

“The Effectiveness of Using Video-taped lessons as an alternative mode of teaching supervision.”

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## Introduction

The School of Early Childhood Education conducted a project entitled “A Pilot Study on Using Videotaping as an Alternative Mode of Supervised Teaching for In-Service Teachers” in 2002/2003, which was a feasibility study on field-experience supervisors using videotaping as an alternative mode of supervision for in-service students. The results indicated a reasonable degree of consistency between assessment of teaching through site visits and videotaped lessons, and supported the use of videotapes to assess students teachers’ teaching performance.

In addition to allowing lectures a more flexible schedule in assessing students’ teaching performance as compared to site visits, various research also supported the use of audiovisual technology as a good means for student teachers’ self evaluation and self-assessment, and hence a tool for improving their professional qualities(Jensen et al, 1994; Rogers & Tucker,1993; Thomson, 1992; Davis, 1971). Videos enabled student teachers “to reflect on the quality of their work, to assess their strengths and to identify areas in need of their attention” (Jensen,1994) Videotaped lesson analysis was found to help pre-service student teacher progress significantly in the mastery of teaching skills(Kpanja,2001). For Hougham(1992), videos provides opportunities for student teachers to self-reflect and analyze the teaching segments, seeing themselves “in action”. The data indicate that students who received video evaluations improved their questioning strategies to a greater degree than students who did not receive video evaluations. Thomson(1992) also found that optimum learning occurred when the student and the supervisor viewed the tape together and discussed in the context of the lesson being watched.

An extended study of the project was therefore conducted to further explore the effectiveness of using videotaped lessons as an alternative mode of supervision, and identify ways of improving the techniques of videotaped lesson analysis.

## **Aims of Study**

- To explore the effectiveness of videotaped lessons as an alternative mode of teaching supervision
- To explore ways of improving the effectiveness of videotaped lessons analysis

## **Subject**

Five practicum tutors from the in-service QKT (the Basic course) and four practicum tutors from the in-service CE/KG (The Certificate programmes) participated in this project. Each participating practicum tutors recruited two student teachers to participate in the videotaped lesson analysis in lieu of site visit. Together, 10 students from the QKT course and 8 students from the CE/KG program participated in this project.

## **Methods**

Students participated in this study were required to videotape a lesson and sent a copy of the tape to the corresponding supervisors. After viewing the videotape, the supervisors arranged a post-lesson conference with the student. Three semi-structured group interviews were conducted with the students and one for the lecturers to collect their views on using videotaped lesson for supervision. All interviews were audio-taped for analysis.

### **Data analysis**

Each interview was transcribed and the transcriptions were sorted to seek patterns which emerged from the data. A framework including 5 categories was generated. They were: “Capture of Teaching and Learning”; “Psychological Effect”; “Reflective Practice”; “Effectiveness of Post-Lesson Conferencing” and “Technical Support”.

## **Results**

### **1. Students’ Perceptions of the Effectiveness of Videotaped lesson Analysis**

*Capture of teaching and learning*

“Capture of Teaching and Learning” concerns the effectiveness of capturing the teaching and learning performance on videotape. It includes personal quality, teaching technique, the learning environment and the transition of activities.

Students agreed that video-taping could capture the essential things happening in the lesson, showing how they teach. However, some students have concerns that the tape will miss some of their interactions with children that could demonstrate their personal qualities. They made comments such as: “When the shot were on the other teacher playing with children in the Family Corner, the moment of my sharing and reading with my children in the Library Corner was missed. My supervisor suggested me to build a close relationship with the children, like the other teacher. I thought I did, but the moment was not captured by the video” (CE-KG student A).

They also worried that although the tape could capture different parts of the learning environment, difficulties were still found in presenting it as a whole.

QKT student C: *Videotaping could not capture the teaching environment. I was afraid it would be different if supervisor pay an on-site visit instead”*

However, most students expressed that although the video-taped lesson might not cover all items in the supervised teaching form, supervisors, based on what they had seen and heard, could still understand and give valuable comments for their teaching.

CE/KG student C: *When viewing the video only, the supervisor might miss some of my performance. Nevertheless, if she could see those important features of my teaching in the tape, e.g. the children’s responses, conversations and facial expressions, she should have sufficient information to give me sound advice.*

### ***Psychological Effect***

“Psychological Effect” is a category concerning students’ physical and mental states in using the videotaped lesson analysis. It includes level of anxiety, level of confidence, level of trust.

All students expressed that their level of anxiety was lower for the videotaped

lesson analysis. Increased confidence was mentioned by students as other benefits. A number of positive comments such as: “I felt free to ask questions”; “I saw the tape several times beforehand and realized what were my areas of strength and weaknesses” were made.

The level of trust was greater in video-taped lesson analysis as students could communicate better with the supervisors. As they viewed the tape with the supervisor, they could clarify situations and provide explanations.

CE-KG student E: *I could explain the situations verbally to the supervisor when we reviewed the tape together. When my supervisor found anything in the tape unclear, she could ask me for clarification.*

### ***Reflective Practice***

“Reflective practice” is a category concerning the effectiveness of promoting students’ reflectivity through video-taped lesson analysis.

Students expressed that videotaped lesson analysis helped them reflect on the quality of their teaching. The video-taped provided them with a record of their teaching performance through which they could self-evaluate and self-correct. This information also served as a discussion basis with the supervisors during the post-lesson conference.

CE-KG student E: *“Videotaping gave us a very good chance to reflect upon our own teaching; we could really review own roles and skills in the class room.*

OKT student A: *“About the analysis of my teaching performance, I found that the opportunity to review the tape afterwards was the advantage of this lesson analysis since I could realize my strengths and weaknesses. If it was an on-site visit, I would be too scared to remember what I said straight after the lesson. The depth of the discussion would then be affected.”*

Students indicated that during the post-lesson conference, the supervisors could provide more concrete and in-depth feedback as they could stop the tape at a particular point for review, and focus on specific aspects for reflection.

CE-KG student B: *"I could see the supervisor's comments from the tape."*

CE-KG student F: *"I could see what my problem was in the tape, but didn't know how to cope with it. My supervisor could give me more concrete suggestions."*

CE-KG student G: *"I was always too afraid to remember what to say in the meeting when the supervisor paid me on-site visits.....I could understand only supervisor's comments better because I reviewed the tape by myself before the post-lesson conference. We could have an in-depth discussion" (Student G)*

### ***Effectiveness of Post-Lesson Conference***

"Effectiveness of Post-Lesson Conference" concerns students' responses on the effectiveness of the post-lesson conference after videotaping. It includes logistics arrangement, learning attitudes.

Some students thought that there was more flexibility in arranging time for post-lesson conference. They suggested the post-lesson conference to be held preferably within a week after the videotaping.

CE-KG student B: *"We have more time for the post-lesson conferencing, even up to an hour. If we were on-site, there might not be enough time to do so."*

QKT student D: *"She [my supervisor] called and arranged a meeting with me a few days after the videotaping, so I could still remember what happened in the lesson. I also made some notes to remind me what questions to ask her [supervisor] in the discussion."*

Students were very positive towards their supervisors' comments and consented with their suggestions. Several said that: "I found out some areas for improvement after reviewing the tape. Things became much clearer after discussing with my supervisor"; "I discovered that I had similar views with my supervisor after reviewing the videotape, but had deeper insight in specific things"

## ***Technical Support***

“Technical Support” concerns technical issues students encounter in using the mode of videotaping.

Students expressed that when choosing videotape lesson analysis as a mode of teaching supervision, manpower was an issue that needed to be considered carefully. For those who were principals or head teachers, it might be easier to allocate manpower for videotaping. For those who were teachers, special arrangements had to be made and they need to consult with the principals in advance.

CE-KG student D: *“I had to solve the problem of man-power by myself. I asked my friends to help and she had to take a day off and came to my school for videotaping. Manpower was a really practical issue to be considered; especially when I might need to record more than once.”*

QKT student A: *“The biggest problem was manpower since our school needed to make special arrangements for me.”*

Students mentioned that it was essential for the cameraperson to understand the requirements of the videotaping experience, and their technique might also affect the quality of the tape.

CE-KG student E: *“The cameraperson did not capture good shots on my teaching.”*

CE-KG student A: *“The camera moved too fast. The shots only showed me moving around the classroom all the time.”*

QKT student A: *“Sometimes [it] was shaking, because he [the cameraperson] has to hold the digital camera for hours.”*

## **II. Supervisors’ Perceptions of the Effectiveness of Videotaped Lesson Analysis**

### ***Capture of Teaching Performance***

Most lectures indicated that they could evaluate the effectiveness of students’ interaction in class after reviewing the tape. However, some thought it was not easy to judge students’ attitude towards the children because the videotape could not convey their feelings. In regard to the mode of supervision, some found it passive since they could only see what was filmed. However, most of them mentioned that

they could seek clarifications when viewing the tape with the students in the post-lesson conference.

Most of the supervisors thought that it was possible to capture the learning environment and the transition between activities on videotape. Only one supervisor claimed that it was hard to observe student's performance in group activities, and some mentioned that a few items in the Supervised Teaching Form needed to be adjusted when using this mode of supervision.

Supervisor 2: *"There was no difficulty in deciding a pass or fail, however, in the case of pass or distinction, I had to think about it seriously".*

Supervisor 7: *"I couldn't think of what items should be adjusted right now. I just found some items missing when I was rating"*

### **Psychological Effect**

Almost all supervisors agreed that students showed less pressure and anxiety in the videotaped lesson analysis compared with on-site visit. They mentioned that "students told me that they could re-videotape if they were not satisfied with the quality of the tape. They didn't have any pressure in doing that. In fact they found the re-videotaping process quite useful as they could reflect on their teaching performance through reviewing the tapes."

### **Reflective Practice**

Supervisors found that viewing the tape prior to the post-lesson conference helped them scaffold students more easily on their reflective practice. They also found this mode of supervision providing more opportunities and time for students to review and reflect on their teaching performance. They could then lead discussions focusing on specific aspects, facilitate students' reflection on their teaching and make suggestions for improvement. Supervisors also found students more proactive in expressing their opinions and raising ideas in the post-lesson conference.

Supervisor 4: *"They were well-prepared and well-organized. The meeting went more smoothly compared to on-site visits."*

Supervisor 6: *"They reviewed the tape themselves before discussing with us [supervisors], so they were very clear of how they performed in the lesson and we didn't need to waste time to remind them again. We could guide them more easily in our discussion compared to on-site visits because students are more ready to talk."*

## **Effectiveness of Post lesson Conference**

Some supervisors found arranging post-lesson conferencing with students difficult. One lecturer stated that: “I found it really hard to arrange a meeting with the student since they were only available before lecture hours, so I needed to compromise my schedule with theirs.” However, supervisors found that students had deeper reflection and discussion in the post-lesson conference as they could guide their students easily in the discussion since they were very familiar with the content of the videotape.

## **Discussion**

The results of the present study showed that students from both the CE(KG) and QKT programmes found videotaped lesson analysis a very promising mode of supervision, and they were very positive in using videotaping as an alternative mode of teaching supervision. They reflected that most of the essential elements of teaching and learning performance could be captured, and more importantly, they recognized the value of videotaping in providing opportunities for them to review and reflect on the strengths and weaknesses of their teaching performance.

Students found that they encountered less anxiety and stress as they could prepare the videotape whenever they were ready; they could have more time to express their feelings and concerns in the post-lesson conferencing; they could be more proactive in expressing their views as they had sufficient time to prepare before the meeting; and they could have deeper self-reflections as they had reviewed the videotape beforehand; Also they were more ready to accept their supervisors’ comment as they were better prepared for the conferencing, so that a level of trust was maintained. For some students, their scope of reflection was broadened to include comments from their colleagues and children in their class who could also view the video.

Even though students agreed that video-taped lesson analysis could enhance their reflectivity, technical support, however, was their main area of concern. They expressed worries in soliciting manpower for videotaping, inadequate videotaping facilities and cameraperson’s lack of understanding of the content to be taped. It was therefore suggested that students who opt for videotaped lesson analysis should consult their schools about the manpower arrangements beforehand. Camerapersons should be invited to join the briefing session on videotaping so that they could get some technical advice and have a better understanding of what to videotape.

From the views of the supervisors, it was agreed that using videotaped lesson analysis was an effective mode of teaching supervision. Students were more proactive in expressing their views during their discussion with the lectures, and they had sufficient time to review the tape before the meeting. Supervisors also found the post-lesson conferencing effective because students were more reflective and more productive. However, supervisors were concerned of a few issues in using videotaping: students' memories would fade gradually if the meeting was not arranged within a week after the shooting; the camerapersons might not understand the assessment requirement clearly enough to tape all the episodes related to the students' teaching performance.

As for the effectiveness of on-site visits versus videotaped lesson analysis, supervisors found that although video-taped might not cover every aspect of the learning environment and capture all learning activities, they shall provide valid comments to students based on what they see and hear in the videotape. However, a few expressed the concern on their role in videotaped lesson analysis as it was relatively passive. Supervisors also commented that they could give instant feedback and encouragement to students during on-site visits, while in the videotaping mode, this had to be delayed.

To sum, reflection was essential component for bringing understanding to the complex nature of the classroom. Using lesson video clips(Hu et.al.2000) and video conferencing(Sharpe et al,2000) had been recognized as ideal for reflective teaching. Video clips made concrete what would otherwise be abstract discussion(Galbreath,1996). The results of the study have echoed the above findings.

## **Conclusion and Recommendations**

The present study has supported that videotaped lesson can be an alternative mode of teaching supervision. Students can be more flexible in choosing the right time for videotaping when they, the children and the environment are ready to do so. As for the supervisors, videotaping can provide them with a more flexible schedule for evaluating students' teaching and providing them feedback. The greatest merit is, as mentioned previously, enhancing students' reflectivity. Reflection is no longer dependent on supervisor only. Students can review and reflect on their teaching

performance through videotapes by themselves.

Meanwhile, in order to fully benefit from this alternative mode of supervision, the following recommendations are made:

- (i) Students' level of understanding of the rationale of videotaped lesson analysis is crucial. They should be informed of the objectives and merits of using this alternative mode of supervision in the practicum workshops at the beginning of the semester. Results of the two studies (the pilot study and the present one) should also be disseminated to the students to inform them of the effectiveness of using videotaped lesson analysis, and encourage them to consider choosing this alternative mode of supervision.
- (ii) Students who opt for using videotaped lesson analysis should be given technical advice and support. Workshops and seminars should be arranged to demonstrate the mode of operation and answer any queries.
- (iii) Supervisors should fully understand the rationale and operation of the videotaped lesson. They should make sure they have enough time to review the videotapes beforehand and arrange post-lesson conference with a reasonable time after receiving the videotape as references to discuss with student about their teaching performance in post-lesson conference.
- (iv) Given all the advantages of videotaped lesson analysis identified in the present study, it is highly recommended that in-service students studying in a two or three year program should try this alternative mode of supervision at least once during their studying. The culture of videotaping lessons for review should be highly recommended and promoted so that students can reflect and learn from themselves or from their peers, besides from their supervision.
- (v) The significance and effectiveness of videotaped lesson analysis should be further disseminated to the field through occasions such as the Mentoring Program run by the School. Principals might then have a better understanding of this alternative mode supervision and make arrangements to solve the manpower issues for their colleagues studying in our programmes.

## References

Jensen,R.A.et al.(1994). Fear of the known: *Using audio-visual technology as a tool for reflection in teacher education*. Paper presented at the 74<sup>th</sup> Annual meeting of the Association of Teacher Educators, Atlanta, GA.

Rogers.S.F.&Tucker,B.H.(1993). *Video portfolios: Collaborations in literacy teaching assessment*. Paper presented at the Annual Meeting of the College Reading Association.

Davis,A.(1970). *Video-tapes in early childhood education*. Education, 92(2), 79-81

Thomson,W.S.(1992) *Using Videotape as a supplement to traditional student teacher supervision*. (ERIC Document Reproduction Service No. 357 014)

E.Kpanja(2001) *A Study of the effects of video tape recording in microteaching training*. British Journal of Educational Technology, 32(4), 483-48

Hougham, Pollidia(1992) *Improving Student Teachers' Strategies for Asking a Range of Both High and Low Level Questions through Video Evaluations*. Fort Lauderdale, FL; Nova University. (ERIC Document Reproduction Service No. ED 349309)

Sharpe, Leslie;Hu,Chun; Crawford, Lachlan; Gopinathan, Saravanan; Moo,Swee Ngoh;Wong, Angela F.L.(2000) *Multipoint Desktop Videoconferencing as a Collaborative Learning Tool for Teacher Preparation* (ERIC Document Reproduction Service No. EJ615297)

Galbreath, Jeremy(1996) *Interactive Television: The State of the Industry* (ERIC Document No: EJ520236)