Who's doing all the work? Using a technology-enhanced learning resource to develop student autonomy

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Abstract
This paper explores the efficacy of a technology-enhanced learning resource designed by tutors to develop their students' understanding about academic writing and their confidence in working independently. Two senior university tutors and a learning technology advisor collaborated to produce a series of screen-capture artefacts in which extracts of academic submissions were presented together with voiceovers by the tutors identifying, discussing and analysing features of academic level 6 writing. A self-assessment exercise was also devised that enabled students to apply what tutors had modelled for them and evaluate their own understanding of what constitutes successful academic writing. As the resource was disseminated through the University's VLE, students were able to engage with it easily and regularly and at a time and in a place that suited them. It was hoped that students' engagement with this resource would encourage them to work more independently and thereby alleviate some of the time-costly demands on tutors of students requesting one: one clarification and reassurance. Student feedback indicated overwhelmingly that the resource enhanced their understanding and confidence and comprised a user-friendly tool that facilitated working autonomously, with some students requesting additional, similar resources. Dissemination of this model within and across faculties has resulted in other tutors using this approach to support the development of student understanding and autonomy across a range of academic areas.

Key words
Student autonomy; technology-enhanced learning; assessment; tutor workload; academic writing.

Context

High levels of student satisfaction are directly correlated with high levels of student-tutor contact (Ashby *et al.*, 2008), particularly as the increase in tuition fees has perpetuated the notion of 'student as customer' (Thorne and Cuthbert, 1996). Faculty priorities and market forces, driven by ratings of student satisfaction such as those collated by the National Student Survey (NSS), as well as a 'sense of role',

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can make tutors feel obliged to respond to student requests for additional contact and input. However, this risks creating an unmanageable increase in tutor workload (Owen, 2002) and has also raised concerns about the danger of students being over-supported and spoon-fed and thereby denied the opportunity to develop the autonomy they need to succeed both academically and professionally.

The BEd (Hons) Primary Education programme at the University in England where this research was carried out operates an assessment schedule that features mostly written coursework. Feedback from BEd (Hons) students in the final year of their programme, gathered both anecdotally through informal conversations and quantitatively through in-house programme evaluation questionnaires, indicates that one of their main concerns is 'making the jump' from writing at academic level 5 (commonly associated with undergraduates in the second year / stage of their academic programme) to academic level 6 (the highest level of undergraduate academic writing and pertaining to final year undergraduate students). A cogent argument can be made for providing focused support for students about how to write successfully at level 6 before they submit their first assignment, thereby minimising the risk to grades which exists when students have to 'stumble around in the dark without really understanding what level 6 writing looks like so we just have to have a go and submit it and just hope that we've got it right and then find out when it's too late that we haven't' ('Laura', BEd (Hons) final year student, in discussion, June 2011). Many tutors, including those at this University, would argue that they already provide students with guidance about academic writing in the form of detailed module handbooks or lead lectures or workshops or, indeed, all three. However, the fact that students persist in asking for further clarification and reassurance, often through numerous emails to their tutors, suggests that this support is not as effective as expected. Moreover, having to respond to individual requests for help both increases tutor workload and decreases student autonomy.

The BEd (Hons) Primary Education programme at this University is currently undergoing a process of revalidation and, by requiring module designers to build in formative assessment events as well as summative ones, a valuable opportunity now exists to integrate learning loops (Poulos and Mahony, 2008; Laurillard, 2005) within and across the programme, thereby allowing students greater opportunity to reflect and act on tutor input at the 'thinking' and draft stages of writing submissions, rather than having to wait until receiving a piece of marked, graded work before understanding which aspects of their content and style need improvement. Devising a resource that enables students to develop their understanding and confidence before submitting written work could therefore be seen to be a productive use of tutor time, and disseminating it to the whole cohort could be an efficient alternative to dealing piecemeal with individual requests for support and clarification.

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These factors – tutor workload; student anxiety about level 6 writing; and the need for supplements and alternatives to summative assessment – have been recognised, and an attempt made to address them, in the design and creation of a multimodal, technology-enhanced artefact that, by providing support material which students can access independently to develop their own academic writing skills, comprises an innovative resource that both enhances student autonomy and makes more efficient use of tutor time.

Aims of the Research

This research aims to explore how a multimodal artefact can be used to develop students' understanding of how to write successfully at academic level 6. In order to meet this aim, a number of objectives have been identified, as follows:

- To use technology to design a learning resource that is timely, easily accessible, engaging and productive.
- To enable students to develop their learning through a 'see, apply, assess' approach.
- To build students' confidence in working autonomously.
- To use tutor time effectively and efficiently.

Review of Literature

The aims and design of this investigation have been informed by educational research literature that explores issues related to student autonomy, assessment and the use of technology, in order to strengthen this study's currency and relevance.

Student Autonomy

The market-driven pressure to generate high National Student Survey (NSS) scores for student satisfaction is having a profound impact on tutor workload and it is becoming increasingly difficult to provide the 'high-quality, consistent and equitable support' that all students expect (Dhillon *et al*., 2008, p.290) in an expanding system of higher education. At the University in England where this research was carried out, this translates into everyday practice as tutors feeling 'besieged' ('Caroline', Senior Lecturer in Initial Teacher Education, personal communication, February 2011) by high numbers of student emails asking questions about assignments. Tutors are exasperated further by the fact that many of these questions are about information that has already been disseminated to the students in various forms through module handbooks, lead lectures and workshops. This situation suggests that either the information is still not clear enough for many students to understand, despite it being provided in various and detailed formats, or that students lack confidence in their own ability to interpret it and need the reassurance of 'checking in' with tutors. In both cases, the outcome is that tutors are spending increasing amounts of time dealing with low level but persistent

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interruptions and students are sidestepping the process of working independently and taking ownership of their learning. Biggs' concern (2003, p.128) that students 'wish to be spoon fed and in turn they are spoon fed' is reflected in the warning that increasing tutor support can decrease student autonomy by 'perpetuating a state of dependency' (Light and Cox, 2001, p.141). The principal support options open to tutors, and their potential outcomes, can be summarised as follows:

- Tutors provide the personalised support that students expect but, by doing so, greatly increase their own workload -> tutors can 'fear [of] being overwhelmed by the demands of students' (Owen, 2002, p.14).
- Tutors restrict support in order to promote autonomy -> students may feel abandoned and anxious and 'perceive certain staff to be unapproachable' (Lea and Farbus, 2000, p.23) -> students 'gravitate to those who are available' (Owen, 2002, p.14) -> unequal distribution of workload amongst tutors -> tutors feel resentful.
- Tutors restrict the guidance they offer to those who shout loudest -> equality of opportunity is compromised -> both students and tutors consider this unjust.

This research, prompted by both anecdotal and evidence-based findings, investigates one innovative, efficient way to manage tutor workload and build student autonomy.

Assessment

Assessment is considered central to education (Taras, 2005), but research indicates that students are often dissatisfied with the feedback processes used in Higher Education (NSS survey, 2005-2009). It is incumbent upon tutors, therefore, to identify the strengths and areas for development in their assessment practices and, where appropriate, to explore other approaches. One of the elements of feedback that Price *et al.,* (2010) explore is the temporal dimension, positing that what is important is not just the timing of the feedback but also its longevity, its relevance to students long-term, and the dissonance between how this is perceived by tutors and by students. Tutors may believe that their feedback supports students in writing future assignments, but students may only see its applicability in relation to that one essay. This finding is echoed in Hughes' suggestion (2011, p.359) that tutor comments that are generic rather than 'task orientated' are more usable and useful to students. Price et al (2010, p.284) also propose that descriptive diagnosis is, in itself, insufficient, citing comments from tutors and students such as: 'How does telling students to be more analytical help them acquire the skill?' (staff) ... What does clarify your aims and objectives mean? (student)*'.* These comments reveal the frustration of both stakeholders and indicate that simply telling students what they should do to improve does not help all students to understand what that means in practice. Higgins *et al*., (2001) suggest that shifting the emphasis from feeding back to feeding forward - an assessment practice that Sadler (2010, p.538)

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proposes occurs when 'communications are future-oriented' - will better facilitate student autonomy. Similarly, Walser (2009), in her action research study of self-assessment as an HE instructional strategy, found that self-assessment facilitates the development of students' metacognitive skills, helping them to take more responsibility for their own learning and building reflection as a professional trait. Tan (2008, p.27) agrees, proposing that the ability to self-assess effectively is 'a critical ingredient for students' lifelong learning'.

The design of this project's artefacts has been informed by these findings that tutor support for assignment writing should be timely, relevant and usable long-term; that it should move beyond description; that it should offer feed forward support, and that it should incorporate self-assessment strategies.

The use of technology

Technology is increasingly being used in HE, largely because of its flexibility in relation to time, place and pace (Inglis *et al*., 2002) enabling students to, for example, replay information as many times as needed (Heilesen, 2010). JISC (2007) has identified the key features of technology that students value as being increased choice, ease of access to information and control over when and how they learn. It has been noted, however, that there is considerable variation in the extent to which technology is viewed as an effective learning tool in HE, although this may be due to the different forms it takes (Biggs, 2003). Having students who are 'digital natives' seems to require an acknowledgment that 'pedagogy will evolve to fit with the capabilities of the new technologies' (Burgess and Mayes, 2003, p. 301). It is important, though, that the technology used is an appropriate medium that is fit for purpose and fully aligned with the teaching aims (Turney *et al*., 2009). Studies suggest that, if this is achieved, then students can experience a more creative learning environment that promotes empowerment, control and autonomy (Dale and Pymm, 2009). Reluctance to use technology as a teaching and learning tool can derive from concerns about reliability, expense and time, but research suggests that cost in time, at least, can be more than compensated for by increased efficiency (Turney *et al.*, 2009).

These research findings seem to indicate that time could profitably be spent designing artefacts that use fit for purpose technology to offer all Stage 3 students the opportunity to build and apply their understanding of academic level 6 writing. To achieve this, a multi-disciplinary collaborative project was established that paired senior lecturers on an initial teacher education (ITE) programme with a learning technology advisor from the same university.

The key findings from this literature review, and their relevance to the aims, methodology and methods of this research, can be summarised as follows:

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- Students value direct contact with tutors and often seek additional support and input, but this increases tutor workload and decreases student autonomy.
- Tutor support for assignment writing should be analytical and of use across multiple assignments and should include feed forward and self-assessment strategies.
- Where fit for purpose, technology can be used to provide a creative and accessible learning experience that promotes student autonomy.

The following research questions have been derived from these findings:

- Can a technology-enhanced resource be devised that makes efficient use of tutor time and engages students in self-assessing their understanding of how to write successfully and builds their confidence in working independently?
- Does student feedback indicate that these aims have been achieved?

Methodology and Methods

Research Strategy

A case study was deemed an appropriate research method given the exploratory nature of the study and its underlying research philosophy which is based on 'an interpretative understanding of the world' (Biggam, 2008 p.97); in this instance, the desire to collate, explore and interpret the responses of a cohort of students to a new resource. The fact that the study was predicated on findings, both anecdotal and evidence-based, that are likely to resonate with tutors within and across faculties, and may be at other universities, - namely students' desire for direct contact with their tutors; tutor workload being increased by individual student questioning, often in the form of numerous emails; and the need to provide effective guidance on academic writing – enhances the study's validity, reliability and potential generalisability. A qualitative approach is congruent with the research focus on individuals' perceptions and with the collection and analysis of qualitative data, derived from student responses *verbatim*, but the use of a survey featuring a quantitative tool, the questionnaire, means that a mixed-methods approach was used. This approach was selected in order to generate qualitative data that provides deep understanding and quantitative data that indicates patterns of responses (Driscoll *et al.,* 2007). Open-ended questions in the questionnaire captured respondents' views in their own words and thereby offered a detailed and representative account of the students' experiences and evaluations of the technology enhanced learning (TEL) artefacts. Iterative content analysis was used to code thematically the open-ended question responses (Webster, 1990) in order to identify principal themes in the responses.

Research Personnel

The resource was created by two Senior Lecturers (CS and AT) in the ITE

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department at a University in England - both of whom are Stage Tutors for student teachers at Stage 3 of a BEd (Hons) programme - working in collaboration with a Learning Technology Advisor (CD) in the Learning Enhancement and Innovation department at the same University. Feedback on the resource was generated by its users, Stage 3 BEd (Hons) students writing at academic level 6. Of a cohort of 86 students (10 male and 76 female), 65 students (76% of the cohort) responded to the survey.

Resource

The multimodal, technology-enhanced resource comprised:

- Several videos, including a 'Talking Heads' introduction from CS and AT followed by the presentation of extracts from previous level 6 students' submissions with tutor voiceovers explaining key points. The videos had titles such as 'First Steps', 'Linking Theory to Practice' and 'Problems and Pitfalls' and provided students with an opportunity to see how tutors identify and evaluate strong and weak examples of Level 6 writing.
- A self-assessment exercise: students were provided with another extract from a level 6 submission and were invited to evaluate its strengths and weaknesses themselves using the strategies that had been modelled for them in the videos. A week after this was released to students, CS' evaluation of the same piece of writing was made available, acting as an answer sheet which allowed students to self-assess the accuracy of their own evaluations.
- A survey: all students were invited to complete, anonymously, a brief questionnaire to indicate the usefulness of this exercise.

Timing

- The artefacts were made available to the students at the beginning of the academic year (2011-12), before any submissions had been made, in order to explore the resource's potential for feed forward value.

Provision and production

- These artefacts were made available to students through the University VLE; a repository of which the students were regular and confident users.
- The screen capture tool *Camtasia* was used to produce the videos and the survey was collected using *Lime Survey* software.

Ethics

As the survey data was collated anonymously from the University's VLE, respondents were identified only by number, thereby preserving full anonymity. The research was intended to accord with the ethical principles of non-malfeasance and beneficence: the students were able to choose whether or not to complete the survey which, because of its brevity and release period was unlikely to cause the

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respondents stress, and they were given clear information about its aim – to help tutors understand if and how the resource had been beneficial to students. Where longer extracts from student submissions were used, the permission of the student authors was sought and given.

Limitations
The relatively high response rate (76% of the cohort) increased the reliability and validity of the study and the anonymous data collection minimised respondent bias as students were less likely to feel obliged to provide 'desired answers' (the Hawthorne effect). However, it also raised questions, including:

- Did the other 24% of the cohort engage with the resource but not complete the survey?
- If this 24% did not engage with the resource; what were their reasons?

Other limitations include the fact that it was not possible to discern whether or not there was a gender or age bias in relation to material engagement and survey response. The author also recognises that the visual and audio format of the resource could disadvantage students who are hearing or vision impaired. Despite the fact that case studies are often considered weak vehicles for generalisation, I would suggest that this study provides potentially generalisable data as it captured responses *verbatim* from a sizeable number of students about a resource that addresses an issue that is likely to be prevalent within and across many Higher Education (HE) departments.

Findings
100% of the students who completed the survey selected 'yes' in response to the following questions:

- 1a 'Was this material helpful to you?'
- 2a 'Was the self-assessment exercise at the end of the material helpful to you?'

Questions 1b and 2b required further clarification from the participants and thematic coding of the students' responses indicated the following themes, exemplified through some qualitative feedback comments:

Question 1b: 'Why was the material helpful to you? What do you feel you have gained by engaging with it?'
Increased understanding of how to write at level 6 (100% of students gave this primary response)

- *I now understand the key attributes of successful level 6 writing and how to achieve these*
- *A better understanding of how to write critically*
- *An understanding of what mistakes can be made in order to fail*

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Helpfulness of the resource format itself (49% of students made a secondary comment related to this theme)

- *The visual and aural elements together aided understanding further*
- *Seeing actual examples of real students work was very helpful*
- *I like the fact that it is possible to return to the videos at a later date in advance to proofread our own submissions.*
- *Being able to stop start the video to see examples etc.*

Knowing more about what tutors are looking for (32% of students made a secondary comment related to this theme)

- *I now know what the tutors are looking for.*
- *It has brought up errors that I have in the past been graded down for and explained why.*
- *It shows what is expected from me as a level 6 reader and writer.*

Question 2b 'Why was the self-assessment exercise helpful to you? What do you feel you have gained by carrying out this exercise?'

Being able to self-correct (61% of students made a comment related to this theme)

- *I can now read back through my own work and correct any mistakes now that I am aware of what to look for*
- *I have gained an understanding of some of the pitfalls and hopefully I will now be able to avoid these in my assignments.*
- *I can now look over my own assignments and pick out what is good and what may need to be improved.*

Having a resource that can be referred back to and used in the future (52% of students made a comment related to this theme)

- *Using this technique I can check my own work before handing it in.*
- *I will now be able to go through and do this exercise to my own essays to improve them.*
- *I can see what areas I missed and try and ensure this does not happen in my future essays by checking these areas again.*

The opportunity to look at someone else's work (22% of students made a comment related to this theme)

- *It is easier to identify errors in other peoples [sic] work rather than your own*
- *It gave me a chance to read something I had not done and pick out the points which will make it easier when I write something myself*

Access to a tutor's perspective (22% of students made a comment related to this theme)

- *It enables me to view my work in a different light - like from the markers point of view.*
- *Apply what had been discussed in the videos beforehand and then have the opportunity to compare my thoughts with what was noted about the work by tutors.*
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- *I got a chance to see how to read like the tutors do - and see how my work compares.*

When asked what could be done to improve the resource (Question 3), 53% of the responses stated '*nothing*' or comprised comments such as '*it's already really useful*'; 38% of students asked for more (more essay examples, longer videos) and 11% of students asked for specific input such as a focus on referencing or writing conclusions.

It should also be noted that anecdotal feedback from tutors indicated that the number of student email communications they had received asking for support, clarification or reassurance about academic writing was lower than that of the previous year, although exact figures were not available as only some of the previous year's student emails had been retained. It may be helpful to explore ways to generate this type of quantitative data as part of future research into tutor workload and student autonomy. Similarly, the author recognises that a focus for future research could be to identify and interrogate comparative data regarding student assessment grades before and after their engagement with such a resource.

Analysis and discussion

The findings suggest that the aims and objectives of this research have been met and a resource has been created that offers measurable value in the following ways:

Value to students

Student feedback indicated that this resource was engaging, accessible and effective. 100% of student respondents rated it as helpful and stated that it had developed their understanding about writing at academic level 6. Both the content – the deconstruction by tutors of real examples of level 6 student submissions – and the format – the combination of visual and auditory input; the opportunity to pause and rewind explanations – were perceived as being successful and supportive. One student commented: '*Finally, an easy to use, easy to access guide that gives us the step by step process of writing academically at level 6'.*

Value to tutors

Approximately 4 hours of tutor time plus 3 hours of the learning technology advisor's editing time generated a resource that can be used repeatedly by a large cohort of students over a period of at least a year. Anecdotal feedback pointed to a noticeable reduction in the number of student emails to tutors seeking one:one reassurance and checking information about assignments. Tutors were also able to use the resource to improve student ownership of tutorials: 2 students failed a level 6 assignment and both admitted that they had not engaged with the resource. Before holding the resubmission tutorial, tutors asked the students to use the

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resource to self-assess their work; these students were then able to adopt a more proactive stance in the tutorial.

These outcomes endorse the suggestions that an initial investment of time improves efficiency (Turney *et al.,* 2009) and that students can be encouraged to use resources, especially TEL artefacts, to enhance their independent learning.

Value of inter-departmental collaboration
For the ITE tutors, collaborating with a learning technology advisor gave them access to expertise and thereby developed their own confidence in using TEL resources to increase the accessibility and efficiency of the teaching process and to help manage their own workload. The learning technology advisor, in working with the ITE tutors, was able to raise the profile of TEL across the faculty as well as developing greater understanding of the needs of end-users.

Value for future applications
An unexpected but significant outcome of this study has been the discovery that the resource has potential application that goes beyond the original remit. Three students suggested that a similar resource should be in place at other points in the programme; for example *'I think there should be something similar for BEd year 1 and 2 which can be updated accordingly as you start to work at the different levels'*. There has also been both interest and uptake from this and other departments at this University, with the Departments for Health and for Social Work also putting similar resources in place to support their students. This offers compelling evidence for the possible wide-ranging application of this learning resource within and across HE programmes and faculties and illustrates the potential generalisability of this research.

Conclusion

Analysis of participant data indicated very positive responses to the TEL resource. Students stated that it comprised an easily accessible model of successful academic level 6 writing that they could apply to their own assignments in advance of submission. This enhanced students' confidence in their ability to self-assess, correct and enhance their work before submitting it thereby increasing their ownership of, and independent approach towards, learning. This feed forward aspect of the resource was valued by students who were eager not to have to 'risk grades' and wait for tutor feedback before being able to identify their areas of strength and development. Positive student responses in this area support the view that formative assessment has the potential to enhance motivation and autonomy (Nicol and Macfarlane-Dick, 2006).

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The multimodality of the resource was seen to be a strength: the students found that the combination of auditory and visual material enhanced understanding – *'you didn't just tell us, you showed us'* – which supports the notion that simply being told something, even through multiple messages, is not always effective (Price et al, 2010). The students' familiarity with the tutors' tone and register, and even the

environment in which they were filmed, meant that the students found the message to be credible, trustworthy and non-intimidating – *'at one point it was like you were just chatting in your office but it all made everything clear'*. The students appreciated being in control of the resource – *'I could watch it where and when I wanted to'* - and they recognised that having extracts taken from previous student level 6 submissions enhanced the relevance and authenticity of the resource. They also valued having the opportunity to assess work that was not their own - *'it's easier to see the mistakes in someone else's work'* – and to access another perspective – *'it enables you to view the work as an assessor'*. This last point echoes Sadler's suggestion (2010, p.546) that students should be educated to make 'substantive and comprehensive appraisals in ways similar to those characteristically used by expert assessors'.

As well as being fit for this particular purpose, this study's findings indicate that TEL artefacts such as this have a wide range of applications, supporting the view that facilitating independent learning should be a key aim throughout HE (Stefani, Clarke and Littlejohn, 2000). The findings also suggest that a profitable focus for future research could be to explore potential use with other cohorts, other programmes, other departments, other times of the year, other types of content and other presenters, such as outside specialists, mentors and students themselves.

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References

Ashby, P., Hobson, A. J., Tracey, L., Malderez, A., Tomlinson, P.D., Roper, T., Chambers, G. N. and Healy, J. (2008) Beginner Teachers' Experiences of Initial Teacher Preparation, Induction and Early Professional Development: A review of literature (DCSF, University of Nottingham).

Biggam, J. (2008) Succeeding with your Masters Dissertation (Maidenhead, Open University Press).

Biggs, J (2003) Teaching for Quality Learning at University (Maidenhead, Berkshire, SRHE and Open University Press).

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Burgess, H. and Mayes, A. S. (2003) Tutoring Primary Trainee Teachers through e-conferencing Mentoring and Tutoring: Partnership in Learning 11(3), 285-305.

Dale, C. and Pymm, J. M. Podagogy (2009) The iPod as a learning technology *Active Learning in Higher Education* 10(1), 84-96.

Dhillon, J. K., McGowan, M. and Wang, H. (2008) How Effective are Institutional and Departmental Systems of Student Support? Insights from an Investigation into the Support Available at One English University, *Research in Post-Compulsory Education*. 13(3), 281-293.

Driscoll, D. L., Appiah-Yeboah, A., Salib, P., Rupert, D.J. (2007) Merging Qualitative and Quantitative Data in Mixed Methods Research: How to and Why not, *Ecological and Environmental Anthropology,* 3(1), 19-28.

Heilesen S., (2010), What is the academic efficacy of podcasting? *Computers and Education*, 55, 1063-1068.

Higgins, R., Hartley, P. and Skelton, A. (2001) Getting the Message Across: The Problem of Communicating Assessment Feedback, *Teaching in Higher Education,* 6(2), 269-274.

Hughes, G. (2011) Towards a personal best: a case for introducing ipsative assessment in higher education, *Studies in Higher Education*, 36(3), 353-367.

Inglis, A., Ling, P. and Joosten, V. (2002) *Delivering Digitally: Managing the Transition to the Knowledge Media* (2nd ed.) London: Kogan Page.

Joint Information Systems Committee (2007) *In their own words, exploring the learner's perspective on e-learning. Available online at:* http://www.jisc.ac.uk/media/documents/programmes/elearningpedagogy/iowfinal.pdf (Accessed 03 June 2012).

Laurillard, D., (2005) Rethinking University Teaching: a conversational framework for the effective use of learning technologies (2nd Ed) (London, Routledge Falmer).

Lea, S.J. and Farbus, L. (2000) Student Support: Educational Necessity or Mawkish Indulgence? *Psychology Teaching Review*. 9(1), 16-25.

Light, G. and Cox, R. (2001) Assessing: Student Assessment. In Light, G., Cox, R. and Calkins, S. *Learning and Teaching in Higher Education: The Reflective Practitioner* (London: Sage).

Nicol, D., and D. Macfarlane-Dick. 2006. Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education* 31(2), 199–218.

Owen, M. (2002) Sometimes You Feel You're in Niche Time: The Personal Tutor System, a Case Study, *Active Learning in Higher Education*. 3(1), 7-23.

Poulos, A. and Mahony, M.J. (2008) Effectiveness of Feedback: The Students' Perspective, *Assessment and Evaluation in Higher Education*. 33(2), 143-154.

Price, M., Handley, K., Millar, M. and O'Donovan, B. (2010): Feedback: all that effort, but what is the effect? *Assessment & Evaluation in Higher Education*, 35(3), 277-289.

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Sadler, D. R. (2010): Beyond feedback: developing student capability in complex appraisal, *Assessment & Evaluation in Higher Education*, 35(5), 535-550.

Stefani, L., Clarke, J. and Littlejohn, A. (2000) 'Developing a Student-Centred Approach to Reflective Learning' *Innovations in Education and Teaching International*, 37(2), 163-171.

Tan, K. H. K. (2008). Qualitatively different ways of experiencing student self-assessment *Higher Education Research & Development,* 27(1), 15–29.

Taras, M. (2005) Assessment – Summative and Formative – Some Theoretical Reflections *British Journal of Educational Studies*, 53(4), 466-478.

Thorne, M. & Cuthbert, R. (1996), 'Autonomy, bureaucracy and competition: the ABC of control in higher education', in Cuthbert, R. (Ed.). *Working in Higher Education* (Buckingham, SRHE/Open University Press).

Turney, C.S.M., Robinson, D., Lee, M. and Soutar, A. (2009) Using technology to direct learning in higher education: The way forward? *Active Learning in Higher Education*10, 71.

Walser, T. M. (2009) An Action Research Study of Student Self-Assessment in Higher Education *Innovative Higher Education* (2009) 34,299–306.

Webster, C. (1990) Toward the measurement of the marketing culture of a service firm Journal of Business Research, 21(4), 345-362.

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