

## **The Use of Video Feedback and Semi-Structured Interviews for Reflection Among Pre-service Teachers**

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### **Abstract**

A variety of feedback strategies, including video feedback, have been employed to provide accurate and meaningful feedback to pre-service teachers about their own teaching. In addition, semi-structured interviews following teaching sessions can serve as an opportunity for self-analysis of desired teaching behaviors. The purpose of this study was to explore the use of video feedback and semi-structured interviews following teaching sessions for physical education pre-service teachers. Self-confidence and positive perceptions about their own teaching resulted and all participants improved in several target behaviors (use of feedback and use of student names) from the first round to the second round of teaching.

### **Introduction**

Reflective veteran, beginning, and pre-service teachers work to improve their teaching and their students' learning throughout their teaching careers. Unfortunately, reflection and inquiry into teaching are left largely to the individual teacher. After teaching a lesson, teachers may wonder if they delivered the appropriate content at a suitable level, provided accurate feedback with appropriate frequency, used students' names effectively, and assessed student learning meaningfully. Pre-service teachers often receive feedback from their professors (before a semester of student teaching or internship), or from their supervisors (while student teaching), that is both helpful and accurate (Graham, Holt/Hale, & Parker, 2004). However, it can be challenging even for a "veteran" in the field to identify all the target behaviors for a student teacher, observe them, and provide meaningful feedback that will help the student teacher become a better teacher. Likewise, self-analysis is often inaccurate as we tend to attribute success to internal factors and failure to external events (LeUnes & Nation, 2002). Not being able to perceive one's own teaching behaviors as they really occur is a common perceptual bias, and as a result, individuals are prone to make external, as opposed to personal, attributions about their behaviors. In addition, the outcome of the teaching session, especially if a teaching session did not go as intended, is affected.

To combat this problem, a variety of feedback strategies have been employed to provide accurate and meaningful feedback to pre-service and in-service teachers about their own teaching. For example, Townsend (2002) reported on the effectiveness of cooperating teachers providing systematically collected data with prescriptive feedback to pre-service physical education teachers following teaching sessions at three different educational levels: elementary, middle, and high school. Results revealed that in regards to the student teacher's behavior and that of their students, the cooperating teacher made positive changes by providing specific data about target behaviors and also by providing data augmented by prescriptive feedback. Both types of interventions were successful across all three levels of education. Traister (2005) interviewed student teachers, cooperating teachers, and university supervisors in order to understand their perceptions about the usefulness of different types of assessments provided to student teachers during their in-service semester. All agreed that self-reflection was the most important tool for the assessment of the student teachers. All three groups also recognized the importance of other forms of

assessment including observations, conferences, formative and summative competency forms, journaling, video-taping, and electronic portfolios.

Gemmell (2003) implemented a peer coaching process combined with video analysis for a group of student teachers. Each student teacher was placed in a cohort, and they met regularly to provide feedback to each other about their teaching behaviors. Each student teacher also viewed himself/herself teaching on videotape and answered a set of provided reflection questions. The questions asked the participants to describe what they observed in general, address their own competency and performance in reaching their own goals for teaching, and identify what they would do differently in their next teaching session. Gemmell reported that the perceptions of the peer coaching process overall were positive, but that the participants desired additional guidance on facilitating reflection conferences in order to provide more critical and honest feedback with peers. Kukanauza de Mazeika (2001) also reported that student teachers benefit from varied and multiple types of feedback because individuals react differently to distinct types of feedback due to their unique biography. One may benefit most from the written comments of a supervisor, while another may benefit most from hearing an audio recording of his/her own teaching.

Pre-school teachers working in a Head Start program were provided with videotaped sessions of themselves teaching and recorded the frequency with which they provided general praise and specific praise statements before and after this viewing. They also responded to written questions related to the amount of praise statements they personally delivered (Wright, 1998). As a result of the evaluation of their performance through the use of video and the reflection questions, teachers changed their behavior to include more praise statements. There are many examples and an abundance of research addressing the effectiveness of video analysis of microteaching sessions in affecting positive changes in teaching behaviors (e.g. Kilbane & McNergney, 1999; Sherin, 2000; Smith, Harris, & Sammons, 2001; Wetzel, Radtke, & Stern, 1994; Zelazek, 1993).

A study by Roter, et al. (2004) examined the use of video feedback to train medical personnel in communication skills. Medical residents were videotaped in simulated patient interviews with the video being utilized along with didactic methods as part of a teaching intervention regimen. Following an examination of pre- and post-intervention interviews, the intervention including the implementation of video feedback was credited with affecting a number of significant improvements in residents' performance. Among those were changes in interaction including a reduction in verbal dominance, an increased usage of open-ended questions, an increased level of empathy, and an increased instance of partnership building and problem solving. A greater communication change was noted among female residents. The researchers also noted that the significant improvements found in the study were attained with only a minimal time commitment of four hours comprised of two hours of interviews and two hours of intervention per resident.

Matthew Dicks (2005) described his use of immediate and delayed video feedback with his third grade students to illustrate and discuss appropriate behaviors and protocol for interaction. Through this process, Dicks recognized the ability to identify and respond to areas needing improvement in his own techniques by using the video recording as a self-assessment tool. Dicks also recommended utilizing video feedback for activities beyond classroom instruction such as workshop activities, scientific experiments, and parent-teacher conferences.

Eckart and Gibson (1993) examined the use of video evaluation of teacher performance with both pre-service and in-service teachers. The precise means of performance documentation offered by video recordings gave this method an advantage over traditional evaluation tools in its ability to facilitate authentic assessment. Additionally, video helped alleviate discrepancies sometimes present between the assessor and teacher being evaluated. Eckart and Gibson stressed the value of video self-assessment tools; however, they made the observation that a greater benefit can be realized when peer analysis teams are formed to work with the teachers in the evaluation process to become more effective practitioners.

In educational settings, video has been used for a wide variety of purposes in addition to instructor evaluation and feedback. The literature on instructional technology, as well as many educational technology textbooks, advocates the use of video technology (e.g. Copley, 2007; Davis, 2007; Edwards, Jones, & Murphy, 2007; Koehler, Yadav, Phillips, & Cavazos-Kottke, 2005; Lever-Duffy & McDonald, 2008; Newby, Stepich, Lehman, & Russell, 2000; Smaldino, Russell, Heinich, & Molenda, 2005; Sponder & Kurkjian, 2001; Xiao, Pietraszewski, & Goodwin, 2004). In most of these instances, video is promoted for its benefits in delivering, or supplementing the delivery of instruction. Because of its ability to appeal to varied learning styles, multimedia components are recommended as a compliment to course content (Fisher, 2003). Astleitner (2002) cautions that in certain instances, video can be a distraction for learners and care should be taken when considering applications in which video materials are to be used. Moreno and Mayer (2000) address this notion of the "Split-Attention Principle" by stating that "students learn better when the instructional material does not require them to split their attention between multiple sources of mutually referring information" (3.2 Split-Attention Principle).

Outside of the strict educational setting, the value of video technology has been recognized for some time by the field of athletics and sports training (Wetzel et al., 1994). Individuals involved in a variety of physical activities have taken advantage of video technology by reviewing recordings of themselves or others performing the activity for the purpose of analysis for improvement of form and technique. Wetzel et al. claimed that the effectiveness of video feedback for improvement of motor skills was greater for individuals possessing initial skills and for those provided guidance while evaluating the video replay. Guided evaluation allows an observer to direct attention to relevant aspects of the task under consideration; whereas, a self-evaluating, or less experienced participant might not be aware of critical tasks on which their attention should be focused. It was also found that greater improvement in performance was realized in those individuals who received feedback throughout, or at the end of the learning process, as opposed to those who received only early feedback.

A primary goal of utilizing video feedback is to affect an improvement in techniques or behavioral characteristics associated with a particular activity. Where the concept of video technology for process improvement compliments instructional delivery is in the utilization of video recording devices to record classroom lessons for teacher reflection to improve strategies of instruction. Many teachers and educational institutions have capitalized on the ability to self-evaluate lessons, as well as evaluate lessons as part of team, to improve instruction (Herrell & Fowler, 1998). Just as athletes have used video to critique their physical performance, teachers can critique their instructional performance and make adjustments to fine-tune their delivery skills. Likewise, benefits are also greater when video is utilized in conjunction with guided feedback (Wetzel et al., 1994). The increased accessibility and lower costs now involved in acquiring and implementing digital video technology has made its use more practical and commonplace in classroom settings (Sponder & Kurkjian, 2001).

While video technology has been used extensively in physical education and athletic settings as a means to provide feedback to learners on performance of motor skills, its use as a way to improve target behaviors for physical education teachers is quite limited. Because instruction in physical education does not typically occur in a traditional classroom setting, but in a large area like a gym or even an outdoor area, the logistics of obtaining quality video recordings are challenging. The number of students in a physical education class is often much higher than a typical classroom setting, and the activities of the class require a lot of movement by both the teacher and the students; both of these factors make it even more difficult to record video on the teachers' behaviors, dialogue, and class movement patterns, all of which are important pieces of any analysis of teaching. The usefulness of video-recorded teaching sessions lies in the teacher's ability to carefully observe his/her own teaching behaviors after the conclusion of the teaching session, many times if necessary; this allows accurate self-reflection that is simply not possible when no actual record of the teaching behaviors is available.

Horton (2004) advocated the use of digital portfolios in physical education teacher education; often these portfolios included video segments of the teacher candidate teaching. If the teaching segment captured the important teaching behaviors, (those that were analyzed by the student teacher, cooperating teacher, university supervisor, or prospective employer), its potential for use and reflection increased greatly. Certainly part of proving teacher competence involves infusing technology into the art of teaching. The

National Council on Accreditation of Teacher Education has devoted an entire standard to technology (National Association for Sport and Physical Education [NASPE], 2001). This standard states, in part, that physical education teachers should use information technology to enhance personal and professional growth. Teacher candidates can use video segments of themselves teaching to meet NASPE/NCATE standards, specifically the standard related to reflection.

One target behavior that is of vital importance in teaching physical education is the appropriate use of verbal feedback. If a learner has been provided with demonstration, instruction, and cues for a motor skill, and is then given the opportunity to practice that skill, feedback must be delivered for optimal learning to occur. The appropriate type and frequency of feedback depends on the performance of the learner and the ability of the learner to identify their own errors and self-correct. Pre-service teachers are sometimes so focused on delivering the initial instruction in a lesson and then managing the students that they do not give appropriate verbal feedback. Students may perform a motor skill incorrectly throughout a lesson and not receive corrective feedback; those who are performing the skill correctly may receive no positive feedback (Pangrazi, 2007).

Brawdy and Byra (1995) reported one of the few studies in physical education that used self-assessment by pre-service teachers using videotaped lessons; specifically, changes in the frequency of positive general feedback, positive specific feedback, and corrective specific feedback were recorded before and after video self-assessment. The outcomes of the intervention were modest at best. While the frequency of feedback seemed to increase overall (a positive change) as a result of self-assessment using video, these positive changes were minimal, perhaps because the pre-service teachers lacked teaching knowledge and experience to make appropriate decisions about their teaching in subsequent lessons. Other target behaviors that have been identified as important in teaching physical education included the use of descriptive feedback, the effective use of time, the appropriate use of student names, and appropriate physical contact with learners (e. g. Pangrazi, 2007; Nicaise, Bois, Fairclough, Amorose, & Cogerino, 2007). One way for beginning and pre-service physical education teachers to assess their own performance in these areas is through the use of video feedback and semi-structured interviews with an expert teacher following their teaching sessions.

## **Purpose of Study & Research Questions**

The purpose of this study was to explore the use of video feedback and semi-structured interviews related to teaching sessions of pre-service physical education teachers. Two research questions guided this study:

- 1) Does conducting a semi-structured interview incorporating video feedback about a teaching session immediately following the session facilitate positive changes in a subsequent teaching session compared to semi-structured interviews with no video feedback conducted immediately following the session, and delayed by twenty-four hours?
- 2) Does immediate analysis with video feedback of teaching result in deeper self-analysis of teaching, compared to immediate and delayed analysis with no video feedback?

## **Method**

### ***Participants***

Participants in this study were six undergraduate students in the physical education teacher preparation program at a regional university located in northeast Texas. The research protocol for this study was approved by the University's Institutional Review Board. Participants were randomly assigned to one of three feedback conditions for both of their teaching sessions: Immediate Video (IV), Immediate No Video (INV) and Delayed No Video (DNV). Two participants were in each of the three treatment groups and labeled P1 and P2 (IV); P3 and P4 (INV); P5 and P6 (DNV). In the Immediate Video (IV) condition, participants viewed their own teaching session as videotaped by the class instructor immediately after the completion of their lesson with a one-on-one semi-structured interview directly afterwards. In the Immediate No Video (INV) condition, participants did not view the video of their teaching session, but participated in the interview immediately following their teaching. In the Delayed No Video (DNV)

condition, participants did not view the video of their teaching session, and participated in the interview twenty-four hours after their teaching session.

Students were provided instructions for developing two 15 minute lessons related to gross motor skills and designed for the secondary physical education curriculum. They were provided two opportunities about 10 days apart to teach the lessons to other students enrolled in the class. All teaching sessions were videotaped. Participants were reminded prior to their teaching sessions about the target behaviors on which they should focus: use of students' names, use of verbal feedback (general positive, specific positive, specific corrective, prescriptive, and descriptive). In addition, participants were instructed to maximize time spent on activity while limiting time spent on instruction, and minimizing management and waiting.

### ***Mixed Method***

The study incorporated a mixed method approach and utilized an experimental design for the treatment conditions for the videotaping and analysis, and a qualitative component to collect perceptions of students' teaching effectiveness with follow-up, one-on-one interviews between the participant and instructor/researcher. Following both sets of teaching sessions, two researchers coded each video segment for two target behaviors: appropriate use of students' names and appropriate use of verbal feedback. Use of student names were simply tabulated; verbal feedback statements were coded as general positive (e.g. "way to go"), specific positive (e.g. "good follow through"), specific corrective (e.g. "don't hold the ball that way"), prescriptive (e.g. "push harder next time"), and descriptive (e.g. "you did not kick hard enough"). Both researchers recorded use of students' names, all types of feedback, total time of each lesson, and time spent on activity for each teaching session on a pre-designed recorder's feedback form.

Following both sets of teaching sessions, a total of twelve interviews were conducted and used a semi-structured interview protocol of eleven questions. The use of a semi-structured interview allowed the participants to be asked the same set of questions, but had flexibility and enabled the researcher to probe deeper with the potential of new concepts emerging (Carruthers, 1990; Dearnley, 2005). The purpose of the interview was to obtain student perceptions of their strengths/weaknesses in teaching and perceived level of achievement on target behaviors they were required to address in their teaching activity. The one-on-one interviews were conducted in a private setting, tape recorded and transcribed for accuracy. The transcribed interviews were analyzed and coded using the constant-comparative method (Glaser & Strauss, 1967) in order to search for common themes/ideas/units that emerged from participant responses in relation to student perceptions of teaching performance and evidence of video treatment impact upon these perceptions. Each theme/idea/unit was highlighted with a unique color and provided a visual representation that allowed the researcher to isolate and categorize information from the interview data.

## **Results and Discussion**

### ***Target Behaviors***

After coding the video segments, feedback per minute was calculated by combining all types of feedback (general positive, specific positive, specific corrective, prescriptive, and descriptive) and dividing the total number of feedback statements given by the recorded length of the lesson. Use of names per minute was calculated the same way, and time spent on activity was calculated by dividing time spent with at least 50% of the students actively participating by the total lesson time (see Table 1). Percent change for use of feedback, use of names, and time spent on activity was also calculated (see Table 2).

Table 1. Target Behaviors, Teach 1 and Teach 2

	<i>Feedback/minute</i>		<i>Names/minute</i>		<i>Percent time in activity</i>	
	Teach 1	Teach 2	Teach 1	Teach 2	Teach 1	Teach 2
P1 (IV)	1.65	3.59	.16	.66	59.6	74.7
P2 (IV)	1.98	3.38	.88	1.69	62.2	57.3
P3 (INV)	.83	2.23	.08	1.54	75	10.15
P4 (INV)	2.23	3.07	.46	.58	73	96
P5 (DNV)	.8	3.97	.22	1.13	80	77
P6 (DNV)	.08	.21	.00	.56	23	58.6

Table 2. Percent Changes in Target Behaviors, Teach 1 to Teach 2

	<i>Feedback/minute</i>	<i>Names/minute</i>	<i>Activity time</i>
P1 (IV)	118%	313%	25%
P2 (IV)	71%	92%	-8%**
P3 (INV)	169%	1825%	-86%**
P4 (INV)	38%	26%	32%
P5 (DNV)	396%	414%	-4%**
P6 (DNV)	163%	n/a	155%

\*\* Negative change.

All participants increased the rate at which they provided positive feedback from the first round of teaching to the second. P5 (DNV) had the most dramatic change, increasing from .8/minute to 3.97/minute. The two participants who provided feedback with the most frequency in the first round of teaching (P2 [IV] and P4 [INV]) changed their behavior least. All participants also increased the rate at which they used students' names during the lesson. P6 (DNV) increased from no student name use to 1.56/minute, while P3 (INV) increased 1825% from .08/minute to 1.54/minute.

Time spent on activity increased for P1 (IV), P4 (INV), and P6 (DNV). It is possible that P2 (IV), P3 (INV), and P5 (DNV) were focused so heavily on improving their performance for the other target behaviors (feedback and use of names) that they were unable to execute their lesson plan effectively as far as time usage was concerned.

## ***Post-Teaching Interviews***

A total of six categories (tentative application, increased confidence, challenge specific, self-analysis, positive perception and negative perception) were developed based upon the themes that emerged from the interview data analysis process. Results are presented in three sections by related interview questions and compare students' first and second rounds of teaching: 1) perceptions and challenges, 2) target behaviors and time management, and 3) reflections. Findings associated with positive changes identified in the second round of teaching by video treatment and differences in self-analysis of teaching by video treatment are also discussed.

### ***Perceptions and Challenges***

Participants were first asked their perceptions regarding their teaching effectiveness in addition to any challenges they faced while presenting their first lesson. Within the first round of teaching, only one individual indicated a positive perception of her performance and presented a strong confidence in her ability. She was able to provide application from the theory taught in her program to what she was doing while teaching her lesson. She states: "Overall, I felt my teaching was effective. I was able to apply cognitive knowledge the students had previously learned to a physical application" (P2 [IV]).

Other responses indicated tentative application towards their ability as teachers and were unsure of their performance and ability (P1 [IV], P3 [INV], P4 [INV], P5 [DNV], P6 [DNV]). Additionally, participants in the study acknowledged their inability to determine their students' opinion as to the effectiveness of the lesson. Two participants interviewed (P5 [DNV], P6 [DNV]) had negative feelings about their performance as they believed their inexperience and unfamiliarity with teaching contributed to specific challenges such as time management and how to better organize their lesson. Other challenges identified by participants were the skill level of their students in performing specific tasks as per lesson requirements and the unexpected low number of students to effectively facilitate their lesson (P2 [IV], P3 [INV]).

After the second round of teaching, all participants' responses in relation to their teaching ability reflected a noticeable increase in confidence levels and self efficacy and an increased positive perception of themselves as teachers regardless of video treatment. Participants were more specific in targeting challenges and/or areas of weakness that occurred within the course of teaching their lesson and utilized a reflective/self-analytical approach to determine how to improve in the future. One individual stated, in response to a challenge about what to do while keeping score on the game: "I ended up waiting on the net a little bit and maybe staying too relaxed. I should have stayed more focused and more into it" (P2 [IV]). Another individual stated, "Some of them didn't really understand what they were doing so I probably could have done a better job explaining it" (P4 [INV]). Finally, one participant noted while he felt he did better his second time teaching and was more comfortable, he was still making the adjustment from being a student to an individual in charge, implying a tentative application of his ability as a teacher (P5 [DNV]).

### ***Target Behaviors and Time Management***

Participants were required to achieve two target behaviors while facilitating their lesson: appropriate use of students' names and appropriate use of verbal feedback. In addition, it was also essential for participants to utilize a time management approach for their lesson to incorporate time spent on activity, instruction, management, and waiting.

After the first round of teaching, only two responses suggested a positive perception for the target behavior of using students' names and provided an analysis of the target behavior with goals for improvement via self-analysis (P2 [IV], P3 [INV]). For example, one person indicated usage of students' names in the lesson, but acknowledged that it probably was not enough (P2 [IV]). While another individual believed she did a good job on the target behavior as she "told everyone they were doing a good job when I saw they were doing it properly and the correct way. I tried to encourage them as a group" (P3 [INV]). Another participant thought that the type of lesson he was teaching did not lend itself to effectively practicing the target behavior (P4 [INV]). One participant recognized that he failed to use any

names during the lesson and was seemingly overwhelmed by the fact that he did not even think to address this target behavior leading to negative perception of his performance (P5 [DNI]).

When asked to address the second target behavior, use of verbal feedback, participants' responses suggested tentative application for a variety of reasons. One individual mentioned again that the lesson did not require verbal feedback; however, this person quickly acknowledged that if verbal feedback was required, he may have failed to spot it during the lesson (P4 [INI]). Others felt that they did not know when or how it was appropriate to use verbal feedback implying that the role of the teacher or expert is not something with which they are yet comfortable and are tentative in applying or asserting their expertise (P1 [IV], P2 [IV], P5 [DNI], P6 [DNI]).

Participants were also asked to respond to the amount of time they spent on four areas: activity, instruction, management, and waiting, while facilitating their lesson. All responses indicated that the majority of the time was spent on the activity itself; however, participants perceived this as a positive attribute to teaching their lesson as minimal time was wasted on students waiting around and believed that their time was used effectively and efficiently. Only one individual was unsure of himself and his response suggested a tentative application as he was unable to break down the four areas in terms of time spent on each (P5 [DNI]).

After the second round of teaching, all participants' answers to the target behaviors of use of student names and verbal feedback reflected an increase in their confidence and ability along with notable positive perceptions of themselves as teachers. Some of the participants noted that they were more aware of these target behaviors and how they failed to address them to a certain degree or at all, and made a concerted effort to do so for their second round of teaching (P1 [IV], P4 [INI], P5 [DNI]). Participant responses also suggested an increase in confidence on time management with more self-analysis on how to improve upon their lesson strategy (P1 [IV], P2 [IV], P4 [INI], P5 [DNI], P6 [DNI]).

### **Reflections**

The final phase of the interview protocol asked a series of questions to enable the participant to reflect upon their teaching overall. Questions asked for examples of areas participants perceived they performed well on, areas in need of improvement, and what they would do differently in the future.

Reactions to these questions after the first round of teaching ranged from self-analysis targeting areas for improvement with positive perceptions of performance to tentative application and negative perceptions acknowledging need for improvement. For example, one individual noted that while overall he believed his teaching performance was good, he would "probably try to do something different to make it less boring" (P4 [INI]). Another individual believed her teaching to be effective despite a few errors; however, she was satisfied with her performance because the students still "learned the material and were able to apply it to other activities" (P2 [IV]). One participant was noted to be a "very harsh critic" with very little self confidence as he believed that nothing he did could be considered good teaching. This same individual was very tentative in his application of his knowledge and noted that while the only thing he has done for "teaching" was observation of teaching and he was in need of improvement in order to put into practice the outline of the lesson he developed (P5 [DNI]). The only area in which he held a positive perception was towards his knowledge of the activity and knowing that what he was telling his students, if not in an effective way, was correct (P6 [DNI]). Several participants noted areas for improvement to their lesson to include more creativity built into the activities, expanding the activities, and personalizing the lesson by providing more verbal feedback/encouragement and increasing usage of students' names (P1 [IV], P2 [IV], P3 [INI], P4 [INI], P5 [DNI], P6 [DNI]).

Responses to these questions after the second round of teaching signified increased levels of confidence in teaching ability and a raised awareness through self-analysis/reflection, not as evident in the first interview, as to specific areas for self-improvement. Everyone interviewed acknowledged that overall they perceived their teaching to have improved in comparison to their first attempt. While one individual admitted to still experiencing some level of discomfort with teaching, he realized that he was improving and used the example of increasing the target behaviors required in his second round of teaching (P4

[INV]). Another individual made an observation of a specific challenge of teaching one's peers and being unaware of students' skills level, but understood that this was a challenge that will be faced in many teaching situations and knew how to handle that situation should it present itself in the future (P3 [INV]).

And finally, one example acknowledged by all participants for an area in need of improvement included developing activities that would not result in repetitive behaviors, but build into new skills. These examples support the notion that with the increase in their confidence level and positive perceptions about their teaching, that they are beginning to focus less on the mechanics of teaching and more on helping their students synthesize skills that build into future activities or lessons.

## **Conclusions and Recommendations**

Participants in this study only taught two lessons and it is encouraging to note that within the course of the first and second interviews, their level of confidence and positive perceptions about their teaching did increase. Also, from the first round of teaching to the second, all six participants increased the rate at which they performed two target behaviors (use of appropriate feedback and use of student names), and three of the six participants increased in their use of time (more time spent on activity) from the first round of teaching to the second.

In addition, the responses in the second round of interviews demonstrated more self-analysis that identified specific examples of positive and negative attributes during the course of teaching the lesson. There was no indication in the interview analysis that video treatment impacted their ability to self-analyze and provide areas for improvement. This behavior should be expected to increase with time and practice as these future teachers develop into more reflective practitioners.

In conclusion, all participants, regardless of video treatment or timing of interview, increased both in their levels of confidence about their teaching and positive self-perceptions. Since the purpose of peer-teaching situations and follow-up analysis through interviews is to increase not only teaching performance, but teaching confidence as well, we are optimistic about the continued use of semi-structured interviews for self-analysis of teaching and improved teaching performance. Given the small sample size (two participants/treatment), we recommend that future research be conducted with increased numbers in each treatment. It is also recommended that focus groups be incorporated after viewing the teaching video with the purposes of further building confidence, allowing for learning from other's mistakes and successes, and for providing and receiving feedback from peers.

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