

Technology Integration Concerns: A virtual dialogue between pre-service teachers and in-service teachers

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Introduction

Social learning theory (Bandura, 1977) tells us that people learn through interaction and observation. In a developmental relationship (Douglas & McCauley, 1999), a less experienced protegee receives career or psychosocial support through observing and interacting with a more experienced developer.

Our aim in this research was to facilitate a virtual developmental relationship in which pre-service teachers could learn from in-service teachers (and in-service teachers could teach pre-service teachers) through indirect interaction.

In order to facilitate this developmental relationship, a space for a virtual dialogue was created where pre-service teachers could express their concerns about their future careers (in this case, about using technology in the classroom), and in-service teachers could address those concerns through video discussions.

Participants

Pre-service teachers:

11 Computers in Education Sections
-3 classes /54 students Service-Learning
-8 classes /163 students Non-service Learning

In-Service Teachers:

5 Jacobs Educator Award winning Technology Using Teachers (2012-2013)



Method

Initial voluntary questionnaire for pre-service teachers: Technology concerns in schools and their classroom

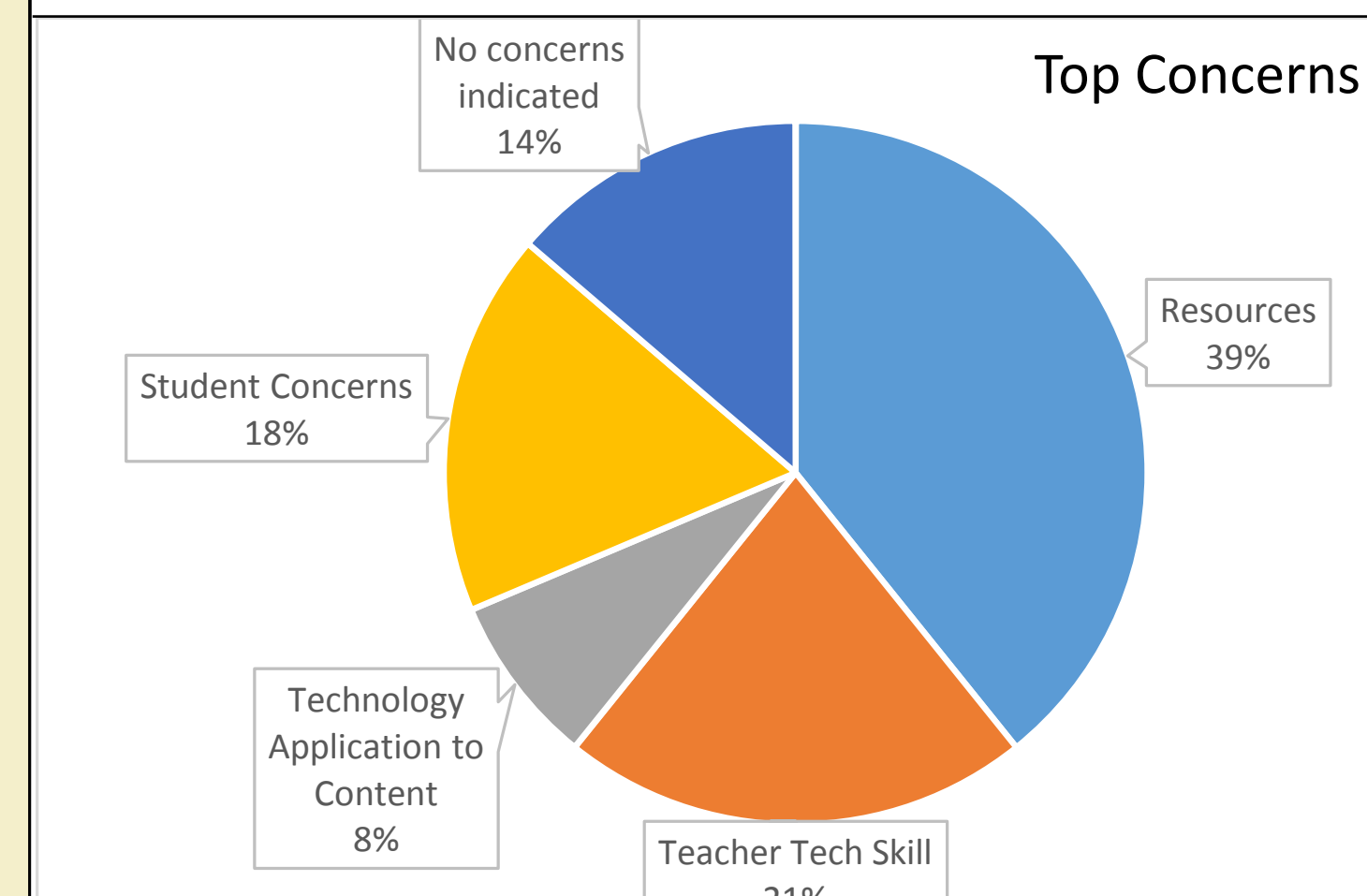
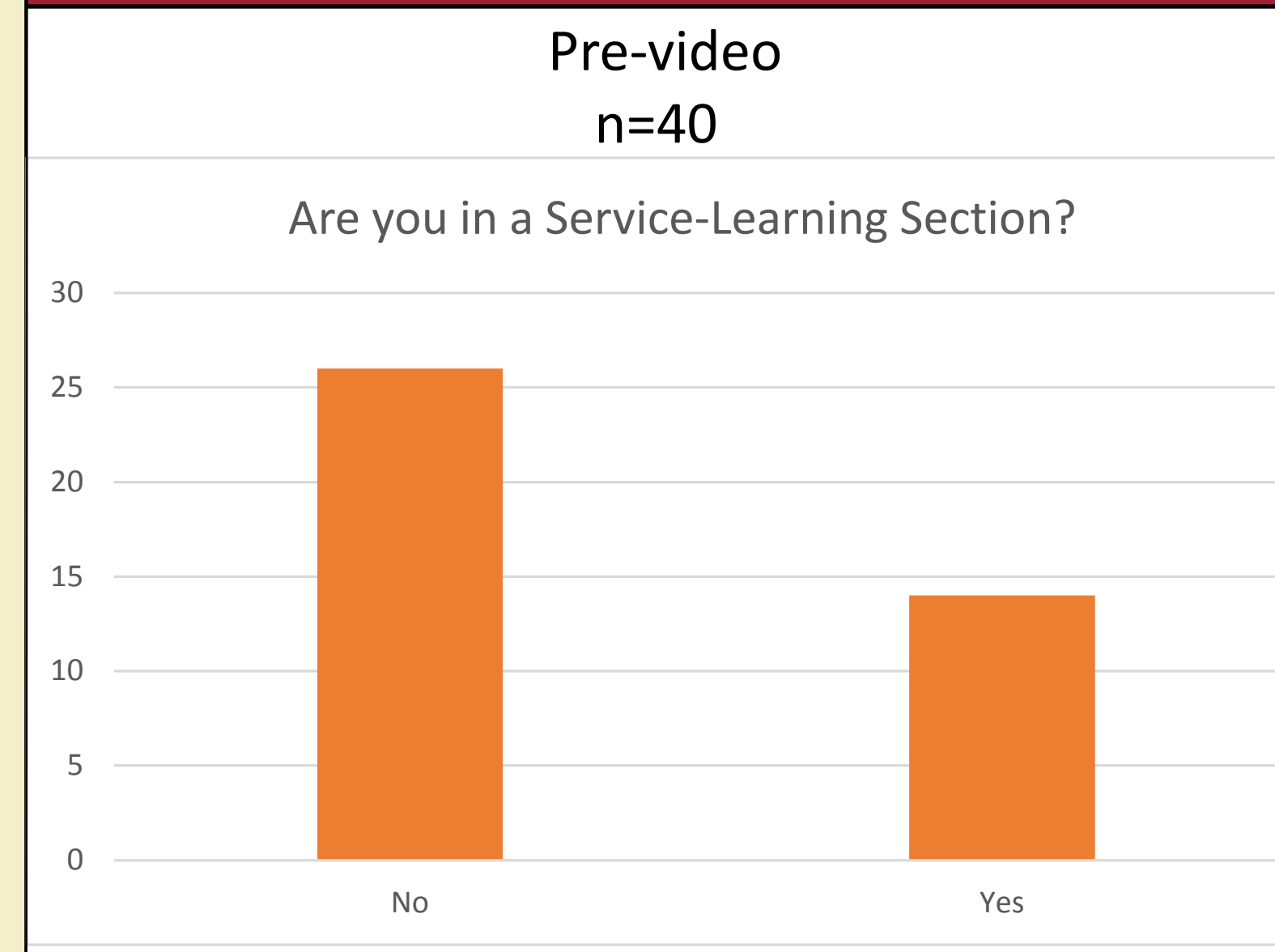
Researchers categorize responses

Panel discussion by In-service teachers addressing concerns by pre-service teachers

Pre-service teachers watch video discussion

Follow-up questionnaire for all pre-service teachers: Were concerns addressed, any new concerns?

Results



*Data between Service Learners and Non-Service Learners showed no difference in concerns

Sample Responses

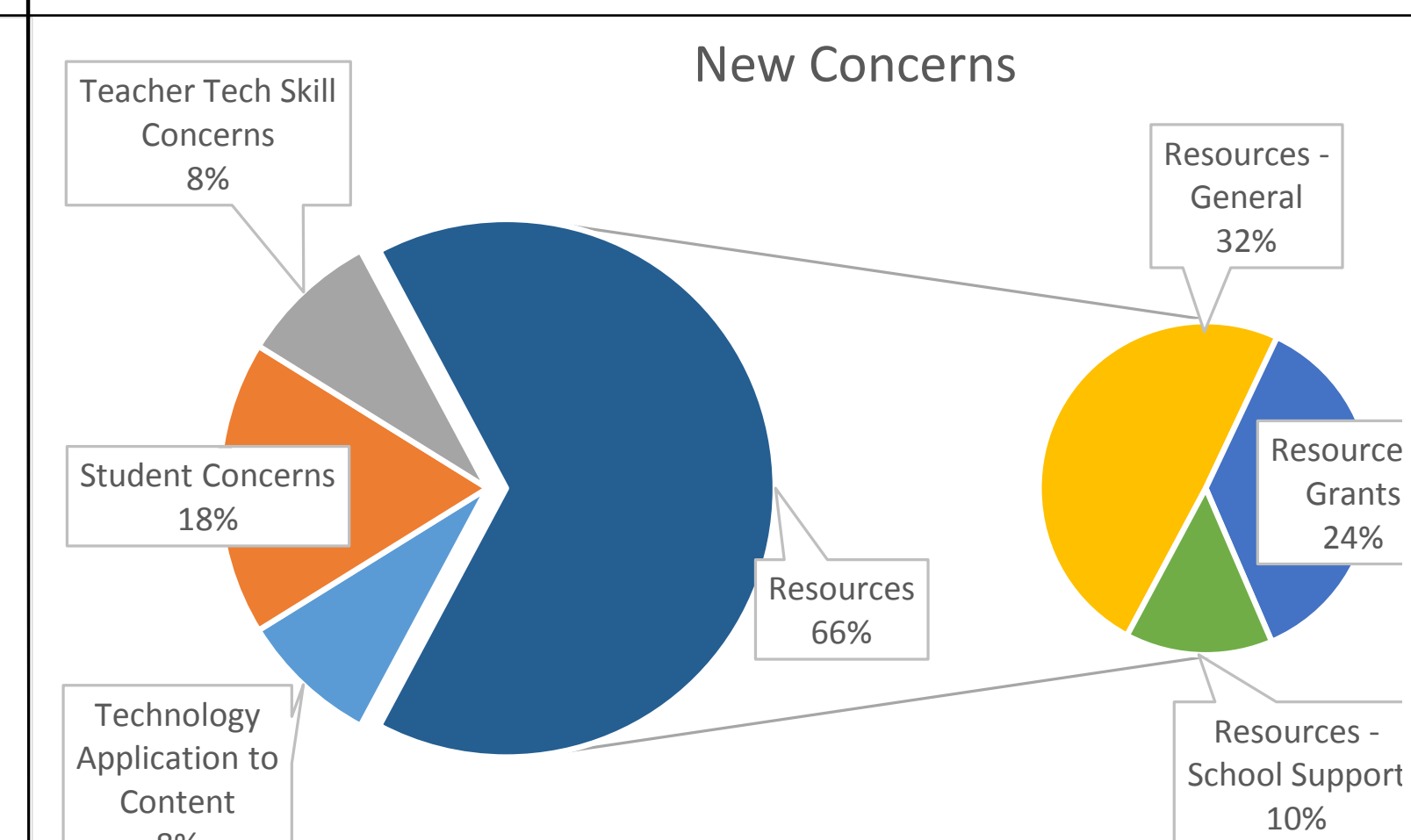
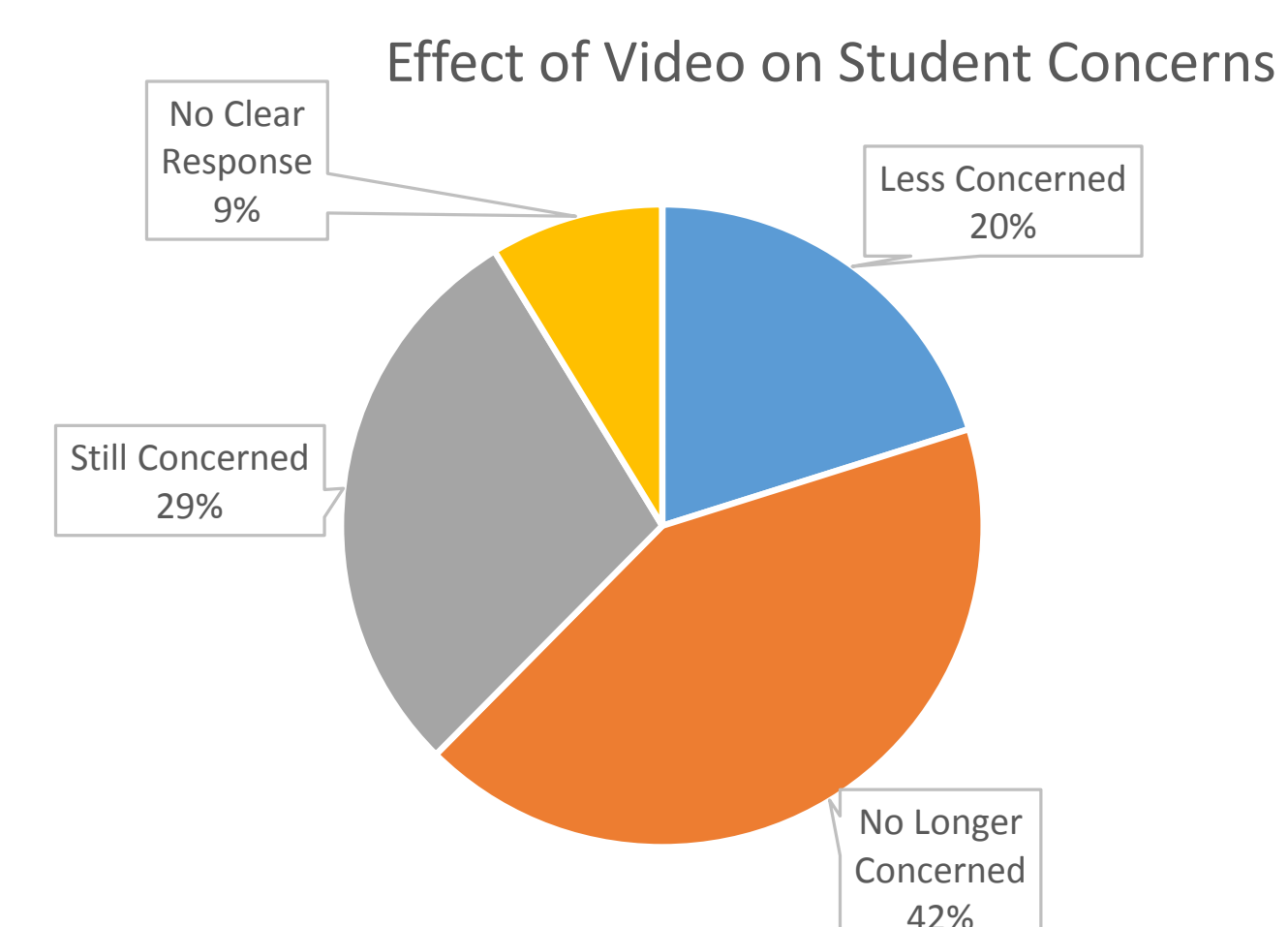
"One of the significant barriers is district funding of computer/technology in classrooms."

"I have concerns that others will have more advanced skills regarding technology and that I won't be able to keep up or compete with their skills."

"I am concerned that I will not have the resources to have technology in my classroom."

"I do not really have concerns about something keeping me from using technology. The only thing that may prevent it would be school budgets."

Top Concerns, Post-video n=153



Sample Responses

"I will have to learn how to apply and write grants in order to access money to incorporate various technologies in the classroom. I am aware of the issues that I will have to deal with, but I also know there are options."

"I had not thought of the issue with me being the 'policeman.' Before, I just assumed students would act up, therefore that is the role I would need to fulfill."

"I am much more comfortable about it now. I didn't realize that it was relatively simple to find help with incorporating technology into my classroom. I know that there are many resources to utilize."

Conclusions

The results of the initial questionnaire and the follow-up questionnaire were, in one way, consistent. Pre-service teachers' concerns about technology use had to do with resources (e.g., lack of money, equipment, or time), their own technology skills, and incompatibility of their subject-area focus with the use of technology.

In the follow-up questionnaire, most pre-service teachers reported that they were less or no longer concerned about these things after watching the in-service teachers' panel discussion. Nearly half reported that they had new concerns after watching the panel discussion, focusing on school administration and policy, parents, and grant funding.

The virtual dialogue we facilitated between pre-service and in-service teachers appears to have had two positive outcomes:

1. Pre-service teachers' initial concerns became less acute;
2. Pre-service teachers learned new things about the reality of their future careers.

As such, virtual dialogue may be an effective way to increase pre-service teachers' limited interaction with in-service teachers.

Citations

Bandura, A. (1977). Self-efficacy: toward a unifying theory or behavioral change. *Psychological review*, 84(2), 191.

Douglas, C. A., & McCauley, C. D. (1999). Formal developmental relationships: A survey of organizational practices. *Human Resource Development Quarterly*, 10(3), 203-220.