0473

The Use of Video in Initial Teacher Education: a Case Study of Processes and Practices

Pete Sorensen, Lindsey Smethem, Tony Fisher
University of Nottingham, Nottingham, United Kingdom

Background

This paper reports on research into the use of digital video in Initial Teacher Education (ITE) carried out within a university-schools partnership in England. This involved more than 300 student teachers on three secondary (11-18) routes: one year full-time Post-Graduate Certificate in Education (PGCE), flexible PGCE and Graduate Teacher Programme (GTP). Seven subject specialisms were involved: English, Geography, History, Maths, Modern Languages, Science, and Society, Health and Development. Some of the work was funded through a TDA project, which allowed for the purchase of digital cameras and laptops, together with some technical support.

Since Brophy's (2004) review of video use, which noted little research on the impact of different applications, there has been a growing body of work suggesting that video can support the development of teachers' observational skills (e.g. Sherin and van Es, 2005) and reflective thinking (e.g. Newhouse et al., 2007), particularly when it presents authentic illustrations of classroom practice (e.g. Bliss and Reynolds, 2004) and avoids 'top down' behaviourist models (e.g. Harrison et al., 2006). The project sought to build on this research.

The use of video was underpinned by the model of teacher education within the partnership context which is in the reflective practitioner tradition (Schon, 2007), placing a value on situated learning (Lave and Wenger, 1991) and the social construction of knowledge through dialogic approaches to teaching and learning (Mortimer and Scott, 2003; Alexander, 2008).

Research Questions

There is a wealth of literature documenting the slow uptake of new technologies in schools and the way in which beginning and experienced teachers embrace new affordances (e.g. Harrison et al, 2002). There is often a tendency for one-off projects or work by an individual to be transitory through their neglect of key principles for professional development (Hill and Crevola, 2003). In designing this project an approach was taken that sought to avoid these pitfalls through a project design which: gained full partnership support at management level; had an inclusive project management team; trained all the faculty-based tutors in the use of the video; involved school based mentors in supporting students teachers' use of video in schools; allowed individuals and subject teams freedom to plan their own interventions within the overarching principles; reported on developments at regular points during the project and evaluated the different uses with a commitment to building further development.

The broad overall aim of the project was to identify uses of digital video which were effective in supporting specific aspects of beginning teachers' development and to identify and evaluate the structures and processes needed to support and sustain the variety of uses across courses.

Video use included: engagement with exemplification classroom teaching video in the range of subjects gathered from partnership schools, either within VLEs or in teaching sessions; videos of student teachers' own teaching as a focus for evaluation; student teachers editing videos of their practice to share strategies for teaching particular elements of their subject; discussion groups of student teachers sharing practice.

Methods

The research methods employed varied according to the application being investigated. At whole course level quantitative data was collected concerning the numbers of schools, students, tutors and mentors involved. At subject level data was collected in relation to the types of use and perceptions of effectiveness. Qualitative research tools included: open-ended written feedback from tutors and teams; reflections written by student teachers; individual interviews with student teachers and tutors; and focus groups of student teachers across subjects. In some cases the videos themselves served as a data source. In terms of sustainability, data was collected concerning intentions for the future use of video and data on actual practice will be gathered over the following year(s).

Frame

In terms of overarching questions concerning perceptions on the use of video, the interviews and focus groups were subject to thematic analysis. This allowed for a picture to be built up of the views of tutors and student teachers in each subject area, both in relation to the use of video in general and some specific applications in practice, including issues of technical support and ethics.

Analysis of the data on the number of uses and people involved provided background information on impact. This, together with the evidence from the attitudinal questions and data on effectiveness, was then presented back to subject teams as a basis for furthering practice. It also enabled project managers to examine ways to overcome pitfalls.

In specific subject areas some analysis focused on the content of videos and video discussion groups in order to seek out evidence of the impact of the use of video on teaching. This work is reported in detail elsewhere.

Research findings

The response of the tutors and student teachers to the work with video was extremely positive in most respects across all subjects, although some subjects had developed its use more than others. One interesting general finding was the initial reticence of student teachers to gather and engage with videos of themselves teaching. When given the choice, they tended to opt out. However, when they had had no choice and completed the activity, they were almost all of the view that this use had enhanced their development as teachers and many suggested that this aspect should be made compulsory!

The management of the project was rated highly and there was a clear sense that this had reflected the underpinning principles. This is not to say that technical issues did not arise and at times lack of support structures led to more limited uses. These potential barriers raised implications for development projects and sustainability.

Following the sharing of the outcomes some practices have now been extended or developed across the courses. Thus the use of video as part of observational visits by tutors has now been embedded across all subjects, building on the positive outcomes observed in the maths team who piloted its use.

Further outcomes and implications for the future are presented in the full paper.

References

Alexander, R. (2006) Towards dialogic teaching: rethinking classroom talk. Third edition. York: Dialogos UK Ltd.

Bliss and Reynolds (2004) 'Quality Vision and Focused Imagination' in Brophy, J (Ed.) Using Video in Teacher Education, Amsterdam: Elsevier

Brophy, J. (2004.) Using video in teacher education. Oxford, UK: Elsevier Ltd

Harrison, C., Fisher, T., Haw, K., Lewin, C. Lunzer, E., A. Mavers, D., McFarlane, A., Scrimshaw, P. and Somekh, B. (2002) Impact 2: Evaluation of the Impact of Information and Communications Technology on Pupil Attainment: Report presented to Becta/DfES, February 2002

Harrison, C., Pead, D. and Sheard, M. (2006) "P, not-P and possibly Q": Literacy Teachers Learning from Digital Representations of the Classroom. In Michael C. McKenna, Linda D. Labbo, Ronald D. Kieffer and David Reinking (eds.), International Handbook Of Literacy And Technology. Mahwah, NJ: Lawrence Erlbaum Associates. Pp. 257-272.

Hill, P. and Crévola, C. (2003) 'Organizational learning' In Brent Davies and John West-Burnham (eds.), Handbook of Educational Leadership and Management. Harlow: Pearson, pp 394-403Lave, J. and Wenger, E. (1991) Situated Learning: Legitimate Peripheral Participation. Cambridge: Cambridge University Press.

Mortimer, E. F. and Scott, P H. (2003) Meaning making in secondary science classrooms. Maidenhead: Open University Press.

Newhouse, C. P., Lane, J. and Brown, C. (2007), Reflecting on Teaching Practices using Digital Video Representation in Teacher Education, Australian Journal of Teacher Education, 32(3). Available online at: http://ajte.education.ecu.edu.au/issues/PDF/323/Newhouse.pdf [Accessed 10.1.09]

Schon, D. A. (1987) Educating the reflective practitioner San Francisco: Jossey-Bass

Sherin, M. G. and van Es, E. A. (2005). Using video to support teachers' ability to notice classroom interactions. Journal of Technology and Teacher Education, 13(3), 475-491.