

A Model for Video-based Virtual Field Experience

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Abstract: The purpose of this project is to introduce a model of using video-based virtual field experiences for pre-service teachers mainly in social studies. Although video-based virtual fields become more practical for pre-service teachers to observe various teaching situations, the use of such video-based classroom cases may be limited to provide meaningful experiences. This paper presents four key affordances of a model that may alleviate such limitations.

Theoretical Background

In order to integrate effective teaching strategies into their teaching, pre-service teachers need to observe diverse classroom teachings, interact with in-service teachers and students, and receive targeted feedback on their initial attempts at teaching related activities in field-based experiences. However, difficulties in finding appropriate placements, coupled with the number of students who need to be placed, make field-based experiences less feasible (Allen, 2003; Wilson & Floden, 2003). Providing online video case classroom vignettes may be an effective and efficient way to help pre-service teachers gain rich field experiences. There are existing examples of video-based databases that focus on classroom activities in different subject matters (Bitter et al., 2004; Schrader et al., 2003; Stirling et al., 2004; Teale et al., 2002). Observing such video-based cases, pre-service teachers are not only exposed to a variety of teaching and learning situations but also have a chance to observe and analyze them in detail as they have flexible control over viewing the videos. However, the linearity of such video clips can limit pre-service teachers' attention on the classroom activities. Pre-service teachers are less likely to grab the important aspects in the activities as they can easily attend to trivial and individual segments in the clips (Dolk et al., 2002). Pre-service teachers, without guidance or activities that direct them to particular aspects of video cases, can only gain very little knowledge. Also, without opportunities to critically reflect on and discuss the teaching and learning situations pre-service teachers cannot gain meaningful observations from these video cases.

A Virtual Experience Laboratory

Aforementioned problems with the use of video-based classroom cases led us to seek for a model, which may help pre-service teachers gain more meaningful virtual field experiences. The model discussed in this paper has been recently implemented in a program of virtual field experiences for pre-service history teachers-PIH - LVFE (Persistent Issues in History Laboratory for Virtual Field Experience). The PIH – LVFE is an online database that provides video cases of authentic classroom practices. It also includes multimedia teaching resources and tools to enable social studies teacher educators to assist pre-service teachers with problem-based historical inquiry. Effectively utilizing these resources and video cases, teacher educators introduce and promote the development of teaching skills needed to effectively implement problem based historical inquiry strategies in secondary classrooms.

Affordances of the Model for Using Video-based Cases

Followings are the key affordances of the model that are likely to enable pre-service teachers to have more meaningful virtual field experiences.

Observe:

Pre-service teachers observe video-based classroom cases in order to be familiar with pedagogical issues that arise in real classroom settings. However, providing only linear classroom vignettes to be observed cannot benefit pre-service teachers who need to make sense of the classroom applications from a professional teacher's perspective. In the model, however, pre-service teachers listen to the classroom teacher as she reflects on what is going on in the classroom and explains the important issues and problems faced during classroom implementation. In the PHI-LVFE program, pre-service teachers observe not only classroom videos but also additional clips of pre- and post- classroom interviews of in-service teachers regarding their experiences.

Read:

Pre-service teachers should read and be able to focus on particular aspects of a video-based classroom that will likely make their observation more meaningful. Teacher educators involved in the PHI-LVFE program are provided with an annotation tool that enables them to link additional information (e.g., comments about the video) to a specific video segment so that pre-service teachers focus on the specific aspects of the video cases.

Discuss:

Sharing and discussing video-based classroom cases can enhance pre-service teachers' observations. Listening to a teacher's thoughts on a classroom case, pre-service teachers can gain multiple interpretations and thus be aware of their incomplete observation of the case (Dolk, 2002). PHI-LVFE allows pre-service teachers to communicate with one another through an online forum and an online journal. They can discuss their observations and reflect on them by creating message threads in the online forum.

Participate:

In order to gain meaningful field experiences, pre-service teachers should be able to get involved in pedagogical activities focusing on teaching issues observed in the video classroom cases. PHI-LVFE provides teacher educators with a tool to develop such activities. The activity development tool enables teacher educators to combine many video-based cases and segments along with their discussion questions that pre-service teachers can be assigned to work on.

Summary

This paper aims to introduce a model with its affordances that may overcome the main obstacles observed in pre-service teachers' video-based virtual field experiences. While the model has been recently applied in a pre-service teacher virtual field program, its effectiveness in providing meaningful experiences will be investigated as more student teachers use the program.

References

- Allen, M. (2003). Eight questions of teacher preparation. What does the research say? Eric Document Reproduction Service # ED479051.
- Dolk, M., den Hertog, J., & Gravemeijer, K. (2002). Using Multimedia Cases for Educating the Primary School Mathematics Teacher Educator: A Design Study. *International Journal of Educational Research*, 37(2), 161-178.
- Schrader, P., Leu, Jr., D., Kinzer, C., Ataya, R., Teale, W., Labbo, L., & Cammack, D. (2003). Using Internet delivered videocases to support pre-service teachers' understanding of effective early literacy instruction: An exploratory study. *Instructional Science*, 31, 317-340.
- Stirling, D., Williams, M., & Padgett, H. (2004, March). Investigating the effectiveness of video case use in teacher education. Paper presented at the annual meeting of the Society for Information Technology and Teacher Education, Atlanta, GA.
- Teale, W., Leu, Jr., D., Labbo, L., & Kinzer, C. (2002). Exploring literacy on the Internet. *The Reading Teacher*, 55(7), 654-659.
- Wilson, S. M. & Floden, R. E. (2003). Creating effective teachers: Concise answers to hard questions. An addendum to the report "Teacher Preparation Research: Current Knowledge, Gaps, and Recommendations." Eric Document Reproduction Service # ED476366.