CHAPTER 8
BRINGING PEDAGOGY BACK TO THE FOREFRONT OF ONLINE TEACHING: OLD PRINCIPLES, NEW MEDIUM

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Abstract

With the evolution of Web 2.0 coupled with a changing higher education sector, the use of online technologies are regarded as essential for institutions to both deliver education as well as to remain competitive within a global environment. However, practitioners have been wary to embrace the new technology and the perceived set of skills that go with it.

Using Chickering & Gamsons' (1987) 'Seven Principles for Good practice in Undergraduate Education' the authors examine how traditional face-to-face teaching principles can be used as a framework for online practice. The focus of this chapter is to bring pedagogical practice to the forefront of the learning and teaching debate, regardless of the teaching context. The arguments in this chapter form a theoretical exploration of the pedagogical practice required for online teaching.

INTRODUCTION

"Technology is, and will continue to be a driving force in workplaces, communities and personal lives in the 21st century" (Salpeter, 2003). The second generation of the world wide web (www), Web 2.0, with its emphasis on interactivity brings with it opportunities to better facilitate and collaborate with both student and practitioner.

In the 21st Century, there are social, political and economic forces that are mandating changes towards the adoption of online courses in what has become known as the knowledge society and or economy. From this perspective, competing in a global market for students means that higher education institutions now more than ever need to understand the strengths, weaknesses and opportunities afforded by the online environment.

The knowledge society brings with it learners that are making demands on higher education institutions for greater flexibility, more access to courses and lifelong learning. The higher education student is now considered a consumer and as such, there is significant pressure on the higher education institution and practitioner to not only ensure we meet their expectations (Hill, 1995) but also to retain their business. We need to recognise that we live in a connected society, and therefore realise the potential of interactivity and interconnectivity.

Ron Oliver (2005) explains that we have moved from a disconnected technology to a wired and networked society where converging technology is providing ubiquitous technological mobility, now referred to as Web 2.0. For example, students access knowledge in an interactive way rather than passive way. To cope with these 21st century demands, institutions are increasing their provision of learning via the online medium. These technological demands are having a significant impact on the practitioners' pedagogical practice.

Laurillard (2002b), supports this claim when she argues:

> ...*that universities must adapt to this change and become leaders in the application of technologies as learning tools and adopt strategies that facilitate active learning. This challenges the conventional approach where the teacher has the role of an expert delivering knowledge to the learner (p. 2).*

A number of research articles describe that the online teaching environment requires a new a set of pedagogical skills that meet the new delivery paradigm (Moreno, 2006; Siemens, 2005; Garrison, Anderson & Archer, 2000; Salmon, 2000). "...teachers today are having to learn to teach in ways they have not been taught themselves" (Hargreaves, Earl, Moore and Manning, 2001, p197). However, the authors' argue that the same pedagogical framework as applied in conventional face-to-face teaching can also be applied effectively within a different medium such as online.

While pedagogy can be drawn from a philosophical perspective on learning, the authors refer to a particular approach to strategy and tactics that the practitioner can use as a framework for online practice, specifically, Chickering and Gamson's (1987) Seven Principles of Good Practice in Education.

It will be argued that using Chickering and Gamson (1987) as a framework will better prepare practitioners for teaching in a Web 2.0 world. Although initially developed as principles for classroom teaching over two decades ago, the framework offers a starting point for designing and teaching in an online environment. It is proposed therefore that there are pedagogical similarities between face-to-face teaching and online teaching. It is further argued that applying the Chickering and Gamson framework will explore the applicability of an effective training model that will prepare practitioners to teach in both traditional face-to-face and online learning environments.

ONLINE LEARNING ENVIRONMENTS

There have been numerous studies undertaken over the last ten years attempting to uncover the differences, benefits and constraints of traditional and online modes of learning (Ladyshewsky, 2004: Mayes, 2002; Mehanna, 2004). In this chapter, the authors describe an online environment as one in which a number of technologies and associated methodologies can be employed to create a conducive educational teaching and learning environment.

There have been significant contributions already made in the field of online learning and teaching in both theory and practice. Researchers such as Oliver, Herrington, (2001) and Salmon (2000) have contributed to various frameworks in the pursuit of assisting the practitioner better understand the online environment. However, these frameworks have been based on the assumption that the practitioner has a knowledge of educational pedagogy including planning, design and delivery. For a practitioner outside the field of education, this diverse array of theoretical perspectives can be overwhelming and can lead to less than effective student learning.

Oliver and Herrington (2001) note that much of the conventional developments of online learning environments stem from design strategies based on face-to-face delivery. They refer specifically to the 'shovelware' approach, whereby content is shovelled from one communication medium, usually print based material, to another with little regard for the appearance, ease of use, or capabilities of the media (Fraser, 1999). It is therefore essential that a pedagogically driven approach to online teaching be adopted.

There is little doubt that a face-to-face learning environment such as a theatre can have a powerful influence on both the teaching and the learning. Alexander & Boud (2001) discuss the fact that the physical environment can constrain some activities and make others more possible. Interestingly, they also note that the physical environment (p.4):

> ....*does not change the fundamental processes of human learning. Students still need to actively engage with what is to be learnt; they still have to have ways of expressing their understanding .... and they need to feel that what they are doing is worthwhile.*

Technology as a medium can be seen as a barrier for many practitioners. While it is not the intention of the authors to discuss this in detail, it must be noted that the barrier does exist and that practitioners need to conceptualise their teaching in line with a pedagogical framework regardless of the medium.

Roblyer and Marshall (2003) have stated that students who have been successful in traditional classrooms are not always as accomplished in online environments. Those who are successful online learners possess a set of skills that enable them to flourish in this environment. The same has also been said of online practitioners, that they must have a unique set of information communication technology skills and different teaching methods for an online environment. Wood (2005) quotes Blomeyer's observation that "(there is a) persistent opinion that people who have never taught in this medium can jump in and teach a class. A good classroom teacher is not necessarily a good online teacher" (p. 36).

The previously mentioned studies have placed emphasis on the method of delivery that are discussed within the boundaries of the three main learning theories, behaviourism, cognitivism, and constructivism. These theories

were modelled on epistemological traditions, and at a time when learning was not impacted through the use of technology (Siemens, 2005). Within a now networked society and continued development of Web 2.0 philosophy of interaction and collaboration, it is timely to look beyond these theories to explore alternatives.

Connectivism is one such alternative theory that the authors believe can offer opportunities as we move into the digital age. Siemens (2005) describes connectivism as the theory that learning consists of making the right connections. Siemens notes that:

> *Connectivism presents a model of learning that acknowledges the tectonic shifts in society where learning is no longer an internal, individualistic activity. How people work and function is altered when new tools are utilized. The field of education has been slow to recognise both the impact of new learning tools and the environmental changes in what it means to learn (p. 8).*

By using connectivism as an underlying learning theory, we are able to move beyond the limitations of the 'old' learning theories and recognise and explore more fully the digital environment.

Phipps & Merisotis (1999) argued in a review of contemporary research in distance education the need for a theoretical or conceptual framework that practitioners could use in their learning and teaching. McCombs (2000) agreed with this view and stated that in order for a framework to become a reality "...we need research validated principles to guide the design, including the design of effective uses of educational technology to support learners and enhance learning" (p. 3).

Laurillard (2002b) states that:

> *Standardised forms of learning activity, therefore, need not be seen as unnecessarily restrictive, but rather as capturing good practice that can be transferred, modified to improve practice, and customised to the particular requirements of the designer. If anything, they could even facilitate innovation, good practice, and effective teaching. (p.1)*

The authors propose therefore that there is no need to develop a new pedagogy to support online learning and teaching, rather, by utilising an existing pedagogical framework proven by research to be effective in a conventional face-to-face setting, could be just as effective in other learning and teaching contexts, such as online. The pedagogically driven approach to online teaching will allow practitioners to make an explicit link between pedagogy and context, ie: conventional face-to-face teaching and online teaching (Conole, Dyke, Oliver & Seale, 2004). Adopting a proven pedagogy such as Chickering and Gamson's (1987) Seven Principles of Good Practice in Education, as a first step, will prepare practitioners for effective teaching.

Juxtaposed to these trains of thoughts are the authors' beliefs that if a practitioner has been trained in the Chickering and Gamson framework, then regardless of the teaching environment, they can apply the same principles in both conventional face-to-face teaching and also online teaching.

CHICKERING AND GAMSON'S FRAMEWORK

The authors have suggested thus far that the Seven Principles for Good Practice in Education can be used as a pedagogical framework for traditional face-to-face as well as online teaching. While it is possible that other existing frameworks could be used, the Chickering & Gamson framework has been chosen because of the considerable research and literature pointing to the student and teacher interactions along with studies examining applicability to technologically driven teaching environments (Chickering & Ehrmann, 1996; Chizmar & Walbert, 1999). The framework will assist the practitioner both at the planning, designing and delivery stages of course development. Chickering & Gamson (1987, p. 2) recognise that "content and pedagogy interact in complex ways. .....what is taught...is at least as important as how it is taught.."

In the next section the authors examine each of the seven principles to illustrate how practitioners can bring pedagogy to the forefront of online learning. They do this by providing examples that relate to the planning, designing and delivery phases of course delivery. This is not meant to be an exhaustive list of examples, but rather an illustration of Chickering & Gamson as a pedagogical framework for online teaching practice.

Principle 1. Encourages contact between students and faculty

Frequent student-faculty contact in and out of classes is the most important factor in student motivation and involvement. Faculty concern helps students get through rough times and keep on working. Knowing a few faculty members well enhances students' intellectual commitment and encourages them to think about their own values and future plans (Chickering & Gamson, 1987, p. 2).

Within any environment, it is important to establish strategies for student-practitioner interaction. In an online environment, this is especially important because students do not have regular contact time such as lectures and tutorials. A student knowing faculty staff is a positive step to enhancing commitment to a course. Holmberg (1991) has indicated that developing personal relationships with the practitioner can promote emotional involvement, which in turn promotes learning. In an online environment, a face-to-face session is not always possible without the aid of technology. Some suggested strategies would include:
- *breaking the ice with a 5 minute podcast about the practitioner*
- *synchronous communication using video or audio conferencing*
- *specific instructions on how to communicate*

- *practitioner set aside a specific time and day that they will be available for phone and email contact (for example, Tuesday 8am – 1pm)*
- *responding to communication such as email within a specified period (for example 24 hours)*

Similarly, it is important that the student establishes expectations as well. These can be achieved by asynchronous communication such as a coffee room or to build in as part of the assessment a way that students can discuss their expectations of the practitioner. It is important for both parties to establish clear instructions and expectations. These strategies will reduce misunderstandings and encourage interaction.

Principle 2. Develops reciprocity and cooperation among students

Learning is enhanced when it is more like a team effort than a solo race. Good learning, like good work, is collaborative and social, not competitive and isolated. Working with others often increases involvement in learning. Sharing one's ideas and responding to others' improves thinking and deepens understanding (Chickering & Gamson, 1987, p. 2).

A key factor for online success is interaction among students. It is critical that all involved understand the types of interaction that is afforded by both synchronous and asynchronous conferencing. Within a traditional face-to-face classroom, a practitioner would et students to discuss issues related to a specific topic. They would take turns at interacting. Similarly, within an online environment, these discussions must be an integral part of any online course. Suggested strategies would include:

- *Mandate at least some student discussion by making it grade dependent*
- *Ensure there is a focus for student discussion by allocating a specific topic. Initially, the practitioner would facilitate and build Deep discussion and questioning rather than shallow, surface level discussion.*
- *Allocate student roles within discussion forums (for example, the use of Gilly Salmon's e-moderating which allows a student focussed responsibility).*
- *The discussion should be engaging, contextual and authentic. Make it apply to the study or current issues.*
- *Discussion groups should be kept to a maximum of five. If the group becomes too large, meaningful discussion is less likely to occur.*

Online discussion, whether synchronous or asynchronous can result in more complex outcome by allowing students to collaborate rather than undertaking the task individually.

Principle 3. Encourages active learning

Learning is not a spectator sport. Students do not learn much just sitting in classes listening to teachers, memorizing pre-packaged assignments, and spitting out answers. They must talk about what they are learning, write reflectively about it, relate it to past experiences, and apply it to their daily

lives. They must make what they learn part of themselves (Chickering & Gamson, 1987, p. 2).

The traditional approach to teaching sees the practitioner spending their time in front of the class lecturing and the students listening. Such a student-centred approach has been found to discourage active learning. A 'Connectivist' approach to active learning would have all students involved in solving problems, formulating questions, debating, brainstorming and working in teams on problems. Examples include:

- *Contextualising content and learning activities. Making it real-world.*
- *Giving students some freedom to design their own topic, project, assessment.*
- *Provide appropriate resources for students to access.*
- *Allow students to contribute to the resources.*
- *Use self and peer-assessment tools (for example SPARK or BAM)*
- *Set clear expectations and boundaries.*
- *Demonstrate student work by presentations, portfolios or exemplary work.*

The online environment allows for students to demonstrate their work via presentations, powerpoints, etc. Students like to see others work to gauge their own learning which could increase motivation. It is important to use the tools that online mechanisms provide.

Principle 4. Gives prompt feedback

Knowing what you know and don't know focuses your learning. In getting started, students need help in assessing their existing knowledge and competence. Then, in classes, students need frequent opportunities to perform and receive feedback on their performance. At various points during college, and at its end, students need chances to reflect on what they have learned, what they still need to know, and how they might assess themselves (Chickering & Gamson, 1987, p. 2).

Regardless of the teaching medium, prompt feedback is the basic tenet for good instruction (Chickering & Erhman, 1996). In a face-to-face environment feedback often takes place via visual cues. A nod of the head can indicate a good job. Within the online environment while this non-verbal cue is not always possible (unless using synchronous conferencing), it is important to provide both informational and evaluative feedback in a timely manner. Some examples include:

- *Regularly monitor bulletin and discussion boards.*
- *Send an email acknowledging receipt of a student assessment (even if submitted online). This can alleviate undue concern on the student's part.*
- *Feedback should be timely (negotiate with students at the beginning of the course as to your commitment) just as importantly their commitment*

Absence of communication in terms of feedback isolates the student and often manifests as a problem further into the course. The quicker the feedback, the more likely is to have a positive affect on the students motivation.

Principle 5. Emphasises time on task

Time plus energy equals learning. Learning to use one's time well is critical for students and professionals alike. Allocating realistic amounts of time means effective learning for students and effective teaching for faculty (Chickering & Gamson, 1987, p. 2).

Students understanding how to use their time effectively within an online environment is difficult. There is a presumption that because it is online, they can do it later. While this is true, in a lot of cases, later it is often too late. Students can be easily distracted from their study with work commitments, social and family life. It is important for the practitioner to set up expectations at the beginning of the course. The following are some instructional strategies that will assist to maximise time on task:

- *Ensure students are aware of deadlines by preparing an overview of the course and assessment details.*
- *If possible, set regular submissions of assessment, such as interaction with the discussion list or reflective tasks once per week. These do not need to be onerous of the practitioner, but are important to establish the time management skills required by the student.*
- *Send reminder emails about due dates.*

It is easy for students to procrastinate when they are not regularly meeting with their class. By establishing small and regular submissions of work will allow students to stay on task and regularly participate in activities.

Principle 6. Communicates high expectations

Expect more and you will get it. High expectations are important for everyone - for the poorly prepared, for those unwilling to exert themselves, and for the bright and well motivated. Expecting students to perform well becomes a self-fulfilling prophecy (Chickering & Gamson, 1987, p. 3).

Once again, without the visual cues and face-to-face meetings, practitioners in the online environment need to ensure they explicitly communicate their expectations to students. Criteria sheets, course expectations of the course and public announcements are ways of communicating expectations. Other strategies could include:

- *Displaying exemplar student work provides motivation when coupled with pointing out the exemplary points of the work.*
- *Displaying student work that you wish to highlight what students should avoid. Students don't know until you tell them.*
- *Reward performance by publicly acknowledging the student/work as well as perhaps incentives of extra marks for work in on time etc.*

Communicating expectations allows the student to follow the guidelines you have established. Providing these rules and boundaries ensures they can be successful.

Principle 7. Respects diverse talents and ways of learning

Many roads lead to learning. Different students bring different talents and styles to college. Brilliant students in a seminar might be all thumbs in a lab or studio; students rich in hands-on experience may not do so well with theory. Students need opportunities to show their talents and learn in ways that work for them. Then they can be pushed to learn in new ways that do not come so easily (Chickering & Gamson, 1987, p. 3).

In any environment, students bring with them difference; different learning styles, different ideas, different talent and different life experiences. It is important to respect and value these differences as they can enrich the learning experience. Just as conventional teaching offers graphs, images, text, audio and video, so can the online environment. Material can be prepared in such a way as to cater for preferred and individual learning styles. To support these diverse ways, the practitioner can:

- *Include an 'ice-breaker' activity where the students can learn about their peers and you can learn about them.*
- *Set up a 'Coffee Lounge' discussion forum where students can freely engage with each other.*
- *Encourage students in engage in deep discussion, to ask the hard questions and to get the most out of their discussion.*
- *Give students some freedom in selecting their assessment.*

Practitioners should utilise authentic learning experiences that are representative of their student cohort and provide learning tasks that are filled with real life examples.

SUMMARY

The research undertaken thus far has outlined the need for a transparent framework such as Chickering & Gamson be adopted across both face-to-face and online teaching practice. It has been argued that the adoption of these principles in the design, planning and delivery phases of instruction will ensure that practitioners can utilise the principles as a starting point for effective online practice.

This chapter has examined the concept of utilising the 'Seven Principles for Good Practice in Undergraduate Education' designed by Chickering & Gamson (1987) as a pedagogical framework for online teaching. By examining the characteristics of good teaching outlined in the seven principles and linking these to examples of online practice, the authors have argued that by adopting these principles regardless of the context (face-to-face or online) will allow practitioners to bring pedagogy back to the forefront of online learning.

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