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Our first time: two higher education tutors reflect on becoming a 'virtual teacher'

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The rapid development of the Internet as a means of both information distribution and social communication seems to be carrying with it a growing imperative for tertiary institutions to put teacher education, like many other things, 'online'. Often this is done in the name of offering teacher training to distant students who would otherwise not be able to undertake such study. Sometimes it is done in the name of 'growing' the financial base of the institution. Sometimes it is done in the name of teacher or learner convenience, or more efficient use of lecturer or student time. But increasingly it is also becoming done in the name not just of more accessible, but of qualitatively *improved* pedagogy—or in a higher education context should one talk of andragogy? This paper reports some action research we conducted on our own initial experiences of incorporating 'online' elements into our respective teacher education courses. They have been experiences which have seen us confront issues which go well beyond technical questions of *how* to teach in a virtual environment, to encompass more value-laden self-enquiries about *why* we should, and the relationship, if there is to be one, between virtual teaching and virtuous teaching.

Introduction

This paper outlines the reflexive experiences of two teacher educators coming to grips with aspects of the use of 'online' modes within their respective postgraduate qualifications programmes. One of us teaches English education courses to pre-service secondary teachers in a year-long postgraduate teaching Diploma. The other teaches courses related to the use of information and communications technologies (ICT) in education to primary and secondary teachers as part of a postgraduate professional development Diploma. In the last few years both of us have had to come to grips with an insitutional requirement to conduct all or part of our courses 'online', and in doing so we have been interested to reflect on the androgogical challenges that such modes of delivery present. It has also caused us to reflect on what it is about teaching that we most value, and what teaching, or the teaching of teachers, actually means to us in a phenomenological sense. In this regard, teaching is not merely

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a set of instructional practices that exists independent, as it were, of either its delivery mode or its ongoing interpersonal context. For us teaching in higher education (HE) contexts is primarily an interpersonal and developmental as opposed to a 'technical' or even 'instructional' process. But if teacher education is to be interpersonal and developmental, how do we track, evaluate and try to generate such development and relationships in an online environment? What is it that changes as a set of social relationships when Blackboard is the name of the software used for the delivery of the course rather than the name of one of the presentation media used in a face-to-face group encounter? More importantly, how do we as *teachers* adapt to those changes without diluting the perceived quality of the teacher education we provide? Is it possible to generate a productive sense of a community of learning online which matches the sense of developmental community built up through repeated face-to-face contact in tutor groups? What, in short, constitutes for us the effective andragogy of online teaching?

The action research

The first action research project reported here (the 'email project') involved getting 24 pre-service student teachers in an English Education class at a College of Education to provide formative assessment of transactional writing assignments via email to two classes of Year 10 boys at a local high school. The project aimed to give the teacher trainees practical experience applying assessment rubrics related to the writing process in an online context, and to give the students a chance for some additional 'virtual' one-to-one tutoring before their final examinations. From the self-study or action research point of view, the project was also to provide us as pre-service teacher educators with experience at setting up an 'authentic' assessment activity for student teachers based exclusively on the use of email, rather than difficult-to-timetable face-to-face contact with the school students. Empirical data came from the teacher educator's reflective journal, recorded post-project interviews with both the student teachers and the participating school pupils, and two written participant questionnaires.

The second project (the 'discussion board project') concerned the delivery of an in-service Diploma course on the management of ICT in schools. The course was taught in a mixed format in which regular 'face-to-face' classes were supplemented by the use of the bulletin board and threaded discussion features of the Blackboard web site to stimulate learner–learner interactions and discussion in between formal classes. The fortnightly 'face-to-face' classes also involved some local teachers who came physically to the College and some distant teachers who took part via audioconference. Both the 'local' and the 'distant' groups were expected to take part in the online discussion aspect of the course. Again, the research aim was to provide us as teacher educators with data about the experience of setting up and running the online components of a qualification credit course. Data in this case consisted of an ongoing tutor journal, regular iterative content analysis of the discussions on Blackboard, periodic formal interviews with participating teachers during the course, and a written questionnaire completed by the teachers at the end of their course.

At a practical, pragmatic level, both studies involved asking ourselves what it was that we as teacher educators needed to do in order to maximise and optimise the effective use of ICT (direct email in one case, and a web-based discussion board in the other) as vehicles for

ongoing student–student interaction during a formal course delivery. At a more reflective level, though, we also became increasingly interested in the conceptions, and preconceptions, that both we and our respective students had about 'traditional' (i.e. synchronous and face-to-face) versus 'online' (i.e. asynchronous and distributed) modes as effective forms of pedagogy/andragogy.

The findings

It would be fair to say that for most of those involved, including ourselves, neither project lived up to its perceived potential in terms of the use of ICT, especially in terms of sustained inter-student contact and discussion, but they both provided very formative, for us, experiences in forcing us to recognise the need for HE tutors in such situations to develop a clear pedagogical rationale for online teaching, rooted in a personal philosophy of teaching and learning, beyond the mere technicalities of how to do it.

With regard to the email project, it was clear from the questionnaire and interview data that many participants were disappointed not to hear from their allotted contacts, that both groups (student teachers and school pupils) needed considerable external motivation from someone else to activate them, and that for many there had been unforeseen difficulties with the practical use of the technology. There was a strong sense of 'out-of-sight-out-of-mind' at both ends of the communication loop if either the tutor or the school teacher was not there to encourage, galvanise or remind the pupils. We were surprised, for example, at how many of the student teachers seemed to give up after only one initial attempt to contact their partner had failed. Nor had we anticipated the technical difficulties that many of the pupils and student teachers alike encountered, having made the assumptions that both groups' youth and ease of access to computers also meant they were familiar with emailing conventions, and that they were as fluent at composing on a word processor as they all initially claimed to be.

Surprisingly, too, both the school pupils and the student teachers in the email study suggested that they would have found it much easier if computer labs had been booked for them and the email writing and feedback sessions had been formally timetabled. The school students had ready access to computers during school hours, but not always outside school hours. While for their part, many of the pre-service students, all of whom are graduates, and from whom one might expect a high degree of independence and internal self-motivation, also wanted the support of formally timetabled sessions. In other words, both groups found the asynchronous nature of the project problematic rather than facilitative, largely because of access difficulties in one case or motivational difficulties in the other, and possibly because of an inability to loosen themselves from conceptual assumptions about 'courses' and 'teaching/learning' having to be, or being best when, 'live' and synchronous.

The participant interviews indicated that the origin of an apparent lack of real motivation to converse in a virtual world in both groups derived in no small part from our common conception of teaching as an essentially interpersonal, social, 'real' and 'real time' activity. Used to social, synchronous face-to-face contact as the 'form' of teaching, many pupils, as well as their student teacher 'tutors', found the expected teacher–pupil relationship (based on submitting work for formative feedback, on the one hand, and responding to it, on the other) daunting in a virtual setting. One pre-service student teacher was especially adamant that this way of

working was totally uncomfortable and undesirable, while the majority of her colleagues expressed discomfort with not having met their school student to 'get to know them' in person before entering the tutor–student relationship. For their part, the school pupils felt the same. Submitting one's writing for scrutiny and feedback is stressful for many students at the best of times, but our hope that the apparent objectivity and anonymity of the person providing the feedback provided by the use of email would be seen positively by the students was not fully realised. They preferred to 'know' their assessor than to merely 'correspond' with them.

As with the email project, the participants in the discussion board study also tended to not take part without significant external stimulus from the tutor. In part this reluctance seemed to derive from initial technical hassles they experienced in 'logging on' to the web site, and in part from the lack of time/motivation that comes with part-time study on top of already busy professional lives. Even though the course was done by teachers who were interested in ICT and who were competent users of Internet technologies, they too tended to regard the online component as useful but still limited as an effective 'teaching' component of the course. As one teacher put it, as if it were explanation enough: 'It's not face-to-face interaction'. In both projects, therefore, traditional face-to-face group dynamics still tended to be the yardstick by which the value of the teaching–learning experience was judged, and online pedagogies were by many valued only in proportion to how well they seemed to reproduce or simulate an equivalent face-to-face experience, rather than as a qualitatively different form in itself. Moreover, on reflection, this was also the light in which we as the tutors tended to regard the experience ourselves. Rightly or wrongly, we all still tended to think of 'real' or 'good' teaching as necessarily interpersonal and not just interactive, and that therefore virtual teaching, being technologically mediated by necessity, could only ever be a second tier alternative, a supplement to, face-to-face, real-time group interactions, but never an adequate substitute for them.

Discussion

Steve Dorman (1998) sums up the apparent advantages of email as: the use of text-based features; opportunities for multiple connections; the convenience of using asynchrony or synchrony; the easy storage and manipulation of the text; the speed and ease of transmission; the opportunity to interact in a way in which both teacher and student feel comfortable; and an opportunity for increased contact. (See also Tao & Reinking, 1996; Gifford, 1998; Allen & Thompson, 1999.) In the asynchronous and distributed virtual world, it is claimed, you can interact more thoughtfully, to more people, more often. Additionally, other HE-level studies report the benefits of online communication in extending classroom discussions, improving interaction between student and teacher (Collins, 1998) and increasing time management ability, self-directive behaviour, self-confidence and self-discipline (McFerrin, 1999). Our experience, however, would tend to indicate that despite the techno-centric discourse of such claims, creating such effects is more a function of tutor intervention and planning than it is a built-in benefit of the technology itself. 'Onlineness', in our experience, did not 'cause' communication; people did. The technology was potentially enabling, but it was not the 'independent variable' that much of the literature implies it is.

Both projects were essentially designed with this latter 'independent learning' model of Distance Education in mind. Student-teacher tutors in the email project were supposed to interact with their school students in their own time, sharing writing and having it responded to by their tutors, while the teachers on the ICT Diploma course would hopefully interact among themselves and discuss issues on the discussion board in between formal classes. However, such improvements in 'incidental learning' in online distance education reported by McFerrin (1999) did not occur in either of our studies, or rather they did not occur without proactive and ongoing intervention on our part. Indeed, the biggest lesson we learned, from a self-study perspective, was that in the absence of other factors strongly motivating participants to prefer online methods of communication, their need to use such facilities tended to increase rather than decrease dependence on the teacher educator as the organiser and sustainer of the process.

As Cunningham points out:

> Teaching in the distance mode is more difficult in some ways, the major challenge being to develop means to compensate for the absence of regular face to face contact between teacher and learner. While a desirable (information) gap is created, so is a void where facial expressions and other non-verbal communications are not readily shared. The learning process requires assistance, the student needs additional motivation and involvement as a degree of autonomous learning is inevitable for success. (Cunningham, 1996, p. 4)

This was our experience also. The hoped-for benefit of using online media in these classes was to enable teaching–learning to happen outside the static, predetermined confines of a regular classroom space and time. Yet, in the email study especially, some of the apparent 'pluses' of online communication (asynchronicity, so students could respond at their convenience, easy transmission and the opportunity for increased interaction with a wider range of 'teachers', along with a relative anonymity that could potentially prevent any potential intimidation of talking face to face), proved to be obstacles rather than advantages.

Some of the clearest evidence of the constant need for teacher educator intervention came from the discussion board project. In this study, such online inter-student interaction as did occur seemed directly proportional to one or a combination of two core factors: the inherent level of motivation of individual students about the Internet as a communications medium, and the extent of direct intervention by the teacher educator. The latter is perhaps best exemplified by the two sociograms in Figure 1, which show the marked increase in the frequency, complexity and quality of inter-student discussion that occurred at a point where the tutor required a contribution to the discussion board as a formal class activity and followed it up with cajoling emails. Interestingly, too, over the six months of this class the distant teachers in the class did not contribute any more to the discussion board than the local teachers, nor were their relative contributions qualitatively different.

Such findings, of course, were neither unexpected nor unparalleled in the experience of other email or Internet-based projects (e.g. Lynch & Leder, 1996; Jones & Jamieson, 1997; Bunt *et al.*, 1998). However, it emphasised again for us that there is a qualitative difference between 'teaching online' and merely 'putting a course online'; between the use of the Internet as a delivery mechanism and the use of it as a communications medium, and that much of the difference originates in the fact that, just as it is in face-to-face situations, it was primarily OUR responsibility to initiate and sustain such communications, not the responsibility of the students.
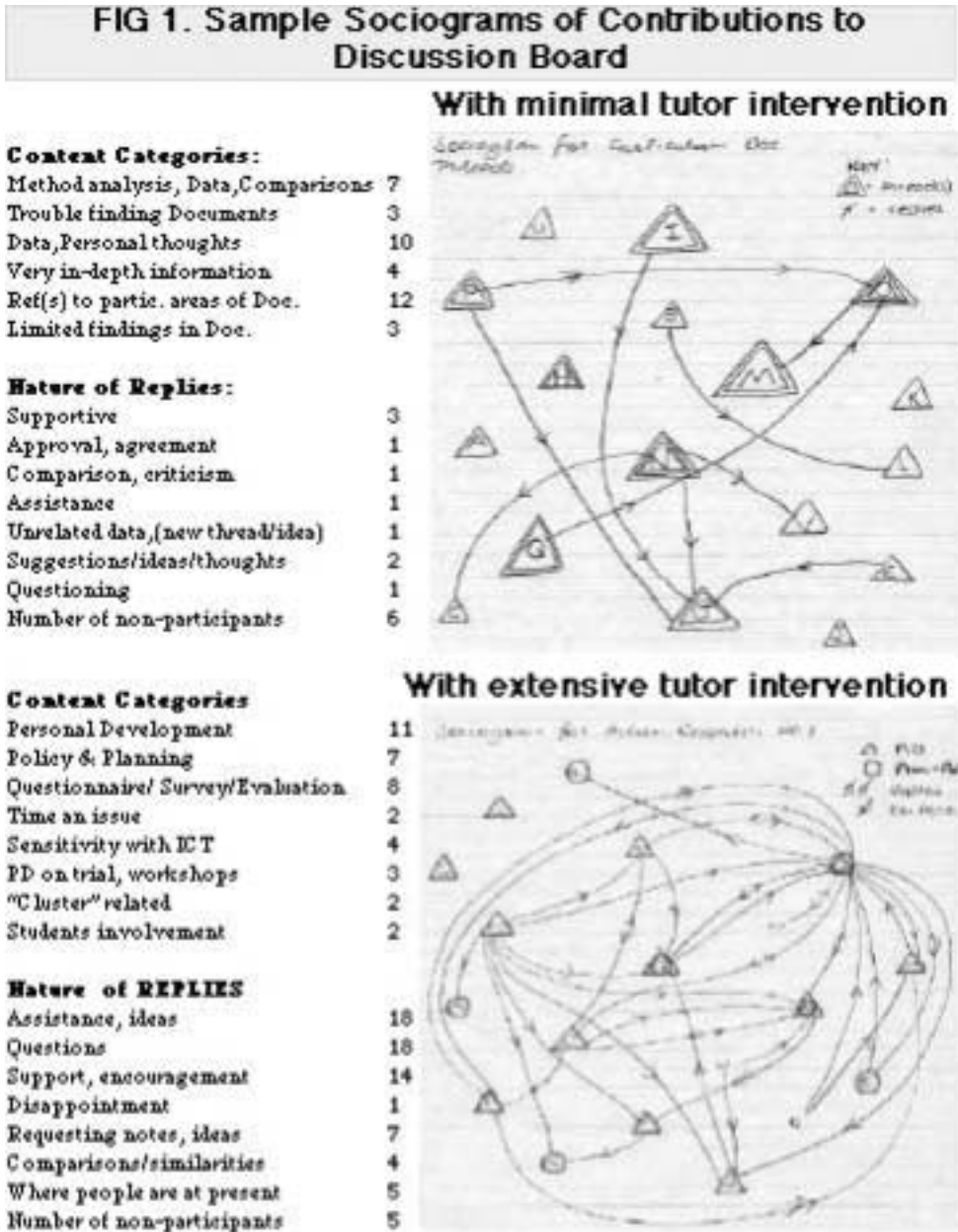
FIG 1. Sample Sociograms of Contributions to Discussion Board

With minimal tutor intervention

Content Categories:

Method analysis, Data, Comparisons	7
Trouble finding Documents	3
Data, Personal thoughts	10
Very in-depth information	4
Ref(s) to partic. areas of Doc.	12
Limited findings in Doc.	3

Nature of Replies:

Supportive	3
Approval, agreement	1
Comparison, criticism	1
Assistance	1
Unrelated data, (new thread/idea)	1
Suggestions/ideas/thoughts	2
Questioning	1
Number of non-participants	6

With extensive tutor intervention

Content Categories

Personal Development	11
Policy & Planning	7
Questionnaire/ Survey/Evaluation	8
Time an issue	2
Sensitivity with ICT	4
PD on trial, workshops	3
"Cluster" related	2
Students involvement	2

Nature of REPLIES

Assistance, ideas	18
Questions	18
Support, encouragement	14
Disappointment	1
Requesting notes, ideas	7
Comparisons/similarities	4
Where people are at present	5
Number of non-participants	5

Figure 1.   Sample sociograms of contributions to the discussion board

Conclusion

Some of the lessons we learned from the two studies as teacher educators were of a technical/ pragmatic nature. We learned, for example, that asynchronous should not be a synonym for untimetabled or unplanned, and that a clear written timeline that scaffolds the whole process is

necessary to ensure structure, support and involvement. We learned that it is necessary to build the teaching of any necessary email or discussion board skills into the timetable and not to assume that participants already have these. We learned that teaching online takes longer than teaching face to face and therefore costs more. Our estimate was that about 50% more time was spent overall dealing with online students than with our face-to-face classes, and within that, that the preparation loads were similar but there was a much greater amount of time required to moderate and sustain discussion both with the group and with individuals.

The most important things we learned from the experience, though, were not so much about the technical or the organisational as about the philosophical and the (inter)personal. We learned that group dynamics are qualitatively different online, especially in that there seems to be a more heightened sense of public and permanent exposure of one's thoughts, ideas or feelings in emails/discussion boards than in the face-to-face, verbal (i.e. ephemeral) equivalents, and that these issues were just as, if not more, problematic from the teacher perspective as from the perspective of the students. We learned that online learning presumes a high level of independence and motivation on the part of the learner, but from that also that in online *teaching* most of the teacher's energies may need to go into building and maintaining such independence and motivation—even for students who have no other means of participation. We learned that in such contexts 'interactive' is not the same as interpersonal and that it was the interpersonal that both ourselves and all of our participating teachers and pupils seemed to value most in the 'teaching' process. In this regard, we learned that those things which are most valued in the social phenomenon that is teaching are precisely those which can be the most difficult to recreate in an online environment, and we found ourselves having deep philosophical discussions about the socio-emotional needs of the *teacher* in such situations; *our* need for a feeling of interpersonal connection with the students, *our* need to 'humanise' and 'socialise' the process in order to feel better about doing a good job as the tutor, quite separate from any projections about their need for 'personalised' contact with us, or with each other.

Thus, we found ourselves left at the end of 'our first times' with some practical strategies to help students 'learn' online, but with more questions than answers about what it *means*, to us, to '*teach* online'. We are, moreover, increasingly convinced that these questions are not trivial in the light of an apparently growing imperative to engage in online as well as, or even instead of, face-to-face teaching, and that such questions revolve more around issues of value and quality and our own sense of self-worth as 'teachers' than they do around issues of technical knowledge or the practicalities of implementation. They are more about 'why', and to what good ends, than they are about 'how'. As we boldly go where no teacher educators have gone before with communications technologies, we are also constantly brought back to questions of value rather than procedure: 'It may be teaching, Jim; but is it teaching as we know it?' Or, more accurately, is it teaching as we would want it to be? We need more studies of what is sacrificed, and what may be gained, in terms of effective socio-emotional dynamic, when one adapts teacher educative activities and processes from a face-to-face to an online context. We need new criteria for judging the virtuosity in virtuality—or do those we have developed for the face-to-face 'classroom' still stand? We need to be more confident that the online delivery of higher education is desirable, not just possible. In short, we need a sounder *pedagogy/andragogy* of online education, not just a technology.

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References

Allen, G. & Thompson, A. (1995) Analysis of the effect of networking on computer assisted collaborative writing in a fifth grade classroom, *Journal of Educational Computing Research,* 12, 66–75.

Bunt, S., DeWinter, W. & Ly, N. (1998) Experimental use of electronic information transfer to enhance communication between the student and the educator, in: B. Black & N. Stanley (Eds) *Teaching and learning in changing times: the proceedings of the 7th Annual Teaching and Learning Forum, 4–5 February 1998* (Perth, The University of Western Australia, Centre for Staff Development), 49–53.

Collins, M. (1998) The use of email and electronic bulletin boards in college-level biology, *Journal of Computers in Mathematics and Science Teaching,* 17(1), 75–94.

Cunningham, D. (1996) From distance mode to the classroom, *Primary Educator,* 2(6), 1–4.

Dorman, S. M. (1998) Using email to enhance instruction, *Journal of School Health,* 68(6), 260–261.

Gifford, L. J. (1998) Graduate students' perceptions of time spent in taking a course by internet versus taking a course in a regular classroom, paper presented at the *Annual Mid-South Educational Research Association Conference*, New Orleans, LA, 4–6 November.

Jones, D. & Jamieson, B. (1997) Three generations of online assignment management, in: *What works and why: reflections on learning with technology: ASCILITE '97: proceedings of the 1997 annual conference* (Perth, WA, Curtin University of Technology). Available online at: http://www.ascilite.org.au/conferences/perth97/papers/Jonesd/Jonesd.html.

Lynch, J. & Leder, G. (1996) Trials and tribulations of learning to use electronic mail: a case study, in: H. Forgasz, T. Jones, G. Leder, J. Lynch, K. Maguire & C. Pearn (Eds) *Mathematics: making connections, proceedings of the 33rd annual conference of the Mathematical Association of Victoria* (Brunswick, Vic, Mathematical Association), 440–445.

McFerrin, K. M. (1999) Incidental learning in a higher education asynchronous online distance education course, in: J. D. Price, J. Willis, M. Jost, S. Boger-Mehall (eds) *SITE 99: proceedings of the Society for Information Technology & Teacher Education international conference,* San Antonio, TX, 28 February to 4 March (Charlotteville, VA, Association for the Advancement of Computers in Education (AACE)), 1418–1423.

Tao, L. & Reinking, D. (1996) *What research reveals about email in education* (ERIC Document No. ED4085).