



Describing the Experiences of Learning within Two Different Contexts: A 12-Month Qualitative Study of Professors in Undergraduate and Teacher Education



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Background	Research Question	Data Analysis
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Little research exists examining the thoughts, feelings, and perspectives of university professors in the process of developing, implementing, and reflecting on the teaching practices between undergraduate students in a classroom setting and PK-12 teachers in a professional development setting. This study sought to examine the similarities and differences in the teaching methods of two college professors within these two distinct learning contexts. Evaluation of two professors took place over two separate 12-month periods. During evaluation, the two college professors were interviewed along with two undergraduate focus groups, and two PK-12 teacher focus groups. Using a grounded theory approach, data was collected and analyzed.

How do professors' teaching methods differ between undergraduate classrooms to seminars for PK-12 teachers?

Interviews were coded in the following order to eliminate bias that may occur from reading through the professors' testimony first as opposed to students accounts of the events.

- Student Focus Group 1
- Professor #1 Interview 1
- Teacher Focus Group #1 Interview
- Professor #1 Interview 2
- Professor #1 Interview 3
- Student Focus Group #2 Interview
- Professor #2 Interview 1
- Teacher Focus Group #2 Interview

Methods

Eight semi-structured interviews were conducted in two different 12-month sessions. The first interview session included interviews with a university science professor, a student focus group consisting of four science lab undergraduate students, and a teacher focus group consisting of four PK-12 public school teachers teaching within STEM fields. The second interview session included interviews with a media literacy professor, a student focus group consisting of four literary media undergraduate students, and a teacher focus group consisting of four PK-12 public school teachers in varying fields. Using a grounded theory approach acquired data was coded to categorize interview response and identify themes within the data.

Results

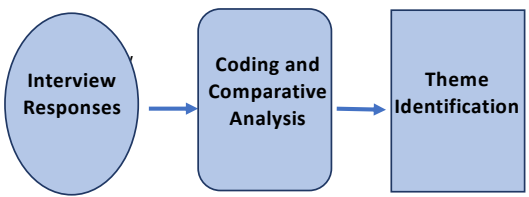
During data analysis a total of 500 codes were generated. From the coded interview data, four themes emerged: positive learning environment, student engagement, personal relationship, and independent learning.

Interview Responses and Emerging Themes

Professors	Undergraduates	PK-12 Teachers
<p><i>"They'll talk to me a lot about the experiments, and especially one on one, when I go to them to the table when they have questions, then they'll really start talking to me about what's going on. Like many classes they don't like to talk in front of a group. They get nervous and they don't want to be the person to ask the stupid question although there's not one."</i></p> <p>- Professor 1 Interview #1</p> <p>Theme: Positive Learning Environment</p>	<p><i>"She talks to me (laughing) calls me by name and I think that's great because a lot of time you don't get that with professors and I wasn't the type of student last semester that went out of my way to engage with her but I feel like she goes out of her way to engage with me like she took it upon herself to remember my name and those type things so I feel like all of that plays a part in her teaching."</i></p> <p>- Student Focus Group #2</p> <p>Theme: Student Engagement, Personal Relationship</p>	<p><i>"I'm thinking it's always good because if you look around the table there are so many diverse experiences and its always good to hear what people are brining to the table, what they're thinking and I do believe we engage each other well, we engage the topic well and for me I've learned a lot from the folk around the table not just in terms of their thinking but in terms of what they're doing, so yes, it's engaging."</i></p> <p>- Teacher Focus Group #2</p> <p>Theme: Student Engagement</p>
<p><i>"I think that is very important for a seminar leader to know is that it is not all on us. In many ways we're facilitators. I mean, yes, we need to provide content because they're relying on us to be the expert on something they need to learn about or want to learn about but at the same time, give them space and room to talk to each other and to learn from each other."</i></p> <p>- Professor 2 Interview #2</p> <p>Theme: Independent Learning</p>	<p><i>"I just like her interaction with us and I guess her vibe, she has this really open vibe that makes you want to interact with her and come talk to her and if you have trouble you can go talk to her and she'll understand. Like her openness, her attitude."</i></p> <p>- Student Focus Group 2</p> <p>Theme: Personal Relationship</p>	<p><i>"I think it's more more she wants us to be able to learn how to explore and see how the process of research and all that kind of goes. Um in different labs you're just gonna kind of have different ways of approaching the same kind of questions and methods and I felt like the labs that I enjoyed the most were the ones that had the more, that were more like this, more strictly hands on and had enough things that we were all engaged and occupied."</i></p> <p>- Teacher Focus Group 1</p> <p>Theme: Student Engagement</p>

Conclusion

The research conducted revealed that very few if any differences are found when comparing the teaching methods of a professor teaching undergraduate students within a classroom and a professor teaching Pk-12 teachers in a professional development setting. Instead, themes emerged relating to the professors' effect on the learning environment of who is being taught regardless of experience or age. Much of the professors' focus was on creating an effective and engaging learning environment. Methods of creating effective learning environments include encouraging participants to be engaged, developing some level of personal relationship with the learner, creating a comfortable and encouraging environment that allows learners to feel safe enough to ask questions, and encouraging learners to seek out their own answers. In focusing on these methods teachers were able to create an effective learning environment that allowed for easier facilitation of discussion and a sense of inclusion amongst learners.



Recommendations

Based on the data and data analysis of this project it can be recommended that future research extend to include more diverse learning contexts. An additional learning context to be considered could be the teaching methods of undergraduate peer tutors. Data collected from this analysis could be compared to this study to derive core methods of teaching that translate across multiple experience levels and age groups. Such teaching methods could then be implemented back into the CTI curriculum.