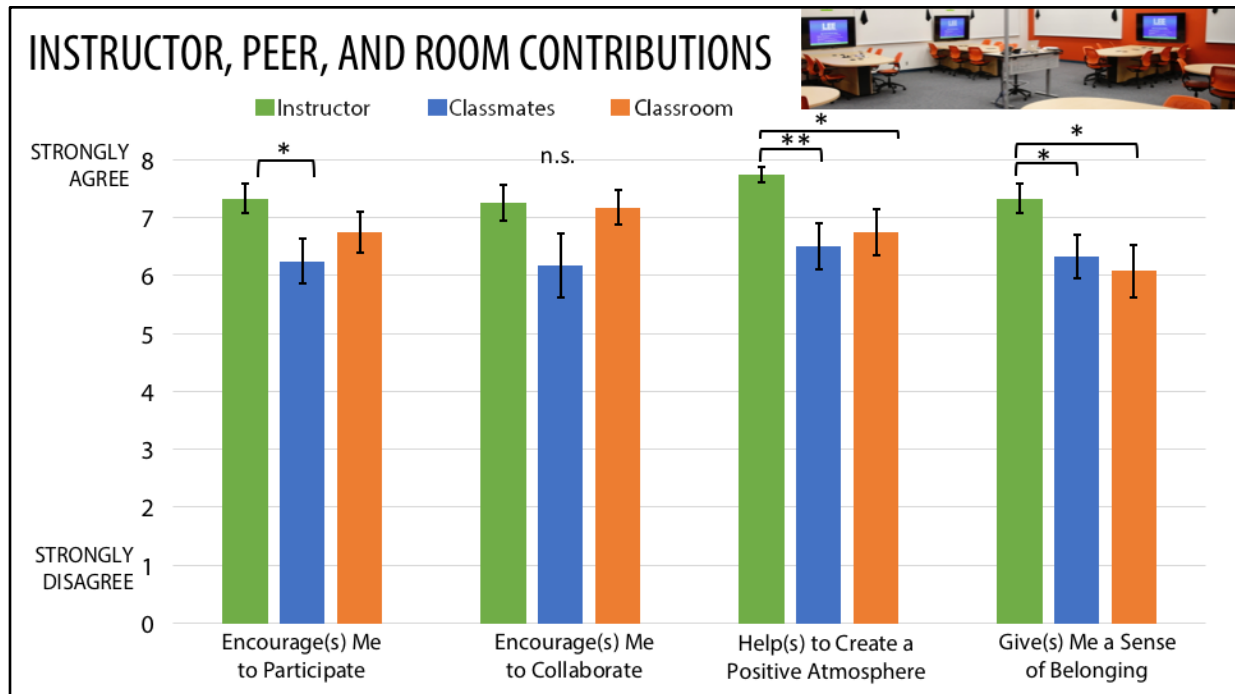


#### Slide 8

In the traditional classroom, we found that the instructor had the greatest influence on four identical aspects of engagement asked for instructor, classmates, and classroom, while the classroom had the lowest contribution.

Asterisks denote the conventional p values: \* =  $p < .05$ ; \*\* =  $p < .01$ ; \*\*\* =  $p < .001$

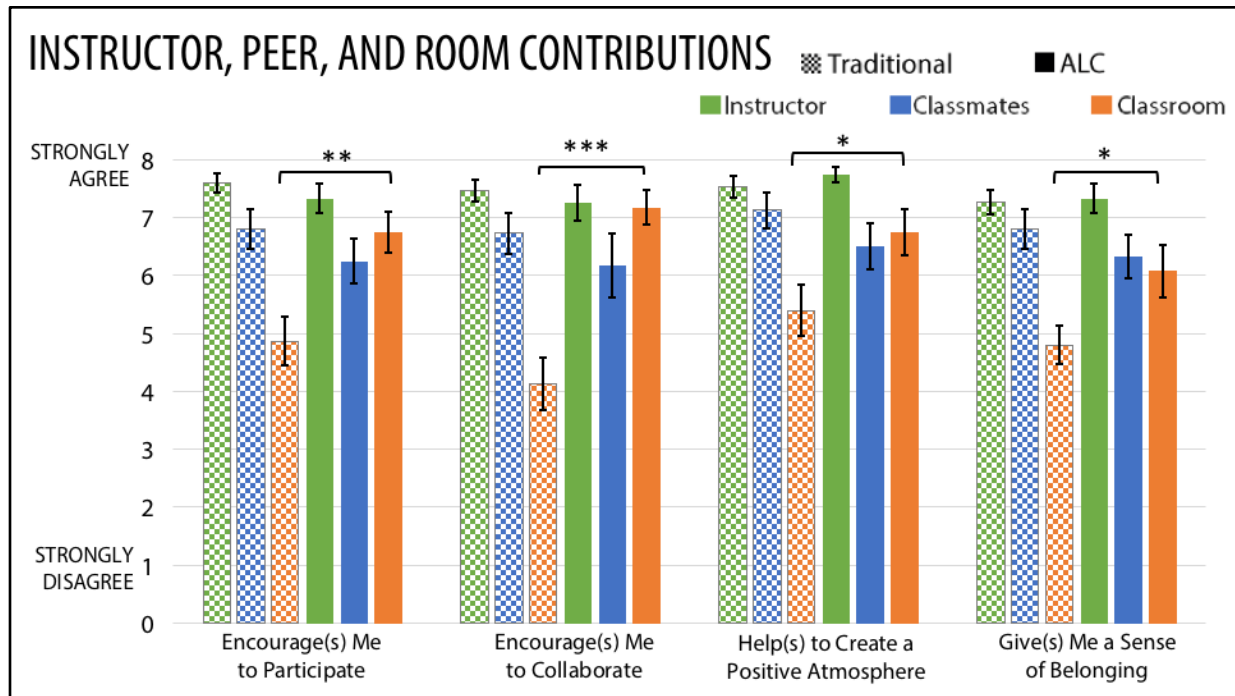




#### Slide 9

In the ALC classroom, we found that, while the instructor still had the greatest influence on four identical aspects of engagement asked for instructor, classmates, and classroom, the classroom now also had a significant contribution (see next page for comparison).

Asterisks denote the conventional p values: \* =  $p < .05$ ; \*\* =  $p < .01$ ; \*\*\* =  $p < .001$

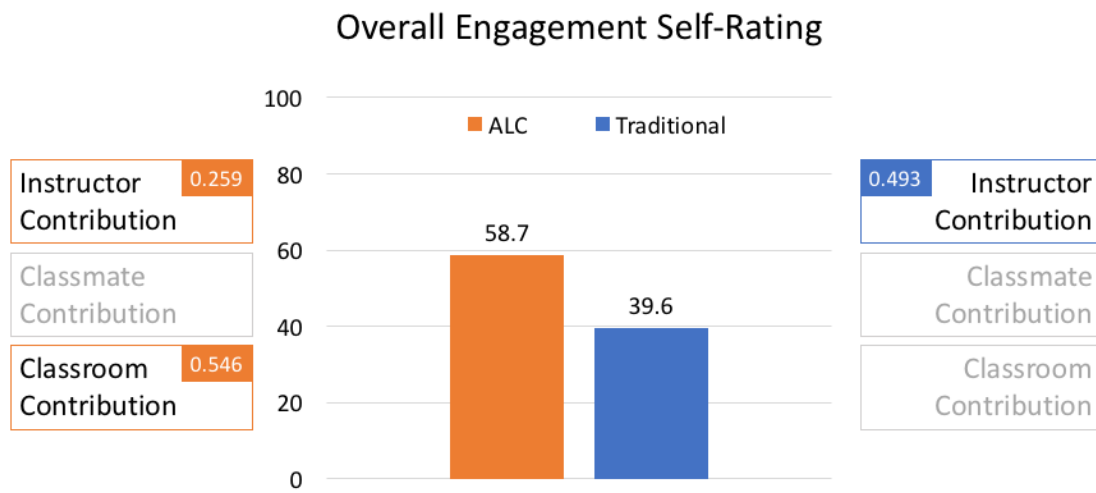


#### Slide 10

The contributions of instructor and classmates on four identical aspects of engagement asked for instructor, classmates, and classroom, were equal compared across the two learning environments. However, the classroom contributed significantly more to student engagement in the ALC compared to the traditional room.

Asterisks denote the conventional p values: \* =  $p < .05$ ; \*\* =  $p < .01$ ; \*\*\* =  $p < .001$

## 3 CLASSES – ALC VS. TRADITIONAL



Slide 11

### AS PART OF A LARGER STUDY

We were interested in investigating respective contribution of instructor, classmates, and classroom (linear regression analysis). Combined data from 3 courses are presented here.

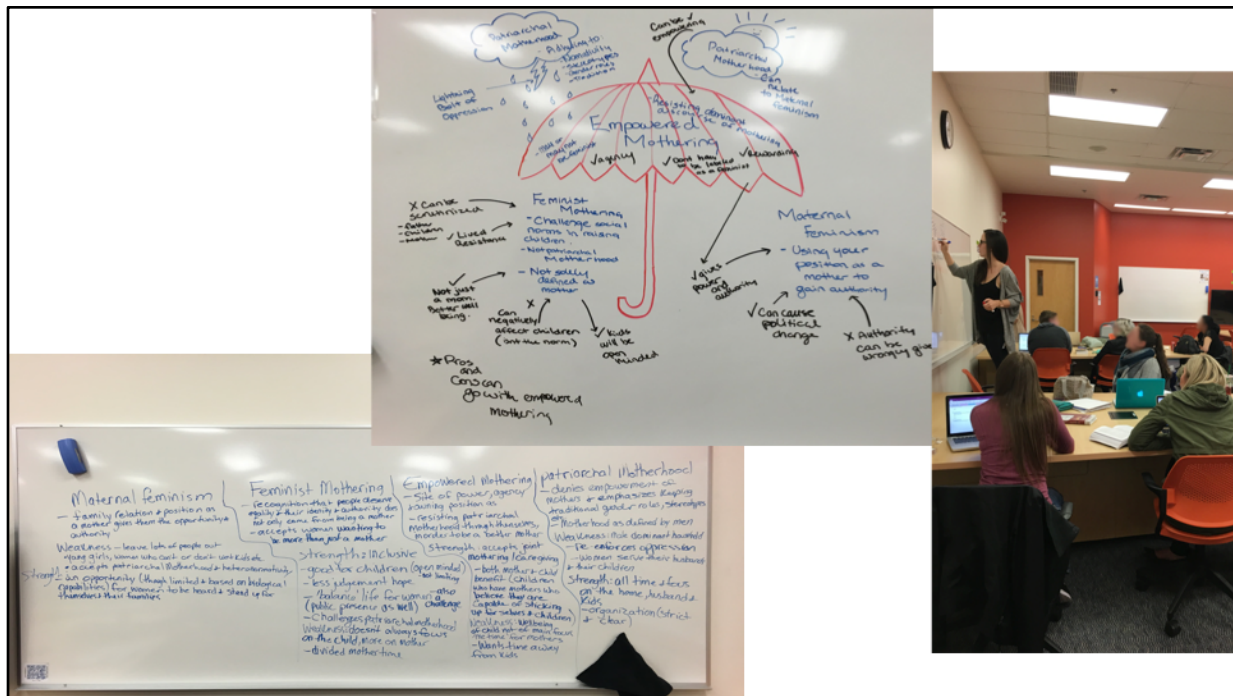
For the ALC, the classroom explained 58.7% in the variance in the student self-rating of engagement. For the traditional classroom, the classroom explained only 39.6% of the variance in the student self-rating of engagement.

When examining the standardized beta values, we found that in the ALC, only the classroom and the instructor had a significant contribution to the self-rating. The classroom contribution was highest. In the traditional classroom, only the instructor had a significant contribution to the self-rating. Classmates had no significant contribution in either room.



## Slide 12

In addition to requiring the usual research papers and presentations, each class was provided with at least one assignment where students had the opportunity to tap into their creative sides. These images depict role playing assignments in the fourth year traditional classroom. Here students built on traditional transferable skills such as research, critical thinking, written and oral communication skills to build the skills needed for global citizenship including empathy, attention to detail, collaboration, the ability to think outside of the box and a willingness to take calculated risks.



## Slide 13

In the Active Learning Classroom the opportunity for creativity was also built into the assignments. An unexpected result was how the classroom facilitated creativity organically as students engaged with their peers and course materials on a daily basis. An illustrative example is in the left image compared to the right. Here the students were asked to consider their readings and reflect on the differences between feminist mothering, patriarchal motherhood, maternal feminism and empowered mothering. Students were asked to define the concepts and talk about their individual strengths and weaknesses. The usual comparative chart as shown here appeared in most groups.

One group of students built on the sense of community that had been fostered in their group and took a risk to chart their own original diagram of explanation and relationships between the concepts. The engagement and creativity of this group is evident in the photo shown as they turned concepts covered in their discussion into highly effective visual representation. One student stood on the furniture while the others intently engaged in the creative process. This would not have been possible in a traditional classroom.

## CREATIVITY

Creative Classroom Design + Creative Course Design  
= Optimal Success

ACTIVITY



How would you (re-)design your course for  
an active learning classroom?

Slide 14

Something to ponder.

## CONTACT INFORMATION

Contact us with questions, comments, or ideas:

Victoria Holec, MSc, Teaching Centre, University of Lethbridge:  
[victoria.holec@uleth.ca](mailto:victoria.holec@uleth.ca)

Janay Nugent, PhD, Department of History, University of Lethbridge:  
[nugejb00@uleth.ca](mailto:nugejb00@uleth.ca)