

The potential of on-line lectures: Reaping the rewards of 'Third spaces'

Author

Elsden-Clifton, Jennifer, Jordan, Kathy

Published

2011

Journal Title

Studies in Learning, Evaluation, Innovation and Development

Version

Version of Record (VoR)

Rights statement

© The Author(s) 2011. The attached file is reproduced here in accordance with the copyright policy of the publisher. For information about this journal please refer to the journal's website or contact the author(s).

Downloaded from

<http://hdl.handle.net/10072/381479>

Link to published version

<https://www.cqu.edu.au/>

Griffith Research Online

<https://research-repository.griffith.edu.au>

The potential of on-line lectures: Reaping the rewards of ‘Third spaces’

Jennifer Elsden-Clifton, RMIT, jennifer.elsden-clifton@rmit.edu.au

Kathy Jordan, RMIT, kathy.jordan@rmit.edu.au

Abstract

This paper explores the learning potential of rapidly developing Web-based lecture software programs such as Elluminate *Live!*® (Elluminate). Specifically, it examines how this technology can challenge conventional notions of control and interaction associated with face-to-face environments and synchronous computer-mediated communication. In doing so, we argue that the technology can potentially create ‘third spaces’ which displaces power traditions, sets up new structures which gives rise to “a new area of negotiation, meaning and representation” (Bhabha, 1990, p. 211). This paper uses data collected from an Elluminate session with beginning teachers within a professional education program in Victoria, Australia. This research provides a small case study of how beginning teachers used aspects of the technology to take up third spaces. It also explores some of the potential rewards to be reaped from the different interactions that characterise this third space, including: creating a space for learners to have more control over interaction; providing a bridge between the learners’ experiences and content; and a shifting of the traditional power relationship of instructor/learner present in face-to-face contexts.

This article has been peer-reviewed and accepted for publication in *SLEID*, an international journal of scholarship and research that supports emerging scholars and the development of evidence-based practice in education.

© Copyright of articles is retained by authors. As an open access journal, articles are free to use, with proper attribution, in educational and other non-commercial settings.
ISSN 1832-2050

Introduction

The recent development of on-line lecture software such as Elluminate, which enables synchronous multimedia and possible many-to-many interactions, has been greeted with some enthusiasm in computer-mediated-communication (CMC) and educational fields. Primarily, Elluminate has the potential to provide a complement to asynchronous and synchronous technologies traditionally used in distance education and higher education. Within educational research, asynchronous communication (discussion or bulletin boards) is commonly perceived as beneficial to learning as participants can interact at a time and place that suit them; they can delay participation and return to it later; and are therefore more likely to engage in deep and thoughtful discussion (Johnson, 2008). Synchronous technologies, usually single media and often text-based such as chat and instant messaging, have been called the ‘poorer cousins’ of asynchronous technologies (Murphy & Ciszewska-Carr, 2007) and have been used less within distance education and researched less. Perceived limitations relate to needing participants to be present at the one time, and the view that their value is more as a

conversational or social tool rather than an educational one (Johnson, 2008). Both asynchronous and synchronous CMC have historically been used as an addition or supplement to mainstream face-to-face practice. Face-to-face spaces (such as those associated with lectures in higher education or presentations in professional learning) are characterised commonly as taking place in one location with participants being physically present and controlled by an instructor/teacher.

Communication, whether it be face-to-face or enabled by computer-mediated technologies, requires a level of interaction. Without a level of interaction, a network “would comprise a series of statements linked only by the theme or subject under discussion – we would be faced with a collection of monologues and one-way statements” (Henri, 1992, p. 128). Within each of these settings, however, synchronous, asynchronous and face-to-face interactions are characterised differently which in turn influences the way power, control and learner engagement is positioned. For instance, in conventional face-to-face lectures, interaction between instructor and participants is minimal as the role of the lecture/presentation is for information to be transferred from one to many participants. Control, therefore, rests with the instructor, as expert, and there is little capacity for participants to be involved perhaps leading to an impersonal learning experience. Asynchronous and synchronous communication technologies, depending on their capacities and designs and the intent of instructors, can enable a different level of interaction, one that is many-to-many, and one that is more controlled by participants, resulting in a more personal experience. This interaction, however, is often guided by a moderator or facilitator who, according to Salmon (2000), takes on the role of leading, motivating and stimulating the interaction as well as guiding or weaving the topic to keep it on task.

The capabilities and features of Elluminate offer multiple ways of engaging and interacting as participants are enabled to talk over the internet with full audio, text and chat, as well as share video, whiteboards, multimedia files and applications within a web browser interface. Elluminate in a sense brings together some characteristics of interaction from face-to-face and CMC settings but also opens up a third space. This paper utilises third space theory to analyse the ways in which interactions are controlled and shaped between beginning teachers and an instructor within an Elluminate enabled professional learning session.

Third space theory

The notion of ‘third space’ has been used in different contexts, for various purposes and with different foci. There are many iterations across disciplines; however, it is often associated with exploring and understanding the space “in between” (Bhabha, 1994, p. 1) two or more discourses or conceptualisations. A productive way to explain third space is by drawing upon Soja’s (1996) triad of: Firstspace, Secondspace, and Thirdspace. In this explanation, Thirdspace is a space where “everything comes together” (Soja, 1996, p. 56) by bringing together elements of Firstspace and Secondspace, but also by extending beyond these spaces. We have used this notion to conceptualise how we see the different spaces of our research. For instance, in this paper we have associated first space with face-to-face instruction and second space with single media synchronous CMC technologies. The third space we associate with Elluminate as we believe it “gives rise to something different, something new and unrecognisable, a new area of negotiation, meaning and representation” (Bhabha 1990, p. 211). This paper argues that Elluminate has the potential to bring together elements of first and second spaces such as the instructor presenting knowledge and synchronous discussion or chat. It

suggests also that it may be possible to open up these first and second spaces, thereby disrupting the traditional model of instructor as expert or moderator as shaper and thus, shifting the power relationship traditionally present in face-to-face and online spaces.

Within learning contexts, Moje, et al., (2004) summarised the three main ways that theorists have conceptualised third space which includes: as a bridge; navigational space; and a space of cultural, social, and epistemological change. To explain in more detail, the first way in which third space is perceived is as space to build bridges between knowledge which, according to Moje et al. (2004), helps learners see connections, contradictions and bridge competing and contradictory understanding. This concept was illustrated in Moje's et al.'s (2004) research into how students bridged inside and outside schooling literacy and in doing so created a space for typically marginalised voices or stories.

Third space can also be theorised as a navigational space in which participants can cross over or draw upon different binaries, discourses or discursive boundaries. In other words, third spaces can be seen as hybrid learning spaces in which students' linguistic and cultural forms, goals, or ways of relating transform the official space of the school, teacher, or classroom enabling participants to become more central to their learning and gain access to alternative knowledge (Gutierrez, Baquedano-Lopez, Alvarez, & Chiu, 1999). This was evident in Elsdon-Clifton's (2006) research into the visual arts created by migrant students, which found that students used their art to navigate between cultures and in doing so, negotiate being connected to, and 'in-between', different countries, cultures and spaces.

Finally, third space can be seen as a place of change or transformation where competing knowledge and ideas are brought into 'conversation' to challenge and reshape that leads to new understandings, to new forms of learning and to knowledge projection (Moje et al., 2004). In doing so, there is the potential to resist cultural authority and challenge dominant conceptions of learners and learning.

To summarise, the concept of third space has been adapted to refer to the possibility of imagining (and inhabiting) an alternative space, where the traditional hierarchical relationships of expert/novice, instructor/learner in face-to-face and online conventions can be challenged and 'rewritten'. In this paper we draw on all three views of third space (i.e., a bridge between competing knowledge, a navigational space to cross knowledge spaces and a transformative space where knowledge is challenged and reshaped, to achieve our research aim of analysing the ways in which learners (beginning teachers) and the instructor interacted.

Researching third spaces

The use of Elluminate as a means of facilitating interaction in education and professional learning contexts is under researched and in the main these few studies relate broadly to participant perceptions of using the technology. For example, Fuller (2009) used Elluminate to enhance the teaching and learning experience of Bachelor of Business students in Australia. In the first semester, Elluminate was used to provide additional online workshops, but then expanded to facilitate a weekly online workshop in the second semester. In these sessions, instructors imposed limitations on the use of audio, in order to minimise possible 'traffic'. Survey data revealed positive perceptions of Elluminate. Murphy and Ciszewska-Carr (2007) reported on the use of Elluminate to deliver lectures, e-presentations

and/or on-line office hours, as part of a Distance Education course in Canada. The eight instructors were later interviewed about their perceptions of using this technology and gave generally positive feedback. They also reported that the chat tool was used to deal with technical issues rather than pedagogical ones, and that the amount of social interaction and side conversations were distracting to interactions around course content.

This paper explores the potential of the different aspects of the technology and how they influence interaction between instructor, learner and content through chat and audio. Therefore, we draw upon the theory of third space to analyse: where did the Elluminate technology allow participants to make connections that bridge the theory and their own experiences and practice binary that often exists in face-to-face contexts? How did the beginning teachers attempt to shape, control or transform the original intent of the presentation? How did the voice and text transactions affect and permeate one another and lead to the production of new ways of talking, thinking, being, seeing and interacting? In what ways did beginning teachers interact with one another, and with the instructor?

Elluminating third spaces

This paper reports on the use of Elluminate within a larger Department of Education and Early Childhood, Victorian initiative, which aimed to support beginning teachers when facing the challenges of being new to the profession. This program used a blended approach to learning, with some workshops being held in face-to-face mode, as well as, synchronous chat sessions facilitated by a moderator, an asynchronous discussion board, social networking spaces and Elluminate presentations. In 2010, a pilot program was conducted, and data from this pilot inform this paper. In this pilot study, some 64 beginning teachers, from a mix of primary and secondary and specialist schools from across the state of Victoria participated.

Data for this paper are drawn from one of the three Elluminate lectures delivered as part of the pilot. Each one of these sessions centred on topics considered relevant to early career experience, including curriculum and assessment, creating a positive classroom environment and relating to parents and guardians. These presentations were delivered by an instructor and moderated by another. Audio capacity was enabled, but confined to a selection of students who had volunteered for this role. To facilitate greater participation, several polls using the poll function were used as well as icons (hand capping, and smiley faces) to gauge reaction or opinion to a question. Break-out rooms were also used to provide a more intimate and directed discussion based on cognate groups (for example, primary and secondary school settings).

One Elluminate session, on the topic of feedback was purposively selected as the focus for this paper as it evoked opportunity to consider the presence of a possible third space as a number of the functions of Elluminate were used in the session. This session provided three sources of data: an electronic copy of the PowerPoint presentation uploaded into the Elluminate whiteboard, a transcript of text spoken by the instructor, and a transcript of the chat text spoken by beginning teachers, the instructor and the moderator. In this one-hour session, 26 beginning teachers chose to participate, as well as three online coaches, two moderators and one instructor. Some 256 chat posts were made in this session, with 247 posts being made by beginning teachers, six by online coaches, three by the moderators and none by the instructor.

The three sources of data, the PowerPoint presentation, the instructor transcript and the participant chat transcript were then compared and analysed, with three episodes identified for detailed analysis. According to Stacy and Gerbric (2003), there are practical difficulties in analysing large amounts of communication, as well as issues in selecting how to analyse content. We have taken their advice and adopted “a pragmatic but systematic approach” (p. 496) resulting in our decision to use analysis points as the message units to be analysed and Henri’s (1992) system of classifying interactivity as explicit, implicit or unconnected as a guiding lens.

Episode 1: Interaction in Elluminate

This first episode demonstrates the various levels of interaction that may be present in an Elluminate presentation. For instance there is evidence of: chat interaction between beginning teachers; chat discussion in response to presentation/content; instructor response to what was written in the chat; and beginning teachers’ audio interaction in response to instructor. The complexity of these interactions can be seen in Table 1.

Table 1: Analysis point 1

Beginning teacher chat	PowerPoint presentation	Instructor audio
<p>FC¹: I don’t believe that feedback is given enough to the ‘gifted’ students to extend them.</p> <p>NC: :) HE</p> <p>SS: I agree FC. Thinking back to today’s lesson that is exactly what I did- especially because they were slightly unsettled.</p> <p>NC: trial and error SS</p> <p>HE: Haha FC. Did you think what I said was too harsh?</p> <p>NC: It’s just the first thing we do Stacey, is pick up on those who are in our faces</p> <p>NC: Not at all HE</p> <p>SS: agreed</p> <p>HE: That's okay, FC. Thanks for clearing that up :)</p>	<p>Research</p> <p>‘... the quality of teacher-student relationships is the keystone for all other aspects of classroom management. In fact, our meta-analysis indicates that on average, teachers who had high-quality relationships with their students had 31 percent fewer discipline problems, rule violations, and related problems over a year's time than did teachers who did not have high-quality relationships with their students.’ (Mazarno, Mazarno & Pickering, 2003)</p>	<p>It is worthwhile just pausing for a minute and asking yourself just who got your feedback today and who missed out on your feedback today. If anyone’s brave and wants to respond to one of those “who got your feedback today and who missed out on your feedback?”, I’d be happy for you to put your hand up and have a go.</p> <p><i>NC: I know I’m really guilty of giving the feedback to the louder kids (in your face and doing that obvious stuff) compared to the quieter kids who are quietly doing their work.</i></p> <p><i>RK: That’s pretty much what I was going to say as well. It’s always the loud kids that get your attention, so you go to them first . . .</i></p> <p><i>BN: I’ve spent a long time during the last break writing up feedback for all my year 10s and linking it altogether and today was the day I sat down to provide that back to them . . .</i></p> <p>FC: made a really interesting comment on the chat that often not enough feedback is given to the gifted students to extend them.</p>

This first analysis point occurs midway in the Elluminate session where the instructor is connecting the research on feedback with beginning teachers’ practice.

¹ Initials of the beginning teachers were used to maintain anonymity.

The instructor uses a PowerPoint slide to present a research quote about the connection between feedback and classroom management. Then using the audio function, she poses a reflective question “who got your feedback today and who missed out on your feedback?” inviting an audio response from beginning teacher participants. Three beginning teachers explicitly reply with two commenting that they usually give feedback to the “louder kids”. At the same time four beginning teachers use the chat tool to interact explicitly to both the instructor’s question and the other beginning teachers’ audio responses. The instructor using audio then responds to the chat discussion by reinforcing the appropriateness of a particular beginning teacher’s response.

This four-minute episode suggests that interaction in Elluminate when text, whiteboard and audio tools are used can occur in multiple spaces which interweave, intersect and rebound off each other. Initially, the instructor’s behaviour as she delivers content is typical of what we associate with face-to-face instruction or first space; however, they were then able to use the complexity designed in the Elluminate software to chat about their responses with other people and post their thinking and reflection which may or may not be encouraged or delayed in face-to-face environments. The audio responses by beginning teachers to the instructor question can be seen as typical of the spontaneous interaction which occur in synchronous environments, or second spaces; however, this space is not regulated or shaped by a moderator which is the tradition within synchronous chat. Instead the interaction allows for beginning teachers to engage with content and each other in different ways than would be expected of them in a face-to-face or synchronous environment.

Episode 2: Who is the expert?

This second episode demonstrates how when in third space, beginning teachers are able to navigate between first and second spaces, and in the process, create a third space which enables them to share their own ideas and experiences and ultimately taking control of this space, if for a while. Details of this episode are shown below in Table 2.

The second analysis point occurs at the beginning of the presentation as the instructor explores what feedback is and some of the ineffective ways in which feedback is provided to students in schools. At this time, the instructor activates a PowerPoint slide with the phrase ‘emptiness of a tick’ to convey a key argument that the use of ticks have little value. Using the audio function, the instructor draws on her own experience from interviewing and surveying learners and outlines a number of strategies around feedback. At the same time in the chat window, some nine beginning teachers interact with the content presented. A beginning teacher engages explicitly with the focus being explored by the instructor and on the PowerPoint slide, and comments that “a tick is really just saying ‘yes’ I have opened your book to this page”(KV). Another beginning teachers continue this line of conversation, until another poses the question “tick or tape” (LN), which turns the conversation specifically onto taping as a means of providing feedback. The instructor then talks about giving specific and original feedback to students, with several beginning teachers supporting this idea, until a beginning maths teacher, questions whether this strategy is appropriate in all discipline areas, posting, “What can we find that is original or unique about $2 \times 2 = 4$?” (BN) Other beginning teachers join in this conversation and provide advice and feedback about how this might be achieved, including the comment

that, “well with maths it's more important to give feedback based on their misconceptions and what they have gotten incorrect” (KV).

Table 2: Analysis point 2

Beginning teacher chat	PowerPoint slide	Instructor audio
KV: a tick is really just saying 'yes, I have opened your book to this page...'	Research	My interest in feedback came from some research I was doing . . . What came back from students is they like some of that individualism, they like that they can actually understand you've read their work and know them, know their work and given feedback based on that. I learnt to find something unique or original about their work if I was going to give a tick. But there were a lot of things that my peers tried to make feedback more effective. . . such as devising oral feedback and taping it so they could revisit the feedback that we'd given them orally.
SD: i think it would be a great idea	Emptiness of a tick	
NC: we do that in many of our classes at school, but all day		
LN: tick or tape?		
NC: tape		
MN: wow		
LN: Cool		
HE: the taping idea is good		
HE: I'd be scared of what i might see though haha		
MJ: Love the taping idea		
BN: What if it's a maths problem? What can we find that is original or unique about $2 \times 2 = 4$?		
NC: i suppose commenting on their working out??		
KV: well with maths it's more important to give feedback based on their misconceptions and what they have gotten incorrect.		
FC: how they go there		

Conventional lectures or first spaces are based on the notion of control of content by the instructor and limited interaction with participants. In this second episode, Elluminate is used as a navigational space or bridge in which beginning teachers are able to cross over or disrupt the boundaries around the expert/novice binary, for example, challenging the instructor and providing peer feedback rather than waiting for the 'expert' response or clarification. The interactions between the beginning teachers demonstrate third spaces; spaces in which the beginning teachers work together, question each other, and share ideas without the traditional instructor correction. Ultimately these beginning teachers take ownership of the interaction bring in their contexts and concerns, and challenge what counts as important.

Episode 3: Who controls space?

This third episode demonstrates how when in third space, beginning teachers are able to take control of this space, if for a while, reshaping or transforming it into a new learning space. Details of this episode are shown below in Table 3.

This third episode occurs towards the beginning of the session. The instructor uploads a PowerPoint screen with a model of different types of feedback. As part of this discussion of this model, the instructor draws attention to how goal setting can be an important part of feedback and operates at four different levels. The instructor then illustrates this point by linking back to an earlier example. The

instructor then moves on to another point. The beginning teachers respond specifically to a small part of what the instructor has just said and turn discussion explicitly onto goal setting. Some 40 interactions then result involving 14 beginning teachers, over half of the 26 participants in the session.

Table 3: Analysis point 3

Beginning teacher chat	PowerPoint slide excerpt	Instructor audio
WM: I agree Felicity, sometimes you just give a positive or negative response and that's it	Effective feedback	But if you think about it, when you're setting your criteria's or your rubrics up, in answering "where am I going?" they have to include something about the task, the process, how they can self monitor and regulate their actions, as well as how they might personally evaluate how they are going. So, if we think about that tart that we showed at the very start, some of that feedback I might say is "the tart was very well presented on the plate, you did an excellent job with the decoration". That's very much that task level of feedback.
HT: yes some students tend to call you more, and then there are the quiet ones who need the attention but aren't as vocal about it	answers three questions: Where am I going (the goals)? How am I going? Where to next?	
MN: agreed increasing individual interest in feedback is difficult		
LN: I tried developing a proforma indicate different levels in each criteria then wrote short comment to save time		
HE: Some students at my main school are writing their own rubrics.	(see appendix 1 for full slide)	
HE: for assessment-they've written them as a class.		
MN: that is a great way for students to understand topics		
HE: it's personal to them.		
WM: Then they will always understand the feedback		
SS: they also take a lot more pride in their work		
MN: :) great		
HT: good idea Erin		
HE: Cheers. I thought it was good when I saw it.		
BL: yes, it gives meaning and encourages them to be more active/responsible for their own learning		
HE: that's right, and they're marked accordingly.		
BR: I know even with the preps we tell them what the goals for the week are so they can work towards them. I developmental one is to use teacher feedback.		
LN: Can I save this table?		
HE: I've seen prep classes with even really simple goals. They keep them on their desks to remind them.		
Moderator : The powerpoint will be up on Blackboard tomorrow		
HE: thanks		
LN: Ta		
Moderator: The slides will be available to everyone on the Blackboard after this session, so you can access this material there		
LN: Thank you		
OR: Fantastic!!		
RB: They are big on the wall for my students.		
HE: that's great too		

HE: I think each year level could use the goals listed somewhere. Them seeing it all time makes them not want to give up.

KV: my class has goals in our 'time capsule' hanging from the roof so whenever they see it they are reminded of what their goals are, yet others don't have to see.

BD: You could get them to record our feedback, we could discuss it with the students and then have them revisit it before the submit the next task?

HE: Oh wow, a time capsule, what a great idea!

YM: we try to praise the effort not the result :)

NC: im guilty of that

KV: yeah thanks erin, we opened it today and they looked at how they had been going, and adjusted it for the last term

LN: Hillbricks? Hillbrix?

HE: I might have to pinch that idea, Victoria :)

BD: How do you spell Hilbricks?

LN: Thanks

BD: thanks

SS: thats a very good idea victoria

KV: wow, stacey and erin, thanks for the praise :)

SD: i might steal that idea too for my class

HE: it's just so original

This third episode highlights how these beginning teachers use chat to respond to both the instructor and other beginning teachers, and how they navigate both the first space and second space, and introduce a third, one which they control and shape to suit their learning interests and needs. For instance, at the start of this episode, first space behaviours are evident, in that a formal environment has been created, the instructor is controlling the space, and the beginning teachers await knowledge to be imparted; but, within several minutes, the instructor who continues to remain in this first space is deposed as there has been a shift in the power relationships and a new space emerges, a third space navigated by the beginning teachers. In this space, beginning teachers take control of the content, readily shaping it by drawing on their own experiences, providing a space for their often marginalised voices and stories in professional learning. This third space is interesting as there was not a moderator present to bring the chat 'back on track' or in line with the presentation which may have happened in synchronous CMC. Similarly, within a face-to-face setting this amount of 'chat' may become a behaviour management issue and discouraged. Interestingly, at times the participants at times interrupt the 'unofficial' chat discussion and refer back to the 'official' instructor content or audio (e.g., "How do you spell Hilbricks?"(BD) is a question in to relation to some feedback strategies by Hillbrick (2004) being discussed by the instructor), so it is assumed that the participants were still listening and interacting on some level with the first space content. In this space, there is a sense that beginning teachers were empowered to destabilise what counts as official knowledge.

Conclusion

This paper has reported on the ways that 26 beginning teachers and an instructor interacted in one Elluminate session as part of a much larger professional learning program. It has suggested that when using this technology, beginning teachers are able to navigate, bridge and transform spaces: first spaces associated with face-to-face instruction, second spaces associated with one media synchronous technologies, to create and take up hybrid or third spaces. When in this third space, beginning teachers can take control of this space, shaping it to suit their own needs, one which is not necessarily in line with that intended by the instructor. It suggests that the use of Elluminate, because of its multi modal capacities enables, disruption of first and second spaces and ultimately challenges who controls the interactions and the space.

This small scale study has several implications for future practice. First, it suggests that Elluminate can serve as a valuable tool for professional learning, as it does overcome some of the shortcomings of earlier text-based synchronous communication technologies. Second, it suggests that Elluminate can serve as a bridge from ‘first spaces’ and ‘second spaces’ conventionally associated with face-to-face and synchronous communication, to allow participants to learn within third spaces that may provide a space to draw on their own contexts and concerns and include their stories. Third, as a result of facilitating this third space, Elluminate can provide a valuable space for learners to have more control of interaction and therefore better meet their needs, particularly when compared to the controlled spaces associated with first space and second space; however, this is dependent on functions such as the audio tool and chat tool being enabled by the moderator. Fourth, it can enable a shift in traditional power relations between instructor and participants, Elluminate could therefore open up possible challenges to conventional notions of the instructor and moderator role, and how interaction is positioned within learning.

This research outlined some of the potential rewards to be reaped for creating opportunities for third spaces in education. It is also important to support this process by asking: what are some of the risks and benefits for learner interacting within third spaces and breaking barriers? How can educators scaffold the third space experience? How do we research interaction and learning within this rapidly developing on-line environment? This study and the questions or implications it evokes highlights the need for further examination with an educational focus, as this research showed that the interaction within the Elluminate technology may provide a space where learners’ experiences are taken up in productive ways and used to inform, enrich or transform their professional learning.

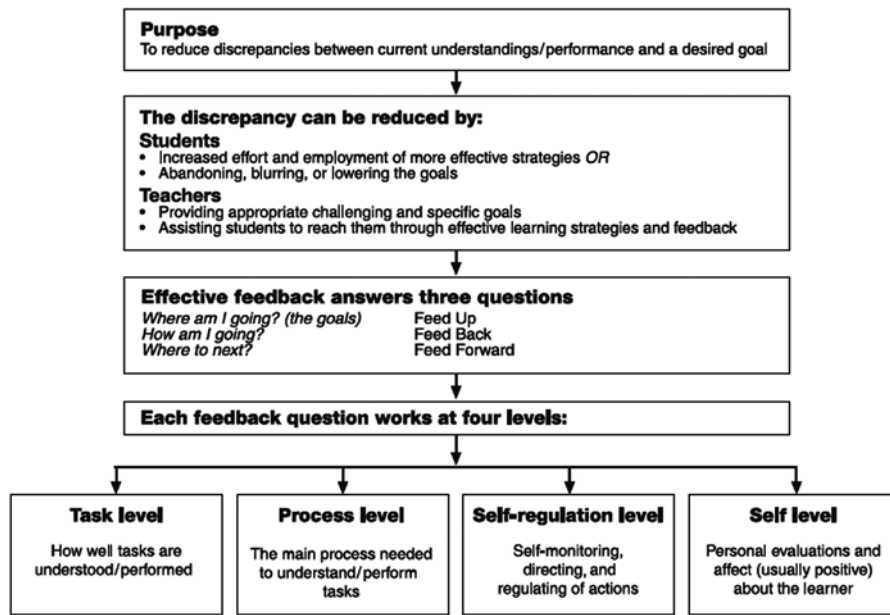
References

- Bhabha, H. (1994). *The location of culture*. London, UK: Routledge.
- Elsden-Clifton, J. (2006). Constructing “Thirdspaces”: Migrant students and the visual arts. *Studies in Learning, Evaluation, Innovation and Development*. 3(1), 1-11.
- Fuller, J. (2009). Engaging students in large classes using Elluminate. In *Proceedings of ATEC 2009 14th Annual Australasian Teaching Economics Conference* (pp. 84-97), School of Economics and Finance, Queensland

University of Technology, Queensland University of Technology, Brisbane,
Queensland, 13-14 July 2009.

- Gutierrez, K. D., Baquedano-Lopez, P., Alvarez, H. H., & Chiu, M. M. (1999). Building a culture of collaboration through hybrid literacy practices. *Theory Into Practice*, (38)2, 87-93.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Education Research*, 77(1), 81-112.
- Henri, F. (1992). Computer conferencing and content analysis. In A. R. Kaye (Ed.), *Collaborative learning through computer conferencing: The Najaden Papers* (pp. 117-136). Berlin, Germany: Springer-Verlag.
- Hillbrick, A. (2004). *Tuning in with task cards: Middle primary*. Carlton, Vic: Curriculum Corporation.
- Johnson, G. M. (2008). The relative learning benefits of synchronous and asynchronous text-based discussion. *British Journal of Educational Technology*, 39(1), 166-169.
- Marzano, R. J., Marzano, J. S., & Pickering, D. J. (2003). *Classroom management that works*. Alexandria, VA: ASCD.
- Moje, E., Ciechanowski, K., Kramer, K., Ellis, L., Carrillo, R., & Collazo, T. (2004). Working toward third space in content area literacy: An examination of everyday funds of knowledge and discourse. *Reading Research Quarterly*, 39(1), 38-70.
- Murphy, E., & Ciszewska-Carr, J. (2007). Instructor's experiences of web based synchronous communication using two way audio and direct messaging. *Australasian Journal of Educational Technology*, 23(1), 68-86.
- Salmon, G. (2000) *E moderating. The key to teaching and learning online*. London, UK: Kogan Page.
- Stacey, E., & Gerbic, P. (2003). Investigating the impact of computer conferencing: Content analysis as a manageable research tool. In G. Crisp, D. Thiele, I. Scholten, S. Barker, & J. Baron (Eds.), *Interact, integrate, impact: Proceedings of the 20th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education* (pp. 494-505).. Adelaide, Vic, 7-10 December.
- Soja, E. W. (1996). *Thirdspace: Journeys to Los Angeles and other real and imagined places*. Malden, MA: Blackwell.
- Wilson, G., & Stacey, E. (2003), Online interaction impacts on learning: Teaching the teachers to teach online. In G. Crisp, D Thiele, I. Scholten, S. Baker, & J. Baron (Eds.), *Interact, integrate, impact: Proceedings of the 20th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education (ASCILITE)* (pp. 541-551). Adelaide, SA, 7-10 December.

Appendix A:



(Hattie and Timperly, 2007)

Figure A1: A model of feedback to enhance learning. From The power of feedback by J. Hattie and H. Timperley, 2007, *Review of Educational Research*, 77(1), 81-112. doi: 10.3102/003465430298487