

Integrating technology into teacher education: How online discussion can be used to develop informed and critical literacy teachers

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Abstract

This paper reports findings from 6 years of investigation of the use of online discussions with large cohorts of preservice literacy teachers (approximately 150 each year). The report outlines essential components for effective online discussion, noting the challenges involved when aiming for informed and critical literacy discussion among large groups of novice educators. It elaborates on the most successful approach to this undertaking which involved the use of case study scenarios as the focus of discussion. The report argues that the case study discussions were most effective in promoting professional discussion because they allowed a more effective expert role for the instructors.

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1. Introduction

The research described in this paper contributes to knowledge about productive uses of technology in teacher education. It analyzes the outcomes of teaching in an online environment with sizable groups of students (groups ranging from 100 to 220 students) over 6 years (2002–2007). The report considers the successes and limitations of the use of online discussion in terms of the significant goal of encouraging preservice teachers to be reflective and critical thinkers in the field of literacy education. An intriguing aspect of teacher education in the 21st

century is that while contemporary teachers and university instructors may have been educated in a pre-cyberspace world (Green & Bigum, 1993; Otero et al., 2005), contemporary preservice teachers appear to be the online *chat room* generation. Can the chat room generation effectively (and willingly) use information and communication technology (ICT) as a tool in their learning? This analysis will outline:

1. Essential components for setting up online discussion to promote learning;
2. Online case study discussions as a way to promote critical professional discourse among preservice literacy teachers.

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2. Preparing informed and critical literacy teachers

Debates about literacy instruction and essential knowledge for literacy teachers have been significant in Australia (National Inquiry into the Teaching of Literacy, 2005) and in the United States for decades (Chall, 1967; International Reading Association (IRA), 2001; National Reading Panel (NRP), 2000). The arguments between the ‘whole language’ and ‘phonics’ perspectives on the teaching of reading have been fierce (Louden et al., 2005, p.1). In the US the influential research of Snow, Burns, and Griffin (1998) and the National Reading Panel (NRP) *Teaching children to read* (2000) have stressed the significance of phonemic awareness and teaching phonics as precursors to reading success. Snow et al. also stressed the complexity of the task of teaching reading, with effective teachers being highly skilled planners of instruction which meets the needs of diverse learners. “If we have learned anything from this effort, it is that effective teachers are able to craft a special mix of instructional ingredients for every child they work with” (Snow et al., executive summary). For Snow et al. the development of this expertise is connected to “regular opportunities for self-examination and reflection, [which] are critical components of the career-long development of excellent teachers.” (Snow et al., 1998, executive summary). The Australian government’s most recent report *Teaching reading* (National Inquiry into the Teaching of Reading, 2005) concurs in recognizing the complex skills and understandings that graduating teachers of literacy need. They must develop “a comprehensive repertoire of strategies and approaches plus the knowledge to select and apply the strategies and approaches that meet individual learning needs” (p.38). The NRP lamented the lack of rigorous research into the connection between teacher education and student outcomes in reading but also highlighted the importance of teacher education among the variables which shape outcomes (NRP, 2000, Findings and Determinations: Teacher education and reading instruction). Darling-Hammond has argued that the “quality of teacher education and teaching appear to be more strongly correlated to student achievement than class sizes, overall spending or teacher salaries (Darling-Hammond, 2000, p. 3). For her as for Snow et al. (1998) the emphasis is on teacher as the informed and reflective practitioner. For teacher educators the question is how are these characteristics developed in preservice

teachers. For contemporary young people everyday information and communication needs are satisfied through digital media (Dole, 2006, chapter 9). Hence, investigating the value of online discussion as a tool of reflection about professional learning makes sense.

The University of Colorado research (Otero et al., 2005), found that online discussion provided opportunities for preservice teachers to think *aloud* and allow others to respond to and critique their ideas. Others have investigated various uses of ICT to facilitate the development of professional problem-solving skills. Ferry et al. (2005) considered the use of a computer-based simulated classroom; Sorin (2004) and Sutherland, Marcus, and Jessup (2005) used online case studies as a mode of learning; McDonald and White (2005) were interested in the way online discussions can encourage autonomous learning. The research reported here adds to these findings. Clearly expecting technology to facilitate high-level thinking goals is to ask a great deal. This is particularly true when considering teaching in large group settings in higher education where one instructor may be responsible for more than 100 students so that following an individual student’s progress is difficult.

In exploring the value of online discussions for learning the researchers also analyzed preservice teachers’ perceptions of the discussions. There is extensive research on the influence of one’s beliefs in decision-making (Kardash & Scholes, 1996) and the regulation of one’s intentions for teaching (Connelly & Clandinin, 1985; Kagan, 1992; Kardash & Scholes, 1996). The robustness of some beliefs, especially those long-held beliefs about teaching and learning experiences has been documented (Block & Hazelip, 1995; Brownlee, 2003; Calderhead & Robson, 1991; Featherstone, 1997). Hence, the perceptions of technology held by preservice teachers are important. Wai-kit Ma, Andersson, and Streith (2005) investigated preservice teachers’ perceptions of computer technology in relation to their intentions to use computers in schools in the future and found that perceived usefulness and ease of use were important. Where preservice teachers saw the long-term usefulness of technology, their stated intention to use it was stronger. Scanlon and Issroff (2005) found that tutors and online student participants often had contradictory perceptions of what using technology efficiently meant. Tutors focused on maximizing student learning using minimal resources, whereas participants were

concerned with not wasting time when using technology. These differences impacted “on the ways [participants] used the learning technologies” (p. 434). O’Reilly and Newton (2002) found that tertiary students valued online discussions even when they were not assessed. Students appreciated the social and learning focused support that the discussions gave them. These studies suggest that preservice teachers’ perceptions of technology are distinct from those of their instructors and need to be considered if instructors are to use technology effectively.

3. Data collection approaches

The context of the investigation was a compulsory preservice education unit addressing literacy in the early years of schooling. This introductory English education unit comprised 12 weekly 1-h lectures and 2-h tutorials. Two, three or four instructors taught approximately 150 preservice teachers each year of the study; however, one of the authors was always core staff.

The unit used a blend of various modes of instruction to provide opportunities for linking theory with practice. Preservice teachers observed and, in most cases, also participated voluntarily in elementary years classrooms. The assessment comprised focussed observations in classrooms, weekly online discussions with peers, prescribed readings and major assignments requiring critical reflection on theory and practice.

Each year the design and use of the online discussions component changed with instructors’ increased skills and confidence with using the medium and improved technical infrastructure and support. Table 1 summarizes the focus for the online discussion for each year of the investigation as well as preservice teachers’ responses to online activities as registered in the university’s unit evaluation instrument. The evaluation included anonymous written responses to items using a five-point Likert scale ranging from *strongly agree* to *strongly disagree*. Table 1 presents the percentages of the total group who made each response. The questions asked in the evaluations changed during the years of the investigation because lecturers formulated questions in response to shifts in their teaching approach. However, although the evaluation questions vary somewhat (not ideal in a research study), the responses do show much about preservice teachers’ perceptions of various online activities.

As will be analyzed below, the instructors’ developing knowledge of effective uses of the online discussion tool was reflected in the move from a relatively unstructured discussion of readings in 2002 to collaborative problem-solving tasks in 2006 and 2007.

During the study three types of data were collected:

- Records of preservice teachers’ online discussions using the DISCUS (2002) and WEBCT (2003–2007) platforms. These electronic records were analyzed in terms of what they showed about the value of the various approaches for promoting learning. Each year the instructors looked for evidence that the preservice teachers were using online discussions to: effectively communicate their understandings of literacy teaching and learning, reflect on their changing views of literacy in light of theory and practice, engage in literacy professional discourse such that they perceived the complexity of literacy teaching issues and were able to debate them.
- Instructors’ critical reflections on their practice. In some cases this took the form of written reports to the University’s Teaching and Learning Committee as part of the University’s evaluation of programs. In other cases it was notes written as part of the instructors’ teaching/learning process.
- Responses by preservice teachers on the university’s unit evaluation instrument (2002–2007) (see Table 1). Also analyzed were the anonymous written comments some preservice teachers made as part of this evaluation.

Examination of Table 1 suggests that preservice teachers were by no means uniformly enthusiastic about online activity with responses spread across the range from ‘agree’ to ‘disagree’ in relation to particular uses of the technology. The following discussion analyses the various uses both in terms of the background to preservice teachers’ perceptions, as well as exploring the study’s findings about the value of online discussion for promoting critical professional discourse.

4. Essential components for setting up online discussion to promote learning

4.1. User-friendly technology

The researchers found that if technology fails to reach a reasonable level of accessibility and reliability

Table 1

Summary of the focus for online discussion for each year and preservice teachers' evaluations of the online activities as percentages of each response

Year	Focus for online discussions	Number of weeks	Items on unit evaluation	SD	D	U	A	SA
2002 N = 168	To discuss weekly readings with tutorial members. E.g. <i>Using your textbook's analysis, discuss the changing role of the teacher during the literacy block</i>	7	Working in an online environment contributed to my learning in this unit	4	17	23	45	11
			I found the technical side of the online learning component user-friendly	11	26	20	30	13
2003 N = 227	To discuss connections between classroom experiences and prescribed readings. E.g. <i>Based on your classroom experiences and professional reading analyse the teaching of phonics in early years classes</i>	12	Working in an online environment contributed to my learning in this unit	5	21	28	40	6
2004 N = 169	To allow preservice teachers to experience three modes of learning (handwritten notes, online discussions, answering multiple choice items as online quiz items). In each case preservice teachers were asked to reflect on their changing understanding of literacy learning	3 weeks for each mode = 9	My perceptions of teaching and learning literacy have been challenged through completing online discussions	5	23	20	41	11
			My perceptions of teaching and learning literacy have been challenged through completing online quizzes discussions	6	13	23	39	19
2005 N = 137	To provide a forum for discussion of an assigned set of literacy issues. E.g. <i>What does an early years literacy teacher need to know about children who are learning English as second language?</i>	5	Discussions on WebCT were useful in my professional learning	5	18	24	35	17
2006 N = 164	To encourage collaborative literacy 'problem solving' of three case studies using defined roles for each group member (Starter, researcher, wrapper). E.g. <i>Meg, a teacher of a year one/two class [who] notices when she reads a big book to her class that some children know the answers, some have no idea and others seem bored. Discuss her best options</i>	6	The use of WebCT helped me with my learning in this unit	5	16	17	37	25
			The use of case studied helped me in my learning	2	7	16	46	29
2007 N = 109	To encourage collaborative literacy 'problem solving' through exploration of case studies and other literacy challenges (e.g. <i>finding appropriate texts to use with a year two class</i>) using defined roles for each group member	10	The use of WebCT helped me with my learning in this unit	1	2	12	54	40
			The use of case studied helped me in my learning	0	4	20	60	25

then preservice teachers' perceptions are negatively colored. In the first year of online discussion free-ware DISCUS platform was used and the end of semester evaluations contained comments such as "The technical problems setting up the online discussion were frustrating" (Student evaluation, 2002); and 37% of the group disagreed with the statement "I found the technical side of the online

learning component user-friendly." While 56% of the 168 preservice teachers agreed that the online environment "contributed to [my] learning" instructors were conscious of having to defend the use of online discussions. As at the University of Colorado, "the power of the learning got lost in the frustration over the technology" (Otero et al., 2005, p.16). In terms of modeling appropriate uses of technology to

preservice teachers, the exercise was a limited success. In subsequent years the relative user-friendliness of WebCT was reflected in fewer negative evaluations.

4.2. *Appropriate tasks*

While technological ease is essential if learning is to be optimal this is not always within the control of instructors. On the other hand, the nature of the online activities required of participants is within the realm of the instructors. The task undertaken was an important variable in shaping both preservice teachers' perception of the value of technology and instructors' assessment of what preservice teachers learned. An instructive error occurred in 2002 when the required task did not sufficiently encourage participants to interact with others in their online contributions. Asked to respond to reading in an online forum, contributions such as "Well here is my discussion" (Student DISCUS contribution, 2002) were made. Just as in the face to face situation, the use of closed questions and teacher-directed discussion may not lead students to making thoughtful contributions, so online learning tasks must be sufficiently open-ended and engaging (Holmes, 2004). Various comments show preservice teachers were aware that they were not always participating in a collaborative activity. For example:

Online discussions did not exactly help my learning—it wasn't very interactive. (Student evaluation, 2002)

Others ... just didn't really interact with what had been written, didn't really agree or disagree, just wrote for themselves. (Student evaluation, 2002)

4.3. *Assessment arrangements*

Another key factor in making online discussions work is the assessment arrangements. In the initial years (2002 and 2003) in this new online environment instructors made the mistake of making online discussion an 'add on' to preservice teachers' other assessment tasks, and consequently preservice teachers felt there were too many demands on them. To limit the assessment weight of an untried activity might seem sensible for instructors unsure of its value, but from some students' points of view it scarcely made the task worth the effort. One student wrote about contributing as a duty rather than a means of learning:

The weekly obligation to go online did not assist my learning, as I only found it a tedious

necessity, that I often could not find the time to do properly, or with enough thought to have learnt anything from it. Going online was a hassle. (Student evaluation, 2002)

For this preservice teacher online discussion was time-consuming and unrewarding. As noted above, in the initial year of the study instructors made the mistake of centering online discussion around a closed question (asking the preservice teachers to summarize a reading). In subsequent years more interactive tasks were planned and the activities were given significant assessment weight. Two potentialities of online discussions which were very readily established were their capacity for creating

1. democratic spaces,
2. avenues for telling personal narratives.

4.4. *Democratic spaces*

As has been noted by other researchers, this investigation found that online environments are democratic in that they allow participants who do not speak in classes an opportunity to have a voice and no one dominates the discussion (Bradford-Smith, Smith, & Boone, 2000; Swan, 2001). Moreover, instructors have access to their thoughts. In contrast, time-constraints during classes often cause an instructor to either limit his/her participation with discussion groups to a few minutes at a time, or participate with selected groups. In an online discussion environment the lecturer can access all groups (Bradford-Smith et al., 2000). Participation in the online discussions was an assessed activity during every year of the investigation so that the fact that almost all preservice teachers were involved was not surprising. However, during the years 2002–2005 when the online discussion was relatively unstructured (lecturers did not specify specific discussion roles and word limits as they did in 2006 and 2007) lecturers were surprised by how often and how lengthily many preservice teachers contributed. Where lecturers specified only one contribution per week, in many cases records of the discussions showed that preservice teachers often logged onto the site multiple times each week, contributing on several occasions. While quantity of participation does not equal quality of thinking, lecturers were pleased to see this involvement, particularly from some preservice teachers who were relatively silent in face to face classes.

4.5. Avenues for telling personal narratives

McDonald and White (2005) argued that online forums are ideal for narrative or the sharing of experiences, especially classroom experiences for which there is rarely sufficient time in university classes. Within this investigation preservice teachers were encouraged to share experiences from both their recollections of their own literacy learning and from their observations as early years classroom helpers. They were asked to connect these experiences with literacy issues being studied. Records of their discussions suggest that there were useful reflections occurring. For example, one preservice teacher wrote:

This one child was working with another child who was fairly good at writing, however, the other child (who did not speak much English and could not read) could copy perfectly the words that the other child was writing- and still would not have been able to read them back to you. So maybe that raises a question as to whether or not simple copying is beneficial to all children; just because you know what a letter looks like and how to copy it, doesn't necessarily mean you understand it. (WebCT discussion contribution, 2004)

It seems that this preservice teacher was capable of critical reflection about literacy practice of the kind that Snow et al. (1998) advocate for the profession. Moreover, the reflection provided an opportunity for learning for others reading it. Bandura (1986) described the *vicarious* capability given situations such as this when people learn from others' experiences.

There was evidence that preservice teachers became engaged in discussions and interacted effectively when they were set tasks which encouraged them to ask questions of each other and pursue answers. The following is an excerpt from the asynchronous discussion of one group who were preparing to write an assignment about oral language in the literacy classroom (the numbers of the messages are not sequential because the program assigns numbers according to the order of posting over the whole cohort not the group). These preservice teachers were capable of discussing issues in a reflective and critical manner, although some participants were more focused on assignment requirements than the professional discussion. For

this task they were able to use informal *chat room style* talk to facilitate communication.

Is anyone else doing oral language for their assignment? One of my earliest memories of learning oral language was probably show and tell. Everyone seemed to enjoy this because they got to talk about something they were interested in. The other memory would be when the class was reading a book together and the class went around the room taking turns to read aloud. Looking back on this now, I'm not sure how effective this was. Mainly because those who had poor oral language skills probably hated this task as they would often be embarrassed because they weren't at the same level as others in the class. Another interesting question I have, is whether everyone else thinks there is a high level of correlation between a child's reading skills and their oral language skills. Common thinking would suggest that there is but I'm interested to hear what others think about this question. (Message no. 728, 2004)

Hi N., looks like its [isc] just you and me at the moment!! To answer your question for starters-I believe there is a correlation between reading and oral language, more so that children rely on oral language use for reading and understanding of expression and meaning. Children who do not have the opportunities to communicate in social and presented styles will, inevitably, lack the skills required to read varying texts. Thus, supporting the argument for greater use of oral language as part of the literacy block in schools. Children from varying socio-economic backgrounds need to have the exposure to differing presentations of oral language as this assists in the development of phonological skills ... Talk again soon, S. (Message no. 748, 2004)

Hi, a number of people have expressed difficulty re: finding resources for the assignment. I, too, am doing it on Oral Language. Some articles I have come across (which would be helpful to varying degrees) are ... Hope this helps, J. (Message no. 1015, 2004)

Hi Guys, as promised I am back with (hopefully) some useful resources for all to research. I will not include if they are same that J. sourced ... (Message no. 1162, 2004)

Hi N. I would think that there would be a strong link between children being able to read and their oral language. What about children who have

speech problems for eg. a stutter? I know of a child who has a speech problem, but is very good at reading. When they have to stand up in front of the class to talk it is very difficult and stressful. This child is quite bright, and has little trouble when reading aloud, but sharing what they've learnt with the rest of the class can be quite difficult. How should we go about helping these children with their oral language? Would you make them 'share' at the front of the class even though it is difficult for them? See ya, L. (Message no. 1014, 2004)

4.6. *Monitoring and providing timely feedback*

The above contributions show evidence of preservice teachers sharing their experiences with literacy learning, assisting each other with their academic assignment as well as more professional *issue-based* discussion. All aspects are evidence of worthwhile discussion about the place of oral language in the literacy classroom. Yet there remains the question asked by L. (Message 1014) about how to work with the child who stutters. It seems that instructor input would be desirable at this stage; perhaps highlighting the idea noted by L. that children's oral language varies according to context, and suggesting that the child's teacher seek supportive contexts for this child as well as expert advice on oral language difficulties. However, while on occasions lecturers were able to provide feedback that would address the professional questions raised in discussions, the task of closely monitoring all the discussion groups in the cohorts was unsustainable when any one instructor might be responsible for 10–20 groups whose members often spoke to each other a number of times each week. At times the lack of close monitoring meant that some significant misconceptions went unchecked. This excerpt is from one preservice teacher who seems to have gained only part of the current advice regarding spelling:

The journals I have read have emphasised the BIG changes in learning [how to] spell since my primary school days. I am pleased to hear that research has criticised the traditional rote learning method. The approach to spelling these days is far more integrated which is said to provide more lasting learning than previous memorization models. I think children are less conscious that they are actually learning spelling in a whole

language approach. They seem to learn to spell subconsciously through immersion and engagement in a rich world of texts. One journal article that I read referred to this as "acquisition" as opposed to "learning". It took me until my second classroom visit to actually realise that the children were learning spelling. I had not noticed because it was so implicitly taught! (Message no. 612, 2004)

It was pleasing to see that this preservice teacher realised that it was useful to take words from content being studied and that rote learning methods alone were not as effective as a range of other strategies. However, in this excerpt there is no mention of other strategies and the emphasis on teaching implicitly and learning subconsciously is misleading. A contribution such as this was a clear indication to lecturers that they needed to provide this preservice teachers with more expert professional knowledge about how spelling is taught so that their "repertoire of strategies and approaches" (National inquiry in the Teaching of Reading, 2005, p.38) is more like of an effective literacy teacher. During the investigation lecturers dealt with such misconceptions in various ways: by posting a short response to the group on the discussion board; discussing the issue in face to face classes and by noting common misconceptions and adapting future coursework to deal with them. Whatever the approach, it seemed that the response was often not as thorough or as focused as lecturers would have liked.

4.7. *Research into online learning highlights the role of the instructor*

Examining learning in a primarily online environment Salmon (2002) and Holmes (2004) identified a period of increased communication between online participants after 10 days of interaction and asserted that input from instructors during this period led to maximized learning opportunities. This finding highlights particular challenges for instructors in courses with blended modes of instructions where online discussion is one of a number of elements. For a 12-week teaching unit where online contributions were expected approximately once a week such as those in the current investigation, the optimum period for input comes towards the end of the 12-week period. This suggests that it was not surprising that the interactions were superficial at times.

Salmon (2002) presented a five-stage conceptual framework describing the development of participants' online discussions. Stages one and two involve participants becoming familiar with the technology and their online peers. At stages three and four participants exchange information and construct personal knowledge. At stage five, participants are ready to integrate new content and deepen their understandings. In stages three and four the instructor acts as an *e-moderator* (Salmon, 2002) supporting participants as they become engaged with the task. In stage five, the instructor assumes a mentoring role for participants. In the teaching under investigation here, while the instructors might read, take note of and briefly respond to students' contributions, in many instances they were not acting as e-moderators and mentors. That is they did not involve themselves sufficiently in the discussions to be able to respond to individual or group misconceptions; nor were they able to take a decisive role in discussions as a mentor might do.

5. Preservice teachers' perceptions of the value of online discussions

Swan (2001) found that student satisfaction with online components of courses was influenced by frequent interactions from instructors (Swan, 2001). A limitation of the data collection in this investigation was not collecting data on preservice teachers' perceptions of the role of the instructors in their online discussions. However, examination of the data reveals some trends in preservice teachers' perceptions. In 2002 and 2003 regardless of the platform being used, for each of the five-point scale, profiles of results for the statement *working in an online environment contributed to [their] learning in this unit* were quite similar. Likewise, profiles of results for the statements each year about the value of online discussions to their learning such as, *My perceptions of teaching and learning literacy have been challenged through completing online discussions* (2004) and *The use of WebCT helped my learning in this unit* (2006) are quite similar. Generally, about 46–62% at least *agreed* with such statements and 21–28% either *disagreed* or *strongly disagreed* with the same. In each of those years between 20% and 28% indicated they were *unsure* whether the online discussions had been helpful to their learning.

A noticeable rise in the levels of satisfaction with online discussions came in 2006 when rather than asking preservice teachers to discuss and reflect in

an informal chat room genre, the online discussions were organized around specific cases and the target discourse was more specified. In this setup in 2006 75% at least *agreed* with the statement, *The use of case studies helped me with my learning*; in 2007 85% of preservice teachers had a similar response. As will be elaborated below, examination of the elements of online case study discussion suggests that this rise in the rate of satisfaction was related to the fact that the case study discussion task established clearer guidelines for educational discussion than had been available to preservice teachers with other online tasks. The instructors were active in shaping and monitoring the discussions.

6. Online discussion of case studies as a useful mode of learning

In 2006 and 2007 preservice teachers were given case studies and encouraged to work collaboratively on a shared task which was related to the major issues and assessment for the unit. See Table 1 for an example of a case study issue. Preservice teachers were instructed to take on specific roles in their discussions. These roles made explicit the thinking and discussion processes of literacy professionals. Roles included: 'initiator'—identify issues impacting on literacy teaching or learning within the case study scenario; 'researcher'—read research about the issues identified, and propose a plan that addresses the issues explored in terms of advice for literacy learning for either teachers or parents; 'critic'—consider the pros and cons of the plan.

Participants were to allocate roles among their six group members to share the task and each undertake different roles over the course of the semester. The provision of a model structure for case study discussion meant that preservice teachers could plan their contributions in a focused way and feedback could be more specific than in the unstructured literacy discussions of previous years. In a less structured discussion it is harder to pinpoint where it is/not effective. For example, has the 'researcher' found material related to the issues as defined by the 'initiator'? Each online discussion was assessed on completion before the next one was due and preservice teachers were informed as to the effectiveness of their discussion on a scale from very effective to below expectations. Critical to an effective case study discussion were: the groups' ability to: respond to each other's ideas rather than write a monologue; find relevant and reputable

research; synthesize it into some kind of educational plan and then critique this plan. Brief individual group feedback such as “Interaction between group members was improved in this case study” was posted. But the fact that the cohort of preservice teachers had all participated in the case study discussions made it possible to post focused feedback to everyone. Exemplary responses were put up on the site with annotations explaining why the discussions were effective. The preservice teachers could compare their case study with the exemplary ones and improve their contributions in the future.

The following comments are excerpts from the wrapper’s contribution in an exemplary case study posted in 2007.

My fellow group members, L., R., B. and A., have successfully identified and researched the key issues impacting on the literacy development and education of Pete, from our chosen case study. From her research investigation, B. has identified that Pete’s level of literacy development may be linked with the quality of the relationships he shares with his parents. To support Pete’s experiences and social practices in his home environment, B. proposed that Pete’s parents adopt a more active role in their son’s literacy education, and as a consequence, build a stronger link between his home and school environment. In her literature review, R. focused on the key issue of phonics and its importance in early literacy education. Through her research, she established that the difference between a good reader and a poor reader is the ability to identify letter-sound relationships. For Pete to grasp the concept of phonics, R. stressed that it is imperative his classroom teacher educates him about phonics in a meaningful context and allows him to be actively involved in his learning process. A. focused on the impact gender has on the literacy development of Pete ... As would be the case with countless other children, Pete would significantly benefit from a teaching plan that supports and values his individual needs as a literacy learner. Listed below are a number of resources and strategies that can be implemented within the classroom to facilitate Pete, and for that matter, other students in the class not unlike himself ... (On line Contribution, March 30, 2007)

The contribution shows a grasp of the vocabulary and concepts of literacy professionals and indicates that the group has been able to consider multiple perspectives on the issue at hand. For lecturers it

was pleasing to see the group showing evidence of the professional goal of “being highly skilled planners of instruction which meets the needs of diverse learners” (Snow et al., executive summary). Although not all groups were as proficient as this one, many of them improved their use of the case study genre during the course of a semester. In 2006 when three case studies were undertaken, initially many groups’ discussions were assessed as barely satisfactory; by the final one many groups received high points.

The use of case study in preservice education has been seen as valuable (Hsu, 2004; Sorin, 2004; Sutherland et al., 2005). In emphasizing active, cooperative learning and higher-order thinking the case study fulfills many of the principles of effective teaching in higher education as enunciated by Chickering and Gamson (1987) and incorporated into an online learning environment by Bangert (2004). Sutherland et al. (2005) used a similar approach by providing an “annotated model answer” (p. 556) as a guide to preservice teachers in their discussions.

7. Conclusion

This investigation highlighted differences between using online discussion for sharing and communication among novice educators and using it to promote professional discourse. While user-friendly technology and well-planned tasks and assessment facilitate useful sharing and communication, the promotion of critical professional discourse necessitates more active intervention by experienced educators. Findings in this study demonstrate that increasing the role of the instructor increases the possibilities for student learning. The study opens areas for further research. Of particular interest is whether the technology can be used to make the professional discussions more on-going as the preservice teachers are involved in ‘real’ cases in their work in schools during practice teaching. Research such as those reported in Hsu (2004) and Otero et al. (2005) have undertaken to encourage this kind of reflection and critique among relatively small groups of participants. How can this be done among much larger cohorts where instructors are ‘in charge of’ multiple discussion groups? Further, what are preservice teachers’ perceptions of the role of the instructor in these structured case study discussions? Do they see themselves as receiving sufficient instructor attention? Research into the

pervasive medium of online discussions needs to keep up with its use.

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