Self-aware and Self-directed: Student Conceptions of Blended Learning

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Abstract

This paper reports on an investigation into student conceptions of "blended learning", (hybrid in US) in the light of their experience of a Higher Education Masters level module at a British university. The small scale study used a rigorous qualitative method to discover in the students' words a range of conceptions relating to this learning experience. The students' conceptions were related to the stage of study and an analysis of motivations for learning in this context. The study identified a new dimension of learning motivation with practical implications for attempting to blend traditional face-to-face teaching methods with online support and study options.

Keywords: Higher Education, online learning, motivation, learning approaches, qualitative research. |

Introduction

E-learning activities and online learning environments are increasingly widespread in UK Higher Education, not for distance learning purposes, but for blended integration with full and part time university courses. Not all of these designs will be strictly "hybrid" as discussed by Mossavar-Rahmani and Larsen-Daugherty (2007) in that less than 50% of the design will be online. This confronts Higher Education teachers with many practical questions about how learning and teaching should be approached, what proportions of design should be online, as well as the broader questions of the meaning and practice of learning and teaching in the twenty-first century, questions emphasized by Graham in his first chapter of the popular Handbook of Blended Learning (Bonk and Graham 2006). University teaching has traditionally been based on considerable interaction between learner and teacher and among and between learners in seminars and tutorials. This learning approach does not fit well with the web-based training instruction model and suggests that Higher Education Institutions (HEIs) should look to the idea of "supported online learning" when introducing online technologies into the blend.

This paper gives a sense of historical perspective to the development of blended learning, by reporting on an investigation into student "conceptions" of their first experience of "blended learning", during a Higher Education Masters level module at a British university.

Research approach and ideas from the literature

Supported online learning is learner and process focussed and requires much student-student and student-tutor interaction, mediated by the online environment. According to a report commissioned by the UK Chartered Institute of Personnel and Development (CIPD):

> "Supported online learning involves significant interaction between the learner and other learners as well as the tutor. Typically this will include synchronous or asynchronous conferencing, small group learning and, possibly, face-to-face support in addition to online access to materials and information." (Reynolds, Caley and Mason 2002).

In exploring how to support online learning, it seemed sensible to ask students about their perceptions of the blending experience compared to face-to-face teaching, at a time when most of their teaching was in traditional mode, and the blend with online activities was a fresh approach. It was important to find out how the online activities in the blend would affect their motivation to learn, in order to decide how best to offer appropriate feedback and support through the design of the online learning space. A review of literature suggested that motivations for learning were not permanent individual traits, but dynamic aspects of student intentions in relation to specific tasks in specific circumstances. This view was built on constructivist foundations, where students did not simply take in and store information, but went on to make tentative interpretations of experience, and test out those interpretations (Kolb 1984; Perkins 1992; Race 1993).

Race's model of learning was similar to that of Kolb but added the key idea of wanting and/or needing to learn as a central drive throughout the learning process, suggesting that if the want or need receded, the learning was likely to do the same. Such ideas imply a central role of motivation in the learning process, suggesting that an understanding of student motivation should enable more tailored and appropriate support and intervention through the learning and teaching strategy.

These ideas moulded the development of the part-time postgraduate module on which this study was based. The module was designed to offer two face-to-face sessions at the outset, followed by alternating face-to-face and online sessions, with the latter requiring asynchronous discussion of tasks and challenges outlined in the "thought starter" materials written specifically for this mode of learning and teaching. The conceptions of blended learning, identified through student interviews, reflected students' experience of such group processes and online tools, which were intended to encourage deep (Marton and Säljö 1976), or at least strategic (Entwistle 2001), learning.

A small-scale study was proposed which reflected the still experimental nature of the blended mode in UK HE provision, a factor which was leading business students to choose traditional modes over blended modes, on the basis of a "devil they knew". Seven students, who had just completed a postgraduate study module delivered by a blend of online and face-to-face teaching and activities, were interviewed and verbatim interview transcripts were analysed in detail using a phenomenographic method, consistent with similar educational research to identify "conceptions" as discussed by Brew (2001). The research study did not attempt to fix ideas about blended learning itself, but to identify possible student conceptions of this learning experience. Semi-structured interview questions triggered discussions of feelings and experiences of the blended mode. The questions also explored conceptions at different phases of the course, by relating first to students' retrospective early views of the blended mode, and then encouraging students to discuss to what extent these views remained constant throughout the module, and as far as the period of the interview after the course. This qualitative method was based on phenomenology to uncover conceptions from the data, which were not confined to discussing how an individual student perceived learning, but how the blend of online and face-to-face learning was perceived.

The author defines "conception" as a mental construct formed by combining all relating experiences, impressions and notions. The interviewing of students after the module was designed to find stable conceptions, which were unlikely to be affected in their expression by any tutor assessment power. The study was influenced by a constructivist perspective (Perkins 1992; Gold 2001), where students had experienced a new method of learning and could be expected to become actively engaged in trying to make sense of the method.

It is normal in phenomenographic method to avoid extensive literature review before analysis of the data, in order to prevent the literature outcomes influencing the conceptions found in the data. Following several trawls through the data to identify ideas associated with blended learning, these ideas were developed and grouped into conceptions, then tested against three externally quoted frameworks found in the literature, the first of these being student learning approaches based on Marton and Säljö's work (1976) on deep and surface learning approaches and extended by Entwistle (Table 1.1 p 19 1997) to include strategic approaches. The deep approach here embodies the students' intention to understand ideas for themselves ("transforming"). The surface approach embodies the students' intention to cope

with course requirements ("reproducing"). The strategic approach embodies the students' intention to achieve the highest possible grades ("organising").

The second framework applied to the data in the study described types of motivation derived from Entwistle (1987). The conception themes derived from the study were explored for association with type of motivation. Entwistle distinguished between:

1. Competence motivation – a search for successful learning experiences
2. Extrinsic motivation – a search for qualifications or good grades
3. Intrinsic motivation – a search for subject knowledge and understanding
4. Achievement motivation – a search for improved self esteem through achievement

To these positive descriptions he adds the fear of failure, a negative, which is most often seen as the downside of extrinsic motivation.

One of the ideas emerging directly from the data was the clustering of certain conceptions around the initial stage of the module and the changing conceptions as learning progressed. The data was therefore also compared to the learning stages framework discussed by Perry (1970) and later amended by Beaty and Morgan (1997).

Findings

The interview transcripts yielded a total of 69 initial ideas, all of which could be considered discrete. These ideas were then grouped into nine themes or combinations of experiences, impressions and notions relating to students' conceptions of blended learning.

1. *Blended learning is a positive conception.* Positive notions included varied advantages relating to the blended teaching and learning approach, such as working at the student's own pace and access to the web while online for regular scheduled activity. This mode was also seen to represent progress in learning: the new and different appeal of the technology and mix of learning methods.

2. *Blended learning involves barriers*. This conception involved technology issues which caused students difficulty such as ICT access problems, unfamiliarity with the technology, potential isolation during online weeks, lack of user friendliness and possible cost issues regarding internet connection time from a home computer.

3. *Blended learning involves competence*. Conceptions of both worry and pleasure over difficulty or challenge of the blended mode were included here. Students were focussed on the mode's difference in approach from traditional learning methods and whether they felt it seemed to work or not.

4. *Blended learning requires confidence*. This conception included expressions of need for comfort and confidence in learning, choosing familiar ground, being prepared to be open in posting messages online and working together in a safe and supported situation with both face-to-face and online support.

5. *Blended learning is particularly good for certain subjects*. This conception focuses on whether blended learning approaches are context dependent.

6. *Blended learning needs a learning community*. Considerable references were made to the need for everyone's personal commitment to the delivery method to support the group's learning. Students in this mode were more interdependent for their learning, requiring interaction in

learning, whether face-to-face or online. There were also expressions of regret that insufficient interaction or commitment had been evident on this module. Social benefit and team belonging were important themes, and references were made to the group behaving like a "learning set" (Revans 1982).

7. *Blended learning success depends on the personal learning approach.* The largest group of references related to personal choice and preference being enabled with blended learning. The blended mode gave students the freedom to make time and quality decisions about learning, about how much to do, and whether a lazy, personal approach was made easier to sustain through blended learning. The conception also contained ideas of enjoyment, self-discipline and adaptation to personal learning style – in particular "reflector" or "activist" styles (Kolb 1984).

8. *Blended learning requires self-direction*. This group of categories showed evidence of a clear awareness of the need for self-directed learning with the blended approach. Such self-direction was not always achieved, in which case, there was an expressed need for something to make people take part – force or compulsion to make the effort, sustained by stimulation and interest through method and content or a strong commitment to finding their own way to meaningful understanding.

9. *Blended learning requires a particular tutor role and structure.* This conception referred to a strongly expressed view that small groups were an important part of effective blended learning. It included the idea that clear ground rules, whether imposed by the tutor or the student team, were essential and that ongoing support from the tutor, and perhaps others, was part of the added value of the experience of blended learning.

Figure 1 below shows how the different conceptions were supported by initial categories in the data arising from the phenomenographic analysis.

A broadly similar profile relates the number of idea categories and number of references to that category in each conception, but relatively many more references were found to personal learning approach, tutor role / structure, learning community and self-direction.

Variations in stage at which conceptions arise

Specific categories were seen to relate to different stages of the learning within the module. Each category was placed alongside a stage on the basis of the context as well as the content of the category. While the stages were allocated subjectively, the context of the references helped to validate the choice. Figure 2 below gives a clear picture of the predominance of conceptions relating to the early stage, during which students are coming to terms with a new method of teaching and learning.

Early stage categories centred around technology difficulties, concerns over personal competence and confidence, tutor role and support and structure provided by the tutor, including references to a teaching model, also a conception of being different and special, undertaking risk. Categories relating to a final stage of learning (based on transcript context and position) included regret in hindsight at not using opportunities recognised in blended learning, a view that blended learning was the future of learning, unexpected benefits and recognition of wider learning arising from the blended approach, an awareness of growth and personal development through self direction. Categories arising throughout the stages included ideas around speed of access, logic and structure, tutor facilitation, appropriateness for subject and an easy mode to choose in order to do a minimum amount of work.

Variations in student learning approach

By applying the deep, surface and strategic student learning approaches to the initial categories in the data, Figure 3 below was produced. Deep learning and strategic learning approaches together outnumbered surface learning approaches in the data. Surface approaches were associated with making it easy to get out of class, a need for comfort and confidence in learning, requiring force or compulsion to

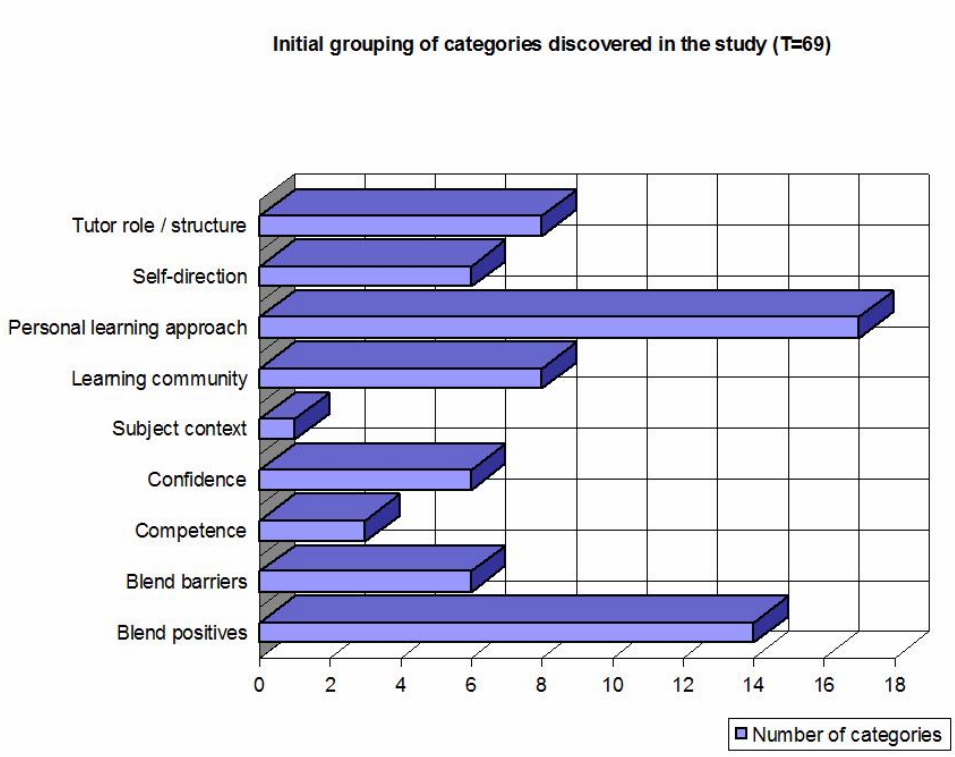

Figure 1. Initial grouping of categories discovered in the study to form conceptions

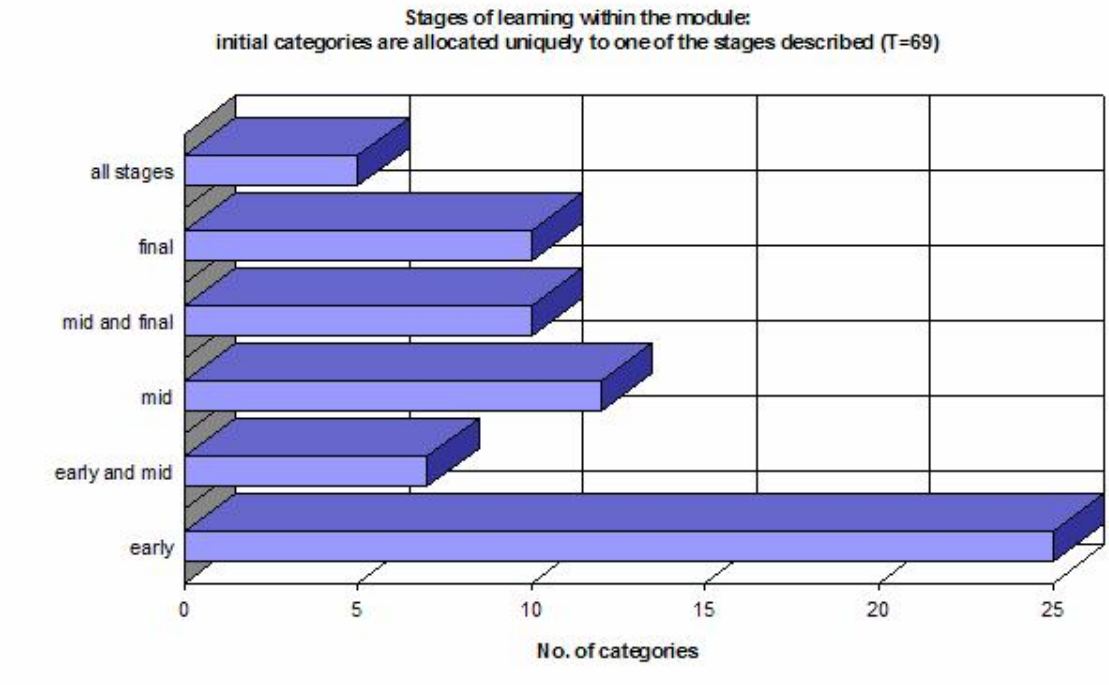

Figure 2. Stages of Learning within the module: initial categories are allocated uniquely to one of the stages described

learn, a self-confessed lazy approach to learning, the wish for a right or correct way of doing things, various blend "barriers" and the need for familiar ground.

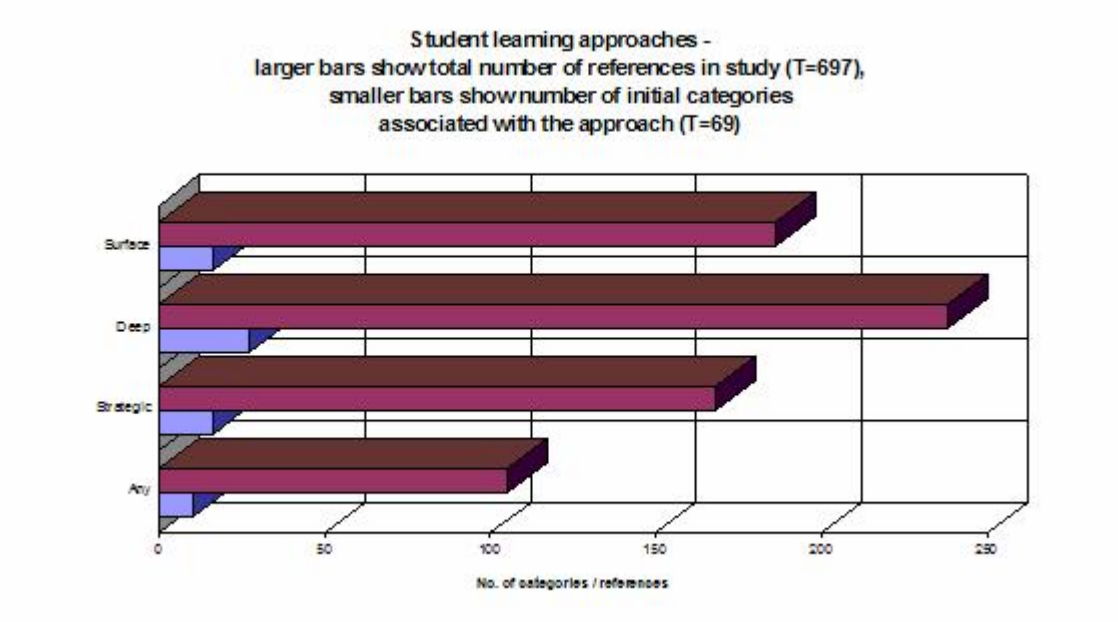

Figure 3. Student learning approaches in this study

Strategic approaches related to a recognised learning style and deliberate strategy for learning, and self-directed learning; also finding value in a smaller group and team belonging to share information and using words such as "useful" and "value" in relation to blended learning.

Deep approaches related to ideas such as surprise or unexpected learning, thinking and reflecting, trust and openness in the team room (asynchronous text-based medium), difficulty and challenge, a need for commitment from the group to make blended learning work, personal achievement, changed behaviour as a result of the experience, the difference in the learning approach in this module, enjoyment, freedom, healthy growth and development and interaction in learning.

Variations in types of motivation

The motivation descriptors of "competence", "extrinsic", "intrinsic", "fear of failure" and "achievement" were applied to the data on initial categories. It proved difficult to identify just one descriptor for every category so 25 of the categories were assigned more than one descriptor. Even then, there seemed to be gaps where the existing motivation descriptors did not relate to the categories. A possible further descriptor of "group commitment" was added to the framework which then accounted for the gaps. "Group commitment" motivation could be understood here to mean seeking to avoid the worry of letting others down, pulling one's weight in the team, wishing to help others to learn for mutual benefit, feeling one has to put in effort for the team's sake or that of other specific members of the team. Supporting the development of this kind of group growth features largely in Janet MacDonald's advice on developing online learning (2006) and is a driver for e-moderating advocated by Gilly Salmon (2000).

Once this additional descriptor was introduced, it was possible to assign categories to the descriptors, which added considerably to the understanding of the data. Figure 4 below shows how references were grouped according to motivation descriptor.

The relatively small number of references to intrinsic motivation could probably be explained by the focus on the process of blended learning, rather than the module content in this study.

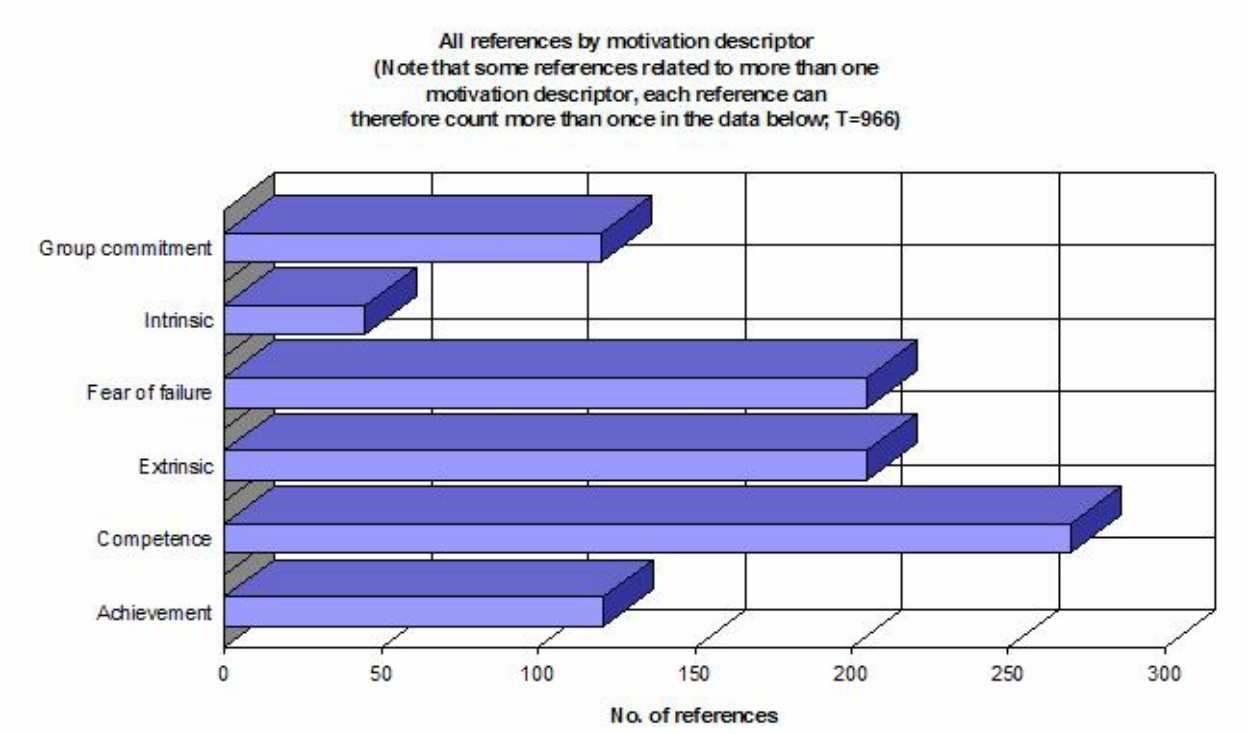

Figure 4. All references by motivation descriptor

Stages of learning

One of the features of the study was that while useful conceptions of blended learning were identified, there seemed to be no hierarchy relating the conceptions in any order of precedence. The data did not suggest that some conceptions related to a deeper level of learning for individual students in the sample; rather they suggested that student conceptions of the phenomenon studied changed with the progress of the learning experience.

Some of the conceptions arising from the study were relevant to student experience right through the module (blend positives, subject context appropriateness, personal approaches to learning and self-direction); but other conceptions related clearly to one or more stages in the process. So conceptions of blend barriers related only to the early stage, competence issues arose in the first half of the module until fears are allayed by feedback and /or increasing confidence, possibilities of a learning community arose mid way and developed through the rest of the module and issues relating to a desire for tutor control and structure related principally to the initial phase of the module.

Other writers who have referred to learning stages include Perry, (1970) and Beaty and Morgan (1997). Perry described an initial stage of unitarist, right/wrong learning which seems to fit with the prevalence of references in this study to blend positives or negatives (barriers). Issues of competence and lack of confidence, together with a dependence on the tutor role and clear structures within the student conceptions would support Perry's thesis. In his discussion of the development of students through a college experience (1970), Perry demonstrates how most students moved through uncomfortable stages from this initial unitarist view, which accepted an absolute teacher authority, through perceptions of diversity of opinion and uncertainty despite the continued need to find the "right" answer, ultimately reaching a relativistic world in which he or she might commit personally to an intellectual maturity, admitting uncertainty and pluralism as the norm. Perry stressed the courage required to move through

these stages of development and the need for increased support from the tutor to allow this progression.

Similar ideas were developed in "In the World of the Learner", a chapter in Marton, Hounsell and Entwistle's The Experience of Learning (1997), where Beaty and Morgan also set out stages of learner development (p134). Fresher, Novice and Intermediate stages all saw the system and the institution in control of learning, while the Expert stage involved control by self within a course and the Graduate stage involved control by self both in content and method of learning. These ideas relate to those suggested by this research study as all describe a process of moving towards self-direction and personal responsibility for learning with early stages which require considerable support and offer opportunities to take it easy or drop out.

These outcomes fit with ideas about the importance of initial support and guidance and the tutor's support role in blended learning. Carl Rogers proposed the vital impact of the tutor's role at the start of the learning process to develop student self-confidence and provide meaningful but highly supportive feedback and encouragement (1969). This critical tutor role was emphasized in e-learning by Gilly Salmon in the early steps of her e-moderating model (2000) and developed by Garrison, Anderson and Archer as teacher presence in their Community of Inquiry model (2003). Teachers designing and delivering blended learning need to devote considerable time to initial reassurance (delivered both online and face-to-face) as learners become accustomed to new strategies.

Approaches to learning

As mentioned by Laurillard (1984), there is a significant task effect on choice of learning approach, that is whether a surface, deep or strategic approach is taken. Tasks identified within the module, the teaching style and the ground rules of the module itself, should take this conception of personal choice into account and offer tools and tasks which stimulate and deepen the learner's approach.

Marton's seminal work on deep and surface learning, quoted in the previous section, and its development by Entwistle to include strategic approaches, is clearly appropriate to the students' conceptions of blended learning in this study. The previous section set out how surface learning approaches produced the least important group numerically when related to reference categories, and these tended to cluster in the early stage of the module. The pedagogic design of such blended modules must clarify to students the benefits and characteristics of deep learning, both to improve learning outcomes and to prevent the level of regret in hindsight as late developing students realise too late the opportunities for self-direction and interaction which were available, but which they may not have used to best effect. However, much work is needed on how this might be done, since it is possible for students to be led into reproducing and organising behaviours, which are intended to demonstrate deep learning, rather than actually experiencing such transformative learning.

According to Carl Rogers "..any significant learning involves a certain amount of pain.." (1969). The study showed that the technology involved in online learning, whether or not it was part of a blend with face-to-face methods, would always present barriers and problems to learners and teachers alike. Yet committed learners, deep learners and strategic learners would find a way around these problems in pursuit of their learning objectives. Even surface learners could be pulled through the barriers through the motivation of responsibility to the group.

The challenge to the tutor wishing to use blended learning in HE is to maintain encouragement and support throughout the process (an early stage set of conceptions) and, if necessary, take a creative route or a traditional back-up route to ensure no student is seriously disadvantaged by technology incompatibility or breakdown. Endless enthusiasm for the technologies and their possibilities for teaching and learning can easily become technological determinism, where the technology drives the teaching agenda instead of the other way around. Morgan et al (2002) advise "technological opportunism" to the tutor, to adopt new ideas and experiment, but not on too many dimensions at once – building experimental technological elements on a sound base of proven pedagogy . These technologies, although much developed since this research study, continue to be in a state of transition, and teachers

need to offer support to students who, like academics, are grappling with steep learning challenges in ICT.

Motivation for learning

The students in this study appeared to need high levels of enthusiasm and varying levels of support and structure or rules to develop their motivation levels at the outset of the module, probably because it was situated in the second semester of the final year of study, by which time natural curiosity had long been exhausted for all but the most determined of learners. Students also needed to be encouraged to develop the confidence to experiment with the tools of learning offered on a blended approach.

The proposition of an additional motivator, that of group commitment, where blended learning is organised to develop a collaborative approach, was evident in this study long before social software began to overtake students' personal and social lives, and may be helpful in understanding the students' conceptions of what makes them put in some effort. Learning motivation is clearly a highly variable and perhaps elusive factor, which will always be mediated by the student's past learning experiences and their current personal and, for working students, their current work contexts.

Group commitment

While the notion of group commitment is superficially evident in any small student group which has developed a sense of team, this study has demonstrated its explicit place among conceptions of blended learning. Alongside the other powerful motivations for learning identified by Entwistle, group commitment is seen by some students as a pre-requisite for online interaction, perhaps more so than in a traditional face-to-face delivery mode. The blended approach of the module studied made online interaction through discussion boards, rotas for posting messages and group collection of data and problem solution a key part of the module's teaching and learning strategy. These elements moved the online dimension of the module from a passive support mechanism and data storage tool to an additional source of learning and a driver for reading and preparation of work.

The blended mode can help to maintain motivation once the early stage has been completed, by offering more opportunities to develop a learning community online, bringing its own group commitment and self-directed learning rewards to those who commit to participating in online discussion boards and intensive face-to-face workshops. From the evidence of the transcripts, the face-to-face sessions in a blended approach take on an increased supportive and motivational role due to their lower frequency and the perceived risk of blended learning.

Conclusions

The study has offered insights into student conceptions of blended learning when this phenomenon was new to them. The stages of learning associated with different categories and conceptions offer teachers some ideas for the development of their role in blended learning, a role which clearly must be higher profile at the outset of such a module, until student-student interaction has reached a critical mass and a learning community begins to develop. Discussions of student motivation and learning approaches have been related to the students' conceptions and led to proposals concerning teaching design strategies relating to the different stages of the module. An additional motivator, group commitment, has been proposed which is experienced by students as a driver for learning.

What does the study tell us about student conceptions of blended learning? That students, who have experienced blended delivery, valued the flexibility and connectivity which encourages regular online forays into wider resources and problems than those confined to the classroom. The barriers posed by low skill or technical access and cost tended to be associated with an early stage of study and for many were relatively easy to jump. Learning support and skill development must remain key elements of an introduction to blended learning.

Self-directed learning strategies and the interdependence of the student group were key factors in successful blended learning for students. Not every student will be prepared for this, and teaching strategies need to provide support for students whose self-directed learning skills are low, who are still at the earliest stages of learning, and who do not feel any commitment to the learning group. Rota strategies and incentives to contribute jointly (prizes or joint assessment for example) may be a way forward here.

The small group size preference for online activities, such as themed discussion, was clearly a majority view and was shown to engage potential lurkers and those who do not contribute actively to class discussion. This small group size was complemented by a teaching strategy which actively moderated online discussion with encouragement and support for effective contribution, particularly in the early stages.

It was also possible to say that confidence and developing competence were associated with the early stages of adopting a new learning strategy such as blended learning, but that these concerns seemed to be less evident as learning progressed.

This study was conducted with a small group of students, and hence cannot produce readily generalisable conclusions. Its purpose was to discover conceptions of blended learning for students new to this mode of delivery, in order to point the way to further research which might test these ideas and investigate further how students could best be introduced to blended learning. The next series of questions to be asked about blended learning must include an investigation into the conception of learning community and the associated issue of "group commitment". In what contexts is this a motivator for students using blended teaching activities? To what extent could students be prepared for the group commitment required, and how? Given the skills and attitudes which seem to be seen by the students as necessary for blended learning, what initial assessment might be indicated prior to such study, to allow those with skills needs or attitude mismatches to be supported through the blended learning process? Is it desirable and possible to develop a "readiness for blended learning" instrument, possibly along the same lines as the established "Self Directed Learning Readiness Scale" created by Dr L Guglielmino (1978)?

There are many more questions to be answered. In particular, whether the HE context of this study and much of the research preclude its conclusions from application to e-learning in the workplace; how best to develop teaching and learning strategies which account for dynamic motivational changes and learning approach choices; and how best to identify students' attitudes to, and skills for, blended learning, as they start such modes of learning, so that teaching and learning strategies can be adapted to their background, prior experience and current and future needs.

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