



The influence of video analysis on the process of teacher change

Tonya R. Tripp^{a,*}, Peter J. Rich^b

^a Brigham Young University, 3800 HBL, Provo, UT 84602, USA

^b Brigham Young University, 150-K MCKB, Provo, UT, USA

ARTICLE INFO

Article history:

Received 17 January 2011

Received in revised form

17 November 2011

Accepted 23 January 2012

Keywords:

Video analysis

Video annotation

Teacher reflection

Teacher inquiry

Video case study

Teacher video case study

Teacher reflection case

Teacher change

ABSTRACT

If the purpose of reflection is to improve teaching, it is essential to understand how video-aided reflection influences teacher change. Yet, there is limited research addressing how video analysis influences the change process. The purpose of this study was to gain an in depth understanding of how video influences the process of teacher change. Teachers in three different teaching environments engaged in semester-long video-reflection groups. Through a descriptive analysis of these meetings, participants' own video-analyses, and individual interviews, six over-arching themes emerged across the different environments that describe the change process. Teachers reported that video encouraged change because it helped them: (a) focus their analysis, (b) see their teaching from a new perspective, (c) trust the feedback they received, (d) feel accountable to change their practice, (e) remember to implement changes, and (f) see their progress. We discuss how these results may help researchers and educators understand how video can be used to encourage teacher improvement.

© 2012 Elsevier Ltd. All rights reserved.

1. Introduction

Since Schön (1983) published "The Reflective Practitioner," reflection has been an integral part of most teacher training programs. Several national teacher accreditation agencies throughout the world, such as the National Council for Accreditation of Teacher Education (USA), the Department for International Development (UK), and the Teacher Registration Board (Australia) include reflective practice as a key component to improving teacher quality, regardless of differences in approach (e.g., certifying teacher programs vs. certifying individual teachers). Despite the preponderance of reflective practices in assuring teacher quality, research on reflective practices has not generated a solid base for understanding the effect that reflective practices have had on teaching. There is a need to explore not merely the content of reflection, but the effect reflection has on how teachers alter their practices (Korthagen & Wubbels, 2001). The purpose of this study was to examine how video analysis influenced the process that led teachers to reflect on and subsequently change their teaching.

1.1. Video analysis review

In a review of the use of video for teacher training worldwide, Brouwer (2011) identified three domains of application: orientation, support, and assessment. One of the earliest methods of using video to improve teacher learning was through microteaching, wherein a teacher is recorded teaching a short lesson to his/her peers. S/he then reviews this lesson for proficiencies and deficiencies and reteaches the lesson. In a review of the use of video for teacher preparation in the past 25 years, Tochon (2008) noted that microteaching is now practiced throughout the UK, Europe, North America, Asia, and Oceania, solidifying the use of video as a valid method for teacher improvement. Over time, however, the practice has changed from one focused on identifying specific, isolated, behaviors, to one more appropriately termed video-reflection, wherein teachers video videos of themselves or others to critically think about the effects of particular actions within a situated environment.

Technological advances are pushing the use of video even further. Increasingly, institutions across the world are developing video analysis tools that make the process of viewing, analyzing, and sharing videos easier for instructors (Rich & Hannafin, 2009). Video analysis tools are emerging as an increasingly viable and accessible tool to facilitate teacher reflection. Consequently, there has been an increase in research studies focused on the benefits of using video to reflect on teaching (Maclean & White, 2007). These

* Corresponding author.

E-mail addresses: tonya.tripp@byu.edu (T.R. Tripp), peter_rich@byu.edu (P.J. Rich).

studies have consistently reported that video is beneficial for helping instructors reflect on their teaching. Reported benefits typically fall under two general categories: improved ability to evaluate teaching and changes made to teaching.

1.1.1. Improved ability to evaluate teaching

Video has enabled teacher administrators to recognize important patterns in teachers' practice. Probably the most well-known of such studies is the Trends in International Mathematics and Science Study (TIMSS) that included video of teachers from seven different countries and 1000 different classrooms (Hiebert et al., 2003). Countries not included in the TIMSS video have also used video to this same end. In both Mexico and Chile, such studies have enabled important changes to take place in the way teachers are prepared for classroom practice (Loera, 2006; Manzi, Preiss, Flotts, González, & Sun, 2008). These videos are made publicly available for teachers and administrators alike to evaluate teaching.

On a more individual, formative, level, several studies reported that using video to reflect helped teachers to identify gaps between their beliefs about good teaching and their actual teaching practices (Rich & Hannafin, 2008; Bryan & Recesso, 2006; Grainger, 2004; Griswold, 2004; Miyata, 2002; Pailliotet, 1995). Donnay and Charlier (1990) initially positioned video self-reflection as an act of confronting one's image of teaching with one's actual teaching. A recent example of this is when Bryan and Recesso (2006) asked science education student teachers to write a belief statement about what they considered to be good teaching. Throughout the semester, teachers videoed themselves and used the Video Analysis Tool (VAT) to identify contradictions or confirmations of their teacher belief statement. Researchers reported that, "prospective teachers became cognizant of tensions in their teaching" (p. 36), pointing to specific examples of when preservice teachers' actual teaching conflicted with their conception of ideal teaching.

Video analysis has also helped teachers articulate their tacit assumptions and purposes regarding teaching and learning (Meade & Meriman, 1992; Powell, 2005). Powell asked teachers to review a video of their teaching and mark three segments to share with the researcher. Powell reported that video analysis helped teachers articulate their feelings about their teaching and make their tacit assumptions about learning explicit. The teacher in Meade and Meriman's study also became better at articulating his purposes for making specific instructional decisions as he used video to review his teaching.

Other studies reported video allowed teachers to notice certain aspect of their teaching which they did not remember (Rich, Recesso, Allexaht-Snider, & Hannafin, 2007; Dye, 2006; Griswold, 2004; Pailliotet, 1995). Teachers often commented, "I never saw that before" (Pailliotet, p. 155). Studies reported that video analysis was beneficial because it allowed teachers to compare their teaching videos to what they remembered about their lesson.

Halter (2006) and Sherin and van Es (2005) noticed that the focus of teachers' reflections changed when they used video analysis. The teachers in Halter completed a reflection guide as they viewed their videos. The focus of the teachers' reflections shifted from a focus on pedagogy to both pedagogy and classroom interactions. Tochon (2008) referred to this shift as one from using video to reconstruct past actions to instead use video to collaboratively reflect on prior teaching and plan for future changes.

Several studies also reported that video helped instructors assess the strengths and weaknesses of their teaching (Rich, et al., 2007; Tripp, 2009; Schmidt & McCutcheon, 1994; Struyk & McCoy, 1993; Wu & Kao, 2008). For example, teachers in Struyk and McCoy watched a video of their teaching and coded the number of times certain behaviors occurred. Teachers were able to use the

information they gained from the evaluation to prioritize problem areas in their teaching. Teachers also reported that video was beneficial because it allowed teachers to evaluate themselves as many times as they wanted, and teachers did not need a supervisor or colleague present to receive feedback on their teaching (Tripp, 2009; Brouwer, 2011). In contrast, through the use of video peer assessment, preservice teachers in Taiwan were able to engage in valuable dialog that resulted in significant teaching changes (Wu & Kao, 2008).

Most studies reported that using video to reflect was beneficial for helping teachers to evaluate their teaching. After using video to reflect, teachers were able to: (a) identify gaps between their beliefs about good teaching and their actual teaching practices, (b) articulate their tacit assumptions and purposes about teaching and learning, (c) notice things about their teaching that they did not remember, (d) focus their reflections on multiple aspects of classroom teaching, and (e) assess the strengths and weaknesses of their teaching.

1.1.2. Changes made to teaching

Previous studies also reported that teachers increased effective teaching behaviors as a result of video reflections. Teachers in Hougham (1992) viewed videos of their teaching and evaluated their question-asking strategies using an observation form. Teachers who used video evaluations improved their question-asking strategies to a greater degree than teachers who did not receive video evaluations. Sherin and van Es (2005) reported that teachers who participated in video clubs changed their questioning strategies and provided more time for students to share and comment on each other's work. Brawdy and Byra (1994) noticed that preservice teachers increased the frequency of their positive specific statements and modified the frequency of their positive general statements they provided to the learners. Additionally, Rich, et al. (2007) felt that video analysis helped teachers develop a course of action for future teaching situations. Although previous studies reported that teachers increased effective teaching behaviors as a result of participating in video reflections, studies did not describe how video influenced the process that led teachers to change their teaching.

1.1.3. Unaddressed issues and future research

Most studies that have examined the impact of using video analysis to reflect on teaching reported that video analysis was beneficial for helping teachers evaluate their teaching. Yet, few studies actually described how video impacted the teacher change process. Schön (1983) stated that reflection involves more than understanding the teaching situation; reflection should also lead the teacher to action. Teachers must "determine the directions in which they will try to change" (Schön, 1983, p. 165). The ability to reflect critically for future action becomes increasingly important in light of recent research that suggests there is a positive correlation between a teacher's pedagogical content knowledge and their ability to analyze a recording of a video lesson (Kuntze & Reiss, 2005). Many prominent reflection theories also claim that reflection should involve change and an evaluation of the change (Taggart & Wilson, 1998). Currently, we do not know very much about how video analysis influences the process of teacher change. The primary focus of this study was to examine how video reflection affects the process that led teachers to change their teaching.

2. Material and methods

A multiple case-study approach was used for this study. Stake (1995) described case studies as "the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances" (p. xi). A multiple case study

Download English Version:

<https://daneshyari.com/en/article/374277>

Download Persian Version:

<https://daneshyari.com/article/374277>

[Daneshyari.com](https://daneshyari.com)