Colloquium

Blended learning approach in teacher education: combining face-to-face instruction, multimedia viewing and online discussion

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Introduction

The National Institute of Education is the sole teacher training institute in Singapore and attempts to prepare trainee teachers to be well-informed, competent and thinking professionals. Curricula are designed to provide understanding of key concepts and principles of teaching and learning in order to implement instructional processes in the classroom. Some modules are being delivered by information and communication technologies (ICT), as appropriate use of technologies can make learning more interesting and enriching for students.

Teaching and Classroom Management is one of the core modules in the Postgraduate Diploma in Education (PGDE) program, and it aims to introduce methods to facilitate learning and maintain orderliness in the classroom. The module emphasises the fundamentals of instructional skills and teacher competencies in managing classroom teaching and pupil behaviour, all of which contribute to the making of an effective teacher. The module is organised into the following six interrelated themes:

1. Classroom management and classroom environment;
2. Creating a positive learning environment;
3. Teachers’ attributes and qualities;
4. Managing learning activities;
5. Managing pupil misbehaviour; and
6. School practices and support.

Mode of instruction

The curriculum team responsible for designing this module believes that learning is an individual process and that collaborative and cooperative learning environments are important means of constructing knowledge. It was decided that this module would use a blended learning approach. The normal mass lectures which use ‘direct instruction’ were cancelled and the content of the lectures was made available in three modes of instruction. The module was conducted using an adopted
textbook with a specially designed multimedia CD-ROM, face-to-face tutorials and online discussion.

**Multimedia CD-ROM**

The indigenously designed CD-ROM consists of relevant classroom episodes, interviews with teachers, policy documents, reports and newspaper clippings on disciplinary problems in Singapore schools. These provide information on authentic classroom situations to help students understand background details and prepare them to face real-life situations. The reasoning here is in line with Soloman’s view (1999) that the best and most instructionally sound uses of technology are those that provide students with real and authentic experiences. The CD-ROM integrates observations, discussions and practical examples to help trainee teachers effectively apply the theories and principles of classroom management and understand the philosophies governing good classroom management. A resource section has also been provided to facilitate more reading and research into areas of interest.

Based on the six tutorial themes, the CD-ROM is also divided into six sections. Each section addresses a particular theme (Figure 1). Some classroom teaching videos show
how a teacher introduces a lesson, presents information and closes a lesson. Other video episodes cover managing group instruction, monitoring group progress and ending group activities systematically. As teaching is a mediated transaction between a student, the teacher, the learning objective and the environment, various strategies and concepts are depicted in each video clip.

**Face-to-face tutorials**
In a 13-week semester, the first 6 weeks were devoted to face-to-face tutorials with a small number of 20 trainee teachers in each tutorial group. Trainee teachers were assigned to read the relevant chapter from the adopted textbook and view the relevant section on the CD-ROM before they come to the class. Each tutorial session focuses on a specific theme of classroom management. For example, one theme deals with managing learning activities. In that session trainee teachers are exposed to the idea that different instructional approaches involve different managing and learning strategies, and that effective management of learning activities entails good rapport, motivation, grouping, and optimal use of time and space. During the face-to-face activities trainee teachers discuss how good planning and establishing rules and routines can prevent classroom management problems. They also discuss the use of different instructional and motivational approaches that can sustain pupil interest and appropriate on-task behaviours.

During the interactive phase of the face-to-face tutorial, trainee teachers view a classroom episode from the CD-ROM relevant to the theme together with their tutor. After viewing the video trainee teachers analyse the teaching process and discuss how the teacher motivated the class and what instructional approaches and questioning techniques were used to deal with the lesson. They also discuss how the teacher sustained pupil attention and how rules, routines and gesture were used.

**Online discussion**
After attending six weeks of face-to-face tutorials on campus, trainee teachers were sent out to schools for practice teaching. During the period of practice teaching, trainee teachers sit in on classes and observe their cooperating teachers teach. Later they are given the opportunity to teach their subjects of specialisation. The most important aspect of this practice teaching is that trainee teachers not only learn to understand the ecology of school and classroom environment, but also try to put into practice the principles of teaching and management in real classroom situations.

A group online discussion board (Figure 2) was set up to display messages from the trainee teachers. They are asked to share their experiences and observations of classroom management and discipline issues and other significant events that happened during their school placement. Research has found promising evidence of robust interactions in asynchronous text-based communication (Johnson et al, 2000) as this allows for anytime/anyplace interaction. Trainee teachers submitted at least one posting on their personal experience or observations they made and one comment on a peer’s posting. It is a useful exercise to discover the links between theoretical principles that
trainee teachers learn during face-to-face sessions and their practical experience in schools.

**Feedback from trainees**
The feedback received from the trainee teachers with regards to the use of the multimedia CD-ROM and discussions are mainly positive and encouraging. Eighty-one percent of the trainees who provided feedback (n = 250) agreed that materials in the CD-ROM were well integrated with the tutorial activities, and that the video clips provided good examples of classroom management principles. In addition, the trainee teachers felt that the content and examples provided a framework for their understanding of classroom management. Students seemed to appreciate most of the examples shown in the video clips used to illustrate aspects of teaching and classroom management. On the whole 92% of the trainees agreed that the module was enhanced by the use of materials found on the CD-ROM.

The trainee teachers felt that online discussion during practicum provided them with an avenue to discuss their problems and ideas and that responses from peers helped clear their problems. More than 90% of the trainee teachers responded that the use of
online discussions during their practice teaching was appropriate and encouraged them to express their opinions. What seems to have been valued most in this exercise is the benefit of learning from peers.

**Conclusion**

On the whole the attempt to combine face-to-face instruction, multimedia viewing and online discussion to deliver a module in the teacher education programme received positive feedback from the trainee teachers. It was found that this approach is beneficial when:

- Face-to-face tutorials are activity-based;
- Materials given in the CD-ROM are authentic and contextually relevant; and
- Marks are allocated to encourage optimum online participation.

**References**

