An Evaluation of Faculty Created Online Course Content in a Practical Teaching Environment

A Case Study

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Abstract

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The purpose of this study was to evaluate the use of faculty created online content in a practical training environment. The study focused on student engagement, the instructional values of personalised multimedia and the benefits associated with using a course website.

The study was carried out in a Hotel Management college in the west of Ireland. The area of focus for the study was practical restaurant training. The participants were all first year undergraduate business students studying hotel management.

A faculty created course website and instructor personalised videos were used for this study. The course website was implemented at the college prior to the study so that the participants could use the website and identify any issues before the research period commenced. The instructor personalised videos were embedded on the website along with additional educational material which would be utilised by the participants over the course of the study.

A case study approach was used to examine this topic. The research was based on the use of both quantitative and qualitative data. Questionnaires, focus groups and online statistical data, were all used in order to gather data for the case study.

The findings of the case study revealed that the participant preferred the audio and visual elements of the instructor personalised videos compared to that of other generic available material or reading instructions from a book. It also highlighted that Non-EU students placed a greater emphasis on the use of these videos during practical classes. An additional finding identified that the participant usage of the online content prior to practical classes had a positive effect on the individual self-efficacy levels.

A principle conclusion for the case study was that the quality and design of online content has major implications for its ability to engage students. In addition, the added flexibility and interactivity that online content offers appeals greatly to students of today.
Declaration

I hereby declare that this project is entirely my own work, and that it has not been submitted for any other academic award, or part thereof, at this or any other educational establishment.

Signed ________________________________

Date _________________________________
Acknowledgements

I wish to express my gratitude to the following people who assisted me during the course of this research:

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I would also like to thank all the staff and students at the college where this study was carried out for their support and participation in this research.

Finally, thank you to my fiancée Carol for her support and encouragement over the entire period of this research.
Dedication

This thesis is dedicated in memory of two very special people in my life
Dorothy Langford
Susan Clarke
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<tbody>
<tr>
<td>BECTA</td>
<td>British Educational Communications and Technology Agency</td>
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<tr>
<td>CAI</td>
<td>Computer Assisted Instruction</td>
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<td>CMS</td>
<td>Course Management System</td>
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<td>CSO</td>
<td>Central Statistics Office</td>
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<td>ESL</td>
<td>English as a Second Language</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>F&amp;B</td>
<td>Food and Beverage</td>
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<td>HE</td>
<td>Higher Education</td>
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<td>HEIs</td>
<td>Higher Education Institutions</td>
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<td>ICT</td>
<td>Information and Communication Technology</td>
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<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>LAN</td>
<td>Local Area Network</td>
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<tr>
<td>MIT</td>
<td>Manager in Training</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<tr>
<td>PC</td>
<td>Personal Computer</td>
</tr>
<tr>
<td>SCT</td>
<td>Social Cognitive Theory</td>
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<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific, and Cultural Organization</td>
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<td>VLE</td>
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CHAPTER 1 Introduction

“My biggest single concern is that teaching and learning aren’t changing as quickly as young people are changing”

Lord Puttnam, CBE (online)

1.1 Introduction

Recent developments in internet technology are having a tremendous impact on educational processes, introducing innovative instructional practices and learning material. The interactivity that these technologies offer allow the student to interact with their peers and teachers in ways that were never before possible. Teaching and learning institutions need to be adopting these technologies as a new digital generation of learning enters the educational system. Ignoring their requirements is not an option.

In 2011 the Irish Government published a report on the National Strategy for Higher Education to 2030. This report looked at all aspects of Higher Education (HE) in Ireland and how it should evolve to cope with the change in students, teaching practices and industry requirements. It highlights the importance of adopting e-learning as a complementary element to traditional learning practice. It is hoped that this will encourage a more self-directed learning, problem based learning and collaborative learning environment.

It has been documented that academics are adopting more recent technologies at a much higher rate and with more enthusiasm than previous audio-visual media. This has been attributed to the advances seen in computer technology and this ability to manipulate words and symbols in a much more engaging manner (Balasubramanian et al. 2009). This adoption can also be attributed to the pressure being placed on Higher Education Institutions (HEIs) by industry for graduates to be technologically ready when entering the workforce. The hospitality industry in the 21st century has recognised the significant contribution that multimedia technologies are making to create organisations that can operate more efficiently and effectively which also adds value to their offering (Sigala et al. 2001).
Therefore in order for this integration of new technology to happen, HEIs must start looking at innovative ways to incorporate technology into the curriculum. This cannot happen without major change both to the curriculum and how the curriculum is delivered. It is important however that a focused approach is taken to this change process, as rushing too quickly to adopt technology just for the sake of it will have no benefit to either the student or the institution. The focused approach needs to be guided by incorporating meaningful pedagogical change alongside the technology change, which is backed up by research in this area.

An inexpensive way to implement such technological change is through faculty created online content. These offer many opportunities to the users, the student and the teacher.

1.2 Statement of Topic

A course website was designed and implemented into a practical training environment. It was used to host instructor personalised multimedia resources and information relating to the subject. The purpose of this research is to examine how the student engaged with the website, what elements they found most useful and the effects the website had on student learning and motivation.

1.2.1 Research Rationale

Personalised videos had been used over the previous two semesters in the college. These were hosted on a social networking website and no analysis on their effectiveness and usage has been carried out. Students had commented on the benefits of using the videos however the author felt that a more structured approach was required for implementing this technology into the practical training environment. A course website was created as it allowed the hosting of the videos in addition to other materials that were only available to the students on the college network. The course website facilitated the gathering of specific usage statistics over
the course of the study. These statistics would then be used to evaluate the student engagement with the website along with additional information gathered throughout the study period.

### 1.2.2 Research Context

This research study was carried out in a third level college in the west of Ireland, which specialises in the teaching of International Hotel Management and Business Studies. The college had over 350 students registered over a four year period. The group of students selected to partake in this study were in first year. This group spend the majority of their first year in college rotating through five different practical teaching areas related to the hospitality industry, one of which is at the centre of this study.

### 1.3 Research Objectives

The main purpose of this research study was to evaluate the educational benefits of using faculty created online content in a practical teaching environment and the effects it may have on student learning.

The following research questions were prepared in order to guide this study:

- To investigate students’ engagement with online course content in practical training.
- To evaluate the overall benefits and constraints of using faculty created online content in practical training.
- To investigate the importance of content to student learning outcomes with regular use of online course content.
- To explore the instructional value of personalised multimedia compared to other freely available material.
- To identify possible areas for development of the faculty created online content.
1.4 Research Methodology

The study involved conducting a literature review focusing on specific areas relevant to this topic. This will include investigating published articles and other relevant material in order to gain an understanding of the direction this research should take.

The primary research for this study utilised a multi-method approach focusing on bother qualitative and quantitative research processes. Pre-study and post-study questionnaires were developed in order to evaluate students’ engagement levels with the online content and their opinion of using this type of technology in a practical setting. These were administered to all the students participating in the study at the beginning and again at the end of the study period. Two focus groups were carried out at the end of the study period to allow for the collection of qualitative information.

Usage statistics were also collected from the course website and the videos hosting website. All this data was analysed and compared in order to evaluate the overall usefulness of the online content to engage students in a practical training environment.

1.5 Research Structure

This study is documented in six chapters.

This chapter, Chapter 1, details the introduction to the study. It outlines and examines background material associated with the area of research. It introduces the rationale for carrying out the research and the main objectives. It also summaries the research methods used while carrying out this primary research for this study.

Chapter 2 contains a detailed summary of published literature related to this research study. It is divided into a number of sections, focusing on the following areas; information and communication technology in education, learning theories,
hospitality education, technologies available to educators, e-learning and engagement and motivation.

Chapter 3 documents the research methodologies employed in the study. It also presents the aims and objectives of the research along with a description of the research participants and the research environment. It examines why these methods were chosen and how the data collected was analysed.

Chapter 4 presents the research findings following the analysis of the questionnaires, focus groups and online statistical information. These findings are presented using the research objectives as headings.

Chapter 5 discusses the findings, which are outlined in Chapter 4, and compares these findings to research previously carried out in this area.

Chapter 6 summaries the findings from Chapter 5. It draws conclusions and identifies areas for further research.
2.1 Introduction

An Irish Government report (Hunt Report) identifies the Higher Education (HE) sector as a “major agent of positive change and development” (Hunt 2011, p. 30). The report explains that HE has served the country well in the past, developing an economy rich in knowledge and skill that was able to make major changes in a global landscape. It does however point out that what has served us well in the past may not serve us in the future, without significant changes. Hunt (2011) identifies that in the coming years systems must change to accommodate new technologies that can enhance the learning experience. Delivery methods in HE must also adapt to allow flexibility in learning by introducing blended approaches to learning. This can be achieved through on and off-campus learning strategies.

The purpose of this research study is to examine the use of faculty created online content in a practical training environment and evaluate its benefits and constraints. It will also review the value of personalised multimedia compared to other freely available media material.

This chapter will examine relevant literature focusing on the HE sector and the technological evolution taking place. In addition, a review of learning theories and how they are developing to encompass the use of information and communication technology (ICT) in education. There will be a strong focus on connecting these theories and technologies to tourism and hospitality education.

2.2 Technology in Education

The use of computers as a learning tool, and its possible advantages, have been investigated over many years but many people still question if this resource is still being utilised to its full potential. Cuban (1986) points out the disappointing history
of educational technologies and how failure has occurred many times when new technologies were implemented in the past.

In 1922, Thomas Edison, predicted that educational books would be a thing of the past, as motion picture would take over and revolutionise our educational system, however this was found not to be the case (Cuban 1986). Many years later, when Computer Assisted Instruction (CAI) programs which were being hailed as the future in educational development, they were found to be no better than the teacher-based models of instruction (Mayer and Moreno 1998). Even with all these failures, developments in the area of Information and Communication Technologies (ICT) continued. Over time, the notion that technology would replace traditional modes of learning has diminished and researchers and teachers alike have concentrated on combining technology and traditional learning methods (Garrison and Akyol 2009) in a way which focuses on the student centred learning rather than traditional teacher centred learning (Lowry and Flohr 2004). This creates a concept of blended learning. Garrison and Akyol (2009) highlight that the impact of developments in both the internet and instructional technology are providing new possibilities to lecturers in HE, allowing them create collaborative learning communities, which are not limited by time and space.

A study by Mayer and Moreno (2002) investigates how computer-based multimedia learning environments could benefit the learner. Based on Mayer’s cognitive theory of multimedia learning, they examined how using pictures and words (animation and narration) offered a powerful platform for improving the understanding of the learner. The results of this study note that learning was increased when narration and animation were presented together as opposed to narration alone. This gives rise to the benefits of multimedia learning and furthermore, the integration of digital video as a learning tool.

Inan and Lowther (2010) mention that even though access to computers is constantly increasing, studies have shown that computer access is still not at a sufficient level to fully integrate this ICT into teaching. They further point out that even when the technology and software is available, only limited integration occurs. Kenny (2002)
found that on campus computers could not be relied upon, as they were often out-dated. However Wang (2009) points out that teachers must have the knowledge to know what tools they require for their teaching and learning needs and then use these tools effectively in the instructional process.

One of the main advances in internet technology would be the movement from static, read-only websites, to the interactivity that is afforded through Web 2.0. This movement in technology allowed developers to add interactivity and participation to websites by allowing individuals to communicate and share information more openly, such as on sites like Wikipedia (Garrison and Akyol 2009). Web 2.0 technologies open up the internet to learners in a way that was previously not possible, creating an environment where individual learners can be critical, creative, constructive and authors of their own interruptions of what others present (Nagy and Bigum 2007). Web 2.0 has opened up the internet to technologies like social networking, wikis, blogs, social media sharing and much more (Garrison and Akyol 2009). It is noted that many of these Web 2.0 technologies have the potential to create engaging learning environments, which is why educators are so keen to incorporate them into their teaching (Baird and Fisher 2005).

Young people of recent generations seem to own a natural skill to appropriate the technologies and to incorporate them fully in their daily activities. (Herrera-Batista and Gonzalez-Martinez 2008, p. 152)

This shows the importance of technology to the young people of today, who have become known as the “digital natives” (Prensky 2001) or Generation Y (Morgan 2012). This importance on technology is not only in a social setting but also in an educational situation. They are exposed to technology from the moment they wake up, from using computers, digital music players, mobile phone, video games and other forms of digital toys (Prensky 2001). Therefore the expectation that technology would be integrated into their learning experience is seen as must for them. For this to take place the teacher, who Prensky (2001) identifies as “digital immigrants”, need to know and understand how this technology will impact on the students, in other words how do these digital natives learn? Prensky (2001, p.1) highlights that “… our students have changed radically. Today's students are no longer the people our educational system was designed to teach”. This was also
echoed by Lord Puttnam as reported by Kennedy (2012) when he discussed the state of the Irish educational system saying that if a highly regarded medical surgeon from 1912 was to enter a modern hospital they would no longer be able to perform their job however if a teacher from the same period was to enter a modern classroom they would still deliver a competent class. Lord Puttnam also noted that since 1985, we know 75% more about how the brain works, however this advance has not been taken full advantage of in the educational circles. This clearly signals a need for change in how we facilitate student learning in a modern society.

2.3 Introduction to Learning Theories

There are many different theories on how individuals learn and how this can benefit the integration of ICTs. Learning theories can play a major role in understanding how different teaching and learning techniques can benefit the individual.

As information and communication technologies are integrated into education, it is important to recognise the best way for this integration to take place. In the past practical teaching in the hospitality and tourism industry may have focused on the behaviourist approach to learning. As education moves forward, the importance of creating students who are critical, creative thinkers who will continue learning once their time in formal education is over (Hunt 2011), shifts the educational process to a more constructivist and cognitivist approach. The latter approaches to teaching and learning are more focused on the students’ construction of their learning and with the teacher acting as the facilitator (Dalgarno 2001).

Forrester and Jantzie (2000) point out that “learning is a personal act” and that we all have our own way to take on the learning process in terms of what, when and how we learn. Daines et al. (1993) sees learning as a change in a person’s knowledge, attitude and values. This change leaves a lasting impression, thus meaning that this change in a person is the product of the learning process. Although many see learning as a simple act, a natural process that is often taken for granted, however understanding how this learning happens is a very complex task (Forrester and Jantzie 2000). The main theories, behaviourism, constructivism and cognitivism
along with Bandura’s social learning theory will be discussed in more detail in the next section.

2.3.1 Behaviourism

Behavioural theorists such as Watson, Thorndike and Skinner highlight that the main emphasis of behaviourism is with observable indicators that show that learning is taking place. This contrasts the view of cognitive theorists who see learning as a mental process. Behaviourists don’t discount these mental processes but view them as unobservable behaviours (Forrester and Jantzie 2000). Dalgarno (2001) summarises behaviourism in teaching as a strategy whereby the learner undergoes repetitive conditioning. This was also noted by Schuman (1996) pointing out that behaviourism is based on behavioural change and it centres on behavioural patterns being repeated over and over again until the behaviour becomes automatic. This reflects the traditional approach to teaching where direct instruction is used to educate the students (Forrester and Jantzie 2000). Direct instruction is a teacher-centred approach to learning, with the teacher providing the knowledge for the students in a direct way through contingencies.

Wall (2004) describes the strengths and weaknesses of different learning theories. Wall sees behaviourism as having clearly defined goals and the learner being able to respond to the cue of that goal. However he points out that this can also be a weakness as if the right cue is not reviewed an individual may not know how to respond (Wall 2004).

2.3.1.1 Behaviourism and Computers

When computers were first introduced to classrooms, computer-aided instruction (CAI) was introduced as a learning tool. CAI was identified as a form of drill and practice learning where questions acted as a stimulus and the answer from the student was the response (Forrester and Jantzie 2000). One of its strengths was its ability to meet the specific needs of the learner through individualised instruction (Ross and Schulz 1999). At the time CAI was seen as an effective approach to
teaching as it allowed self-paced instruction to students while teachers were able to give more time to those students with individual needs. However Ross and Schulz (1999) found that it may not be suitable for all learners and that teachers should be careful when using the computer as a tool for learning. This was due to the fact that CAI could be affected by individual learning characteristics of the student, such as background knowledge, learning styles and individual motivation.

2.3.2 Constructivism

Constructivism is an epistemology of how people learn and assimilate new knowledge, asserting that knowledge is acquired by a process of mental construction. (Sigala 2002, p.31)

Constructivism looks at the individual learners’ ability to construct their own perspective of the world based on experiences and individual interpretations of situations, therefore creating their own learning (Schuman 1996, Forrester and Jantzie 2000). Dalgarno (2001) notes that in a constructivist approach to learning, it is the student who is responsible for the construction of their learning and the teachers is only a facilitator to this knowledge construction, it is also suggested that learning happens when individuals construct an internal representation of how they see knowledge (Tsay et al. 2000, Zhang et al. 2006). White-Clark et al. (2008) look on this approach to learning as the teacher being “guide on the side” of the students who construct their own meaning and understanding of content. It is well documented (Forrester and Jantzie 2000) that constructivists view behaviourism as too teacher-centred and directed. Papert (1993) believed in a natural curiosity that children have as learners to construct their own meaning of the world and that the educational system stifled this natural curiosity.

2.3.2.1 Constructivism and Computers

Balasubramanian et al. (2009) suggest that if e-learning is to be a success, its development must be along side the use of appropriate pedagogies and ICT, which is incorporated into teaching, based on students prior learning experiences. It is further noted that e-learning failures can be as a result of learning being as a transfer of
knowledge as opposed to learning being an active process of knowledge creation. This implies that the learning process should support interactivity, participation, communication and construction.

Tapscott (1998) identified that teachers are moving away from using computers as mere testing devices and as a means to create fancy texts, which are very much behavioural uses of computers in terms of drill and practice learning. Tapscott highlighted eight shifts in learning which signalled a move to a more constructive view of education. These shifts included moving from teacher-centred learning to a more student centred approach, from an instruction method of teaching to a construction and discovery method while customising learning to individual needs rather than a one size fits all approach and looking at the teacher as the facilitator rather than the transmitter of information.

These shifts further identify the movement away from the behaviourist approach to a more constructivist approach to teaching. Due to these shifts in our education structure students are now becoming more innovative in their use of computers, utilising them to solve problems and build their own opinions on topics rather than just learning how to use them (Combs et al. 2009). Cloke and Sharif (2001) note that these shifts, along with an increased emphasis on the use of ICT, create an educational system which empowers its students to learn. Zhang et al. (2006) suggest that in a constructivist educational environment, more emphasis is placed on the student’s ability to learn through discovery than finding the correct answer. Zhang et al. (2006) highlights that when the theory of constructivism is embedded into web-based learning it allows the learner to engage in different creative and interactive activities while creating knowledge, thus making it more interesting.

2.3.2.2 Constructivism in Hospitality Teaching
From a constructivist approach the teacher becomes a facilitator, allowing the student to focus on the construction of their own knowledge rather than the knowledge being a direct instruction (Dalgarno 2001). Practical training in the hospitality industry could be seen as very much a constructivist approach to learning. Students are exposed to real life situations in a semi-controlled environment allowing them the
experience of making their own decisions to achieve an acceptable outcome. The educator can then support the student in making the right decision. Thanasoulas (2002) states that in constructivist learning the learner is immersed in their environment and as a result gets a better understanding of what the environment contains. The assistance from the educator follows the “guide on the side” approach to learning, where students construct their own meaning and understanding of the learning experience with the educator being available for assistance (White-Clark et al. 2008). This type of learning also can be viewed as experiential learning the principles of which are based on a constructivist approach (Rogers and Freiberg 1994). An experiential approach to learning can result in more meaningful learning outcomes, as it is based on the premise that the learner is immersed in the experience of learning and therefore engages in active problem solving (Holman 2000).

### 2.3.3 Cognitivism

Cognitive approach to learning came about when behaviourism could not explain events in the learning process such as problem solving and language learning as well as to why people respond differently to the same stimulus (Eggen and Kauchak 2004). Therefore one could say that cognitivism relates to what learners actually know as opposed to what they do. Alessi and Trollip (2001) point out that the cognitivist approach is about knowledge construction brought about by already present knowledge, reflection, motivation and thinking. According to Sigala (2002) individuals produce cognitive structures that are similar to situations they are engaged in, thus assimilating new knowledge. These new “knowledge structures” are then used along side other experiences as individuals continue to interact with the environment. Knowledge is then embedded within experiences and is not separated when the learner understands it.

Albert Bandura introduced Social Cognitive Theory (SCT) when he combined this work on behaviourism and social learning and developed this new theory (Stajkovic and Luthans 1998). SCT learning happens through knowledge acquisition by cognitive processing of information. Stajkovic and Luthans (1998) explain SCT as
recognising both the social and cognitive aspects of learning, the social element focuses on what is learned by being part of society and the cognitive part being the “influential contribution of thought processes to human motivation, attitudes and actions” (Stajkovic and Luthans 1998, p.63).

Research in the area of self-efficacy has been as a direct result of Banduras’ work in the area of SCT. Self-efficacy is defined as the levels of confidence or beliefs in the ability of an individual to perform or execute a courses of action to accomplish set performance outcomes (Bandura 1997, Chou 2001). Plenty of research has been carried out on the benefits of self-efficacy in education. The author has found very little literature directly related to the tourism and hospitality industries; however its links to practical teaching in other areas are numerous.

Efficacy beliefs have an important role to play in the development of “self directed” learners. Students’ beliefs in their own capabilities to over-come a task effects greatly the overall outcome of that task (Bandura 1997). Lane et al. (2003) research findings in a study of sports students show that if low levels of self-efficacy are discovered early, this can reduce failure rates. Bandura (1997) points out that efficacy beliefs have an impact on how individuals think, feel, act and motivate themselves. Further studies by Lane et al. (2004) found that self-efficacy is extremely important in student motivation. Lane et al. (2004) also pointed out that low self-esteem in an individual could be reflected in their future self-efficacy levels. Further to this point, Zimmerman and Bandura (1995) identifies that students with a high sense of efficacy for achieving educational tasks will put themselves forward to participate, will work harder and persevere longer at a task than those who question their capabilities. Bandura (1993) highlights that having knowledge and skill does not mean that an individual will be successful. The conditions in which a task is being carried out will also influence the eventual outcome as well as the perceived efficacy level of the individual carrying out the task. Thus efficacy beliefs contribute to academic performance.

A study by Pajares and Johnson (1994) also highlighted that self-efficacy helps to explain differences in individuals behaviour even when similar skill and knowledge
levels are present. A further study by McConville and Lane (2006) found that increased levels of self-efficacy were present in students who view a situation by video before encountering it, this was also noted by Cannon et al. (2009) and will be discussed later in this chapter.

2.3.4 Cognitive Theory of Multimedia Learning

Mayer (2001) developed the cognitive theory of multimedia learning. This theory looks at how the human mind works and how this can lead to a greater learning process through multimedia. The theory is based on three core assumptions, Dual-Channel, Limited-Capacity, and Active Processing (Mayer 2001).

The Dual-Channel assumption looks at how humans have separate information channels for processing audio and visual information. When we look at presentations, we process what we see through our visual channel and what we hear through the auditory channel. The Limited-Capacity assumption identifies that each channel had a limited capacity when we hear and see information. The Active Processing assumption deals with the processing of information through these channels and how this information is the processed in a cognitive manner, where clear mental representation of what is seen and heard are interpreted (Mayer 2001).

There has been a lot of evidence produced regarding the importance of multimedia learning in hospitality and tourism education and its effect on the learning outcomes of these students. Multimedia learning allows the acquisition and development of skills such as communication, multicultural and social skills (Sigala 2002). It has also been claimed that images and sound (Keegan 2007, Schott and Sutherland 2009) are important in tourism education as they create an engaging environment. Sigala (2002) also noted that multimedia-learning environments offer students the opportunity to interact with technology and media, exposing them to this much-utilised skill in the industry. However Lee and Gretzel (2010) point out that much of the writing in this area fails to take into account differences in students and the impact of this technology on learning outcomes. Thus one could say that this technology does not accommodate all learners.
2.4 **Information and Communication Technology**

“The power of information technology is greatly enhanced by communication technology”

(Balasubramanian et al. 2009, p. 2)

2.4.1 **What is Information and Communication Technology?**

Information and Communication Technology (ICT) can be seen as range of technological tools, both hardware and software which are used to collect, store, process and communicate information (Blurton 1999, Sarkar 2012, Ghicas 2000, Dunmill and Arslanagic 2006). ICT relies heavily on broadband access in order to be utilised to its full potential and without broadband access at home many people may be at a disadvantage when it comes to using ICT in education.

2.4.2 **Internet Penetration in Ireland**

As stated above internet access and especially broadband access is becoming more and more important in our daily lives. Ireland’s Minister for Communication Pat Rabbitte (TD) has signalled that over the next 3 years Ireland hopes to have 100Mbps broadband to over 650 educational institutions (Kennedy 2012). This highlights the emphasis that the Irish government are putting on getting broadband internet to schools. However having broadband in schools is only half the solution as access at home is imperative to ICT being successfully utilised.

From analysis of Ireland’s Census (CSO 2011), only 72.7% of Irish households own a personal computer, leaving over 25% of the population without access to a computer at home. This is still a major section of the Irish population without access to the internet. Based on the report by Punie et al. (2006) this puts a large number of households at a disadvantage when it comes to competence in ICT. The Census also highlights that 71.8% of the population has internet access, however broadband penetration is only at 63.7%. This highlights a lack of broadband infrastructure in
the country. However 98.8% of Irish households with a computer have access to some type of internet connection, with 87.7% having a broadband connection in their home.

2.4.3 ICT in Education

ICT has opened up many opportunities in the area of education, including the transformation of educational curricula, practices of instruction and new and innovative options for materials to aid the learning process (Sigala 2002) while also adding to the flexibility of the learning process (Tessaring and Wannan 2010). It has been reported that no knowledge economy can afford to be without ICT in its HEIs. HEIs that are at the forefront of this technological revolution will have a distinct advantage in the recruitment of students (Balasubramanian et al. 2009). In the past this technology was seen as an alternative to reinforce face-to-face education, however as times change it has become a fundamental educational resource (Herrera-Batista and Gonzalez-Martinez 2008). In a joint research report for the European Commission, Punie et al. (2006) identify that it is impossible to imagine a learning environment which will not be supported in some way by ICT in the future and that ICT will have major effects on the complete learning process. Sarkar (2012) argues that ICT had only touched the surface of its educational abilities and that in the coming years this will grow considerably (Balasubramanian et al. 2009).

In today’s information age society, it is essential for individuals to making good use of ICT and it is up to HEIs to provide this crucial skill to students which will allow them to thrive in this information society (Selwyn and Husen 2010). Punie et al. (2006) and BECTA 2010 (as cited in Selwyn and Husen 2010), note that it is not only important to have ICT in schools it is also important that it is utilised in the home. As skills develop they have been shown to go hand in hand with levels of achievement in schools. This theory opens up the issue of the “digital divide” which highlights the inequalities in society and thus preventing those with little or no access to ICT at home from participating fully in a knowledge based society (Punie et al. 2006). However other studies (Cosgrave et al. 2011, Heaton-Shrestha et al. 2009) found that access to ICT at home was not a barrier, as students used on campus
computers to access information rather than rely on access at home. This will be discussed further in the section on e-learning later in this chapter.

It is important to note that ICT is not only about using personal computers but using mobile technology in the form of mobile phones and other handheld devices, as over half of the world’s population either owns a mobile phone or has access to one (Balasubramanian et al. 2009). A more recent study by the World Bank shows that mobile phone access has now risen to at least 75% of the world’s population, further highlighting their importance in this field (Fitzpatrick 2012).

2.4.4 ICT in Higher Education

HE has seen a huge increase in the use of the web and other internet powered technologies in the past 15 years (Chen et al. 2010). With increased investment in the area of ICT, teachers are under increasing pressure to integrate this into their everyday teaching. It is important that teachers understand this technology and know how to introduce it in a meaningful way. An OECD report from 2001 states that this integration of ICT needs to be backed up by effective skills development of teaching staff, otherwise such integration will fail. This was also highlighted in a UNESCO report into ICT and HE. This report by UNESCO (Balasubramanian et al. 2009) stated that when ICT was implemented in an effective way into a curriculum, it can harness deeper learning. However if the pedagogical skills required to use technology effectively in HEIs is not present, this technology becomes obsolete (Balasubramanian et al. 2009). It is therefore important to ensure that its implementation is clearly guided by the HEIs policy on ICT integration. ICT is not only being used as a teaching tool, many HEIs are using this technology as a method of course evaluation. However it is noted that the main development of this technology is in the area of learning and teaching (Stensaker et al. 2007). This area of ICT is crucial for the success of HEIs. In our current competitive environment the question is not how, where or even the consequences it might have on HE, but how quickly the benefits of this new technology can be realised (Stensaker et al. 2007).
2.4.5 Challenges and Barriers of ICT in Education

As well as highlighting the positive aspects of ICT it is always important to look at the challenges and pitfalls that face HEIs. Four major pitfalls are highlighted below:

- Installing learning technology without reviewing student needs and content availability.
- Imposing technological systems from the top down without involving faculty and students.
- Using inappropriate content from other regions of the world without customizing it appropriately.
- Producing low quality content that has poor instructional design and is not adapted to the technology in use.

(Balasubramanian et al. 2009, p. 9)

The pitfalls above highlight how easily ICT can be misused in our HEIs, eventually resulting in its failure to develop students’ learning.

Other challenges include cost and ICT literacy of faculty. From a cost point of view it is important to look at all of the costs associated with ICT, not just the upfront cost on the equipment but the on-going costs in relation to maintenance, upgrade and license fees. The ICT literacy of the faculty should not be overestimated, as they are the individuals who will be responsible for implementing this ICT and guiding the students (Balasubramanian et al. 2009). This was highlighted in the early 1990’s when it was identified that many educators were resistant to the use of ICT in the classroom (Christensen 2002), so therefore it would be important to support and train educators in this area. Christensen (2002) commented that although different techniques are used when computers are integrated into the classroom, there should be a positive effect on the attitudes of both the teacher and the students to ICT.

2.5 Hospitality Education

Tourism and hospitality industry was once seen as an area where little or no formal education was required (Wood 1992), however this has changed rapidly over the last number of years as the international hospitality industry requires people with a
formal education in this area. They are looking for multi skilled individuals who can deal with what had become a very complex industry (Sigala and Baum 2003).

Gillet et al. (2005) identified some key characteristics that are generally required of individuals working in the hospitality industry. These included being highly adaptable critical thinkers, culturally sensitive, balancing customer expectation with highly effective business practices, and sustaining high levels for performance at all times. In addition to these, computer literacy skills are becoming increasingly important, and these skills should not be left out of the hospitality curriculum (Cheung and Law 2000). ICT is seen as one of the major changes to hit the tourism and hospitality industry over the past decade (Cantoni et al. 2009) and its utilization throughout the hospitality industry had put pressure on employees to be highly skilled in this area (Connolly and Sigala 2001). However Fortune et al. (2011) points out that hospitality related courses were slow to adopt this new technology. Christou (1999) highlights a reality facing the hospitality education sector, which is that many recruiters are giving preference to students displaying traits of good communication, social and ICT skills while the educational sector is still concentrating on the practical/vocational nature of the industry. This adds its own problem to the equation of combining both classroom delivery and practical training. Getting the right balance of both disciplines is important to produce industry-ready employable graduates (Aubke 2007).

Many international companies are now expecting, like other industry sectors, hospitality graduates to engage in “Manager In Training” or MIT programs. Most of the international companies (Four Seasons, Ritz Carlton, Starwood, Jumeirah) have their own MIT programs in an effort to further educate and integrate these graduates into their workplaces. Starwood hotels see the aim of their MIT program to “attract, develop and retain” talented individuals who will be the leaders of the company tomorrow (Starwood Hotels 2012).

In an effort to prepare students for such a varied set of skills, it would appear that hospitality educators must integrate as much as they can into the curriculum by using innovative techniques. It would seem impractical not to use ICT to assist in
achieving this goal as it provides the students with the computer literacy skills they require while also making teaching methods more efficient (Cheung and Law 2000). Johnson (2009) highlights that it is about being innovative and adopting ICT into hospitality curriculum and not just an either/or approach.

2.5.1 ICT in Hospitality Education

The availability of high-speed internet access can be considered as one of the most important factors for ICT both on and off campus. This increased availability in high-speed internet access has put pressure on educators to integrate this technology into their curriculum. Sigala (2002) points out that the internet had made such an impact on hospitality teaching as it offers “enhanced interactivity, connectivity and convergence” while also allowing students to interact with peers and educators as well as educational material in ways that were not previously possible. Many technologies are becoming available to educators today and they are designed in such a way that they can be integrated with ease into the teaching curriculum. The benefits of the internet allow the use of webpages to deliver course content. However one of the major advantages of the internet is that it will allow the use of multimedia resources for example streaming of video, audio and interactive media (Aubke 2007).

Questions have been raised in the past as to whether technology is a good fit for hospitality education, given the practical nature of the industry and the vocational nature of the curriculum. It has been noted that students on hospitality courses tend to be attracted to the learning environment rather than the course itself (Horton et al. 2005). However it has been found that students in hospitality education are open to having technology integrated into teaching methods as long as its appropriately used and resourced (Aubke 2007). As already noted, the hospitality industry has been shaped over the past decade by the implementation of ICT into almost every aspect of the industry (Cantoni et al. 2009, Connolly and Sigala 2001), therefore it would be foolish for educators to ignore its use during the educational process. Sigala and Baum (2003) conclude that hospitality educational institutions should approach the integration of ICT into the curriculum by blending it with the traditional teaching
methods rather than total substitution. In adapting this approach, they highlight that institutions should be able to achieve numerous traits required by the industry. These traits include:

- Lifelong learning.
- Interactive and collaborative learning.
- A seamless web of interrelated education.
- Information literate and knowledge management oriented.
- Diversity.
- Asynchronous learning.
- Affordable learning.

(Sigala and Baum 2003, pp. 374-375)

2.6 Blended Learning

Mason (2005, p. 217) poses a question “what exactly is blended in ‘blended learning’?”. In response Mason (2005) refers to many articles on blended learning under a number of heading such as technologies, teaching methods, location of learning and learning experiences for the students. However he refers back to the original use of blended learning being a mixture of traditional classroom style learning, (face-to-face learning) and technology based learning or e-learning as it has more recently become known as.

Boyle (2005) points out that any blended learning approach should be designed and developed with pedagogical implications in mind, as discussed previously in this chapter (Balasubramanian et al. 2009, Mayer and Moreno 2002). This development and design of blended learning environments should also consider in the needs of the user - the students, as they are ultimately the end users who will be interacting with this environment on a daily basis (Boyle 2005, Southwell 2008).

2.6.1 Criteria for Blended Learning

Before blended learning is implemented into a learning environment certain questions should be answered. Clark (2003) highlighted a number of questions that should be addressed, some of which are listed here:
• Does the new approach improve learning outcomes?
• Is the blend appropriate for the audience?
• Does the blend fit into the culture of the organisation?
• Are sufficient resources available?
• Can the current infrastructure support online components?
• Is the blend scalable and sustainable?

(Clark 2003, p. 21)

2.6.2 Blended Learning in Higher Education

The use of blended learning in HE has become wide-spread over recent years as many educational papers have discussed its implementation, benefits and weaknesses (Boyle 2005, Kelly et al. 2009, Behnke and Ghiselli 2004, Pang et al. 2010, Bailey and Morais 2005, Eraqi et al. 2011, Sigala and Baum 2003). Branoff and Mapson (2009) suggest that blended learning is a valid alternative to face-to-face learning, or full online learning as long as it is implemented correctly. Osguthorpe and Graham (2003) point out that the best blended learning solutions have the best of each teaching method without any associated weaknesses.

Bailey and Morais (2005) identify that many HEIs highlight that online learning lacks one of the most critical components of the learning experience, interaction. However Larson and Sung 2009 (cited in Fortune et al. 2011), discusses that when online learning and face to face learning are used in isolation from each other, there are no differences in the learning perceptions of students. Additional analysis showed that when online learning and face to face learning are utilised in a blended environment, both student and educator found this method to be highly effective when students learning was measured against learning outcomes (Larson and Sung 2009). This shows that when the strengths of both teaching methods are brought together, a positive environment in which students can learn effectively is created (Bailey and Morais 2005). Bailey and Morris further identify that student satisfaction is directly linked to interaction between the student and the teacher. McDonnell (2000) notes that interaction does not necessarily have to be in the form of face-to-face teaching and that communication through online means is also sufficient.
2.6.3 Blended Learning and Course Websites

Bailey and Morais (2005) concluded that the creation of a course website can increase interaction opportunities outside the physical classroom in a way that was not previously possible. This poses an opportunity for HEIs to overcome one of the challenges of a modern day education, to create a positive learning environment that will engage students both inside and outside of the classroom, increase student achievement and involvement and reduce student absenteeism (Bailey and Morais 2005). Williams (2001) noted that students prefer the use a blended learning environment which includes online content as its almost second nature to them. It allows them feel more connected to their fellow students outside of class as well as having convenient access to their tutor.

2.6.4 Blended Learning in Hospitality

Tourism and Hospitality institutions are constantly seeking ways in which to encourage students to attend their campuses. Students may see innovation in teaching practices as one of these all-important factors when choosing where to study (Sigala and Baum 2003). The vital role that ‘knowledge’ now plays in society had been brought on by the ever-changing ICT tools available. If one is to succeed in this knowledge economy, an increased importance should be placed on the integration of ICT into education. This is even more essential for Tourism and Hospitality students, as they need to be able to cope with the increased technological demands of the modern traveller as well as the increased usage of ICT in all aspects of hotel operations (Sigala 2002, Sigala and Baum 2003).

Sigala and Baum (2003) point out that hospitality students should acquire certain knowledge management and information literacy skills during their time in education in order to be successful in the industry. These skills would allow students to:

- recognise a need for information.
- identify and locate appropriate information sources.
- know-how to gain access to the information contained in those sources; evaluate the quality of information obtained.
- organise and analyse the information; use the information effectively.
• share and disseminate information sources for problem solving or knowledge-creating activities.

(Sigala and Baum 2003, p. 368)

In order for this to happen, ICT not only needs to be available to students in educational intuitions but also needs to be integrated into teaching and learning. However Sigala and Baum (2003) point out that many institutions have not made the link between ICT and pedagogy. However Aubke et al. (online) argue that ICT has been integrated into hospitality classrooms to allow HEIs deliver both the practical and classroom based elements of a hospitality course. In some cases practical elements, which once would have been taught in a vocational manner, are now being delivered via computer simulation, videos or other media (Aubke et al.).

Sigala and Baum (2003, p.374) concluded, in a study carried out on the challenges facing tourism and hospitality institutions, that educational institutions “should follow a blended mix toward education” by using technology for enhancing and complementing traditional teaching and learning practices. They further point out that mixing interactive learning with traditional classroom lectures and practical training, is a move towards innovation in teaching and learning in hospitality.

2.7 Introduction to Web 2.0

Much of the changes that have happened to the internet over the past number years have been due in part to the movement from Web 1.0 to Web 2.0. This technological change has had a major impact on the use of technology in education. It follows the shift already discussed in this literature review from a teacher centred learning approach to a student centred learning approach. The phrase “Web 2.0” was first used by Tim O’Reilly of O’Reilly Media and has since become widely used on the World Wide Web (O'Reilly 2005). Cronin (2009) highlights that there is no universal definition for Web 2.0 however explains that the definition below is both relatively short and understandable:

Web 2.0 is the term given to describe a second generation of the World Wide Web that is focused on the ability for people to collaborate and share information online. Web 2.0 basically refers to the transition from static HTML Web pages to a more dynamic Web that is more organized and is based on serving Web
applications to users. Other improved functionality of Web 2.0 includes open communication with an emphasis on Web-based communities of users, and more open sharing of information. (Web 2.0 2008, as cited in Cronin (2009))

Other definitions highlight that Web 2.0 allows for the enhancement of “creativity communications, secure information sharing, collaboration and functionality of the Web” (Luo 2010) through its newly developed read-write capabilities (Duffy 2008).

### 2.7.1 Web 2.0 Technologies

Luo (2010) identifies two of the most important elements of these technologies are its ability to offer multi-way communication and information creation and retrieval. Examples of Web 2.0 technologies are: wikis, blogs, and video sharing sites. All of which have seen an increased use in an educational setting in recent times. Frand (2000) highlights that Web 2.0 has opened new possibilities to education by supporting students engagement and furthering interactivity between individuals. Duffy (2008) agrees with this support role that these technologies will give, however he also highlights that these technologies will, in fact make redundant some of the learning resources which have been so useful in the past, thus putting new demands on the process of learning. In general many of these Web 2.0 tools are available free of charge, as open source software, however the degree of their implementation may be hindered depending on the teachers expertise in the use of such technologies (Mupinga et al. 2010). This aside, many educators have created their own websites, which will be discussed further in this chapter. Where the technical expertise is not available commercial products based on Web 2.0 are also available. These products generally utilise open source software products and are often set up and ready to go allowing the institution to customise the product with little or no technical ability required. An example of this commercial product would be course management systems (CMS) or virtual learning environments (VLE) like Blackboard and Moodle.
2.7.2 Web 2.0 technologies explained

As already mentioned there are many types of Web 2.0 technologies. This section will focus on blogs, wikis and video-sharing website.

2.7.2.1 Blogs

Blogs were first introduced in the 1990’s (Quible 2005) and since then have become an everyday way to share and communicate online. The term blog comes from the word weblog and they are also referred to as online journals (Hillan 2003). They are widely used within educational environments and their benefits have been widely discussed (Quible 2005, Groves 2001). Some of the main benefits of blogging are that they are available free of charge, that information is more easily accessible to students when it is hosted on a blog (Quible 2005), they can be used for research purposes (Luo 2010), while also engaging students out side of the classroom and enhancing critical thinking (Hillan 2003). Duffy (2008) looks at how blogs are used in teaching and learning; some of these uses are outlined in Figure 2.1.

<table>
<thead>
<tr>
<th>Use of Blog</th>
<th>Benefits\Support Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education in general</td>
<td>• Promote analytical and critical thinkers</td>
</tr>
<tr>
<td></td>
<td>• Promote analogical thinking</td>
</tr>
<tr>
<td></td>
<td>• Increased exposure and access to quality content</td>
</tr>
<tr>
<td></td>
<td>• Combination of solitary and social interaction</td>
</tr>
<tr>
<td>Organisational Perspective</td>
<td>• Online presence of course related information such as calendars, events, assignments and resources</td>
</tr>
<tr>
<td></td>
<td>• Online area where students can post contact details and questions to the tutor</td>
</tr>
<tr>
<td>Pedagogical Perspective</td>
<td>• Comments based on content, literature, readings and student responses</td>
</tr>
<tr>
<td></td>
<td>• An area where students can act as reviewers of course-related materials</td>
</tr>
<tr>
<td></td>
<td>• Images and reflections related to industry placements</td>
</tr>
</tbody>
</table>

Figure 2.1 – Educational benefits of blogs and strategies for using blogs in teaching and learning
Blogs allow readers to leave comments and interact with each other, which Duffy (2008) highlights as an important element to this technology. Many faculty-developed websites referred to above are forms of blogs.

2.7.2.2 Wikis

Arreguin 2004 (as cited in Duffy 2008) identifies a wiki as a collection of Web pages that are open to users to add material and content much like a blog, however it also permits others to edit this information. The key concept of a wiki is that it allows users to read, write and collaborate in its creation. Blogs are usually “one to many” forms of communication where one publisher shares information with many, whereas wikis are “many to many” highlighting the input of everyone into its creation (Pérez et al. 2006).

2.7.2.3 Video Sharing Sites

Videos sharing sites include YouTube and Vimeo. Their development over the past six years has been fundamental in the expansion of e-learning. McAndrew (2010) explains that many educators use these sites to host their own learning resources. YouTube, launched in 2005, and Vimeo are both repositories for user-generated material that is uploaded by individual users to the internet. Today’s learners’ are exposed to digital interaction from an early age and as a result have different habits to older learners. They tend to suffer from low attention span due to the range of digital activities that are constantly on offer to them in their social lives and therefore educators must adapt to meet their needs (Clifton and Mann 2011). YouTube and other such sites can offer a possible solution. Outlined below are some general guidelines that are recommend when incorporating video into teaching to allow for improved learning:

- Ensure the video is focused on learning outcomes in some way
- The video must reduce cognitive load
- The video should be at an appropriate level for the learners learning literacy

Clarke and Mayer 2002 (as cited by Duffy 2008)

Learning with the use of videos should not be passive and should aim to engage learners. Duffy (2008) highlights some points that can be utilised to reduce the passive use of video in teaching. These have been summarised in the Figure 2.2.
<table>
<thead>
<tr>
<th>Segment</th>
<th>Notes</th>
<th>Pause</th>
<th>Sound/Picture off</th>
<th>Cut</th>
<th>Focus</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Show videos in short segments</td>
<td>• Using videos individually, students develop note taking skills by looking over the video a second time to see if notes are sufficient</td>
<td>• Pausing a video and asking students what just happened and what the eventual outcomes may be</td>
<td>• If the sound is superfluous to the learning, turn it off and narrate – Tuning off the picture can engage students more on what is happening.</td>
<td>• Only show the elements of a video that are important – It can be time consuming to show videos in their entirety.</td>
<td>• Give students a specific focus while watching the video, by asking a question or pointing out things to look for.</td>
</tr>
</tbody>
</table>

Figure 2.2 – Guidelines relating to the specific use of video to promote active viewing and maximise learning

Not all videos hosted online are good for teaching and teachers must evaluate the benefit to students’ learning (Duffy 2008). It must also be noted that as video sharing sites contain user-generated material, the authorship of such material is unlikely to have been regulated and therefore the potential quality of the learning should be questioned (Clifton and Mann 2011).

2.8 E-Learning and Web 2.0 Technologies

Many universities worldwide are implementing some aspects of online learning or teaching (OLT) into their courses (Song and Bosselman 2011) or individual modules (Lominé 2002) allowing them deliver these courses to both on and off campus students. E-learning is a buzzword that is generally associated with HE. It covers learning at different levels both formal and non-formal that use an information network such as a LAN (local area network) or the internet to deliver elements of a course or an entire course (Tinio 2003). Clarke (2008) lists a number of terms that are encompassed in e-learning, these can include online learning, computer-based learning and blended learning. The European Union defines e-learning as,
the use of new multimedia technologies and the internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration.

(Commission of the European Communities 2001, p. 2)

Clarke (2008) explains that e-learning offers more freedom when compared to traditional teacher-centred learning. However this shifts the responsibility of learning to the learner while also allowing them to become more independent (Kenny 2002). This leads to increased levels of self-direction and students taking a greater responsibility for their learning goals (Sigala 2002). Studies show that e-learning offers increased flexibility to the student in planning their own learning (Thiele 2003), while also giving them the opportunity to learn at a time and a place that suits them (Kenny 2002, Clarke 2008, Natarajan 2006). Not everything about e-learning is positive; Thiele (2003) notes that it lacks interaction with teacher and that some students prefer having traditional classes with instructions from an “expert”.

2.8.1 Benefits of E-Learning to the Students

A research study carried out by Lominé (2002) on tourism students, whose course utilised online learning as a support tool in a number of different modules, found that the students reacted extremely positively to the online content and welcomed the innovation in the subjects. The study also found that one in five students highlighted that they would like to see the adoption of e-learning into other modules on the course. The results of the study highlighted four key advantages of using online supported learning, information Technology (IT) skill, innovation, flexibility and support (Lominé 2002).

2.8.1.1 IT Skill

While working online the students were able to develop their IT skills in a direct and effective manner by carrying out research online. This was highlighted in other studies where students found that using e-learning helped them “acclimatise” to technologies what may be presented to them in the work place (Cho and Schmelzer 2000).
2.8.1.2 Innovation

Students found the online work more engaging and welcomed it when compared to the traditional classroom work. It offered something different from the norm and compared it going on field trips and having guest speakers. This was also reported by (Tessaring and Wannan 2010) who identified that when traditional learning was supported by e-learning it open the door to greater innovation for both the learner and the teacher.

2.8.1.3 Flexibility

The students found that online work offered greater flexibility in terms of time and place, allowing them learn outside of the traditional classroom. Sigala (2002) also found that e-learning alleviated spatial and time constraints on students, especially important to hospitality students who work in the industry during their college years. This point was further noted by Fortune et al. (2011), who points out that this flexibility in time and place allowed those student who worked during college, to choose when they worked, rather than fitting it in around their study.

2.8.1.4 Support

Students found the ability to move at a slower pace as major benefit to e-learning. The online information gave them the opportunity to move back and forth between different concepts, which allowed for greater understanding and retention of information. E-Learning can also be used to support students while they are on placement or those in the industry looking to partake in continuous professional development – advocating life-long learning (Kasavana1999 as cited in Sigala 2002).

It has been discussed that academic institutions who offer traditional programs in tourism and hospitality education need to adapt to incorporate e-learning and online assisted learning (Collins and Van Hoof 2001). Sigala and Christou (2003) note that constant investment is needed in the area of e-learning for it to be in any way successful in the future. Fortune et al. (2011) carried out research on hospitality students’ perceptions of both e-learning and face-to-face learning. The results
showed that both groups preferred their chosen method of instruction, highlighting that student learning styles have a major impact on the success of a given instructional method. Students who took the e-learning course delivery method found it easier to communicate and interact online and felt “more comfortable” interacting with the instructor online than asking question verbally in class.

### 2.8.2 Benefits of E-Learning to Teacher and the Institution

While it is important to look at how beneficial e-learning and online course tools are to the student, it is also important to look at how they can benefit the institution. Poehlein 1996 (as cited by Sigala 2002) points out that e-learning can be a catalyst for institutional transformation, helping to bring initiatives inline with students’ expectations of e-learning and to introduce other technological developments. Sigala (2002) identified that e-learning can assist institutions in preparing their students for the cultural diversity that they will experience in the hospitality industry, something that they may struggle to do without the use of this educational tool. Barron (2008, p. 739) identifies that the increased use of technology in institutions will act as a method of “engaging and developing Generation Y students”.

Groves (2001) discussed the myth that e-learning and web-based technology could save time for the teacher saying that this was both true and false. Groves noted that while e-learning and web-based technology could save time by automatic grading of tests and disseminating information that would normally be done in class, teachers still spent a lot of time in the development and maintenance of these web-based tools. Responding to students online also added to the amount to time that needed to be invested once the web-based tools are in use.

As explained above developing e-learning has major benefits. However educational institutions must be cautious in their approach. Institutions should understand the purpose of e-learning and how it should be implemented correctly as reproducing information from a traditional classroom environment and making this available digitally may benefit neither the institution nor the learner and in fact may be counter-productive to the learning experience (Sigala 2002). Sigala’s study
highlighted out that even though students may be positively disposed to engage in e-learning they might not have the know-how to do so and that institutions and teachers must guide students through the process from traditional classroom based learning to self-directed and online-learning. The fostering of pedagogical innovation has also been well documented when it comes to e-learning. Sigala and Christou (2002) discuss the importance of using the internet in a way that transforms instruction to be engaging rather than being automated. Tessaring and Wannan (2010) highlight that developing pedagogical methods in order to promote a greater uptake of e-learning and that this could only be achieved by developing teachers in how to teach using this technology. Lominé (2002) concludes that implementing e-learning is by no means an easy task due to the issues faced in the area of technology, pedagogy and practical problems. However it is noted that the rewards for both students and teachers are well worth it.

2.9 E-Learning in Practice

2.9.1 Faculty Developed Course Websites

Many institutions have begun to include elements of Web 2.0 technologies in their classrooms (Leung and Ivy 2003). Course specific websites are one of the most commonly used web technologies in education (Washenberger 2001). It is seen by many educators as a way to implement popular multimedia tools that enhance the learning experience that the students receive (Sigala 2002). These course websites are convenient for students as they are available 24/7 and can be accessed from any place where an internet connection is available (Baum and Sigala 2001). Authors such as Chen et al. (2010) and Selwyn and Husen (2010) suggest that web-based learning technologies have a positive impact on the learning outcomes and engagement levels of students. This was not always the case as a study by McComb (1994) shows that student preferred face-to-face instruction to that online. This was found to still be the case almost 10 years later when it would be expected that more tech savvy students might prefer online instruction (Witt 2004). Witt (2004) notes that poor access to a fast internet connection made web-based instruction and
communication problematic. Witt’s 2004 study concluded that instructors should “examine their objectives” before any substantial investment is made into creating a course website. This was also echoed in a study by Lane and Shelton (2001) where it was found that little consideration was being taken by the instructors into the practical and pedagogical consequences of “latching” on to the latest trend in the area of technology advancement. However Witt (2004) did note that the usefulness and function of the website should not be overlooked and that even though students did not perceive there to be any value to the website, this might not be actually the case.

2.9.2 Why Teachers Create Websites

There are many reasons why educators create course websites, as discussed above. Sigala (2002) highlights that these websites bring together different multimedia tools in an effort to engage students. Groves (2001) discusses the convenience aspects of web-based tools such as course websites, highlighting that they can take away many of the everyday and mundane tasks from the teacher leaving them more time to concentrate on other aspects of their students learning. Groves also discussed the added flexibility course websites offer, especially to student in the hospitality industry where flexibility and finding alternatives are key skills in which these students will have to engage in in the work place. Witt (2003) identified a number of these reasons why teacher utilise websites in a study on whether course websites are worth the trouble. It was identified that educators create course websites to provide additional course material to students out side of class, this could be both information covered and not covered in class, as well as to supplement in class teaching with electronic material. It was also highlighted that some educators create websites to “enhance their own credibility” between other educator and students (Southwell 2008) and as a method to achieve self-appointed goals that have no benefit to the learning and education of the students (Witt 2003).

Witt (2003) noted that the majority of educators felt their website were essential to the course and found that the majority of teachers created the sites themselves at no monitory cost to the institution while also maintaining these websites. This was also
noted by Groves (2001). Leung and Ivy (2003) point out that a lot of time and energy is often spent in the creation of these sites by faculty members, mostly with little input from the end user, the student (Southwell 2008, Boyle 2005). Instructors assume that students will take advantage of the websites however, Southwell (2008) highlights that many of these website are often ineffective at engaging the student due to the lack of input from them. This is in total contrast to a study by (Koch et al. 2010, p. 588) who found that “no staff encouragement was needed” to get students to engage and that additional students who initially did not sign up for access, did so with some haste. Witt’s (2003) study identified that sixty per cent of educators felt that they had achieved their goals and that web resources overall increased the “effectiveness of the teaching/learning experience”.

2.9.3 Course Websites – The Benefits and Constraints

Studies have shown that students take a positive view on the use of websites as a component of a course (Frey et al. 2003, Branoff and Mapson 2009, Southwell 2008). Many of the strengths and weakness of e-learning and Web 2.0 technologies have already been identified in previous sections. These tend to over lap with the benefits of introducing course websites into teaching and learning, however benefits do not just come in the form of enhanced learning. Many authors (Witt 2003, Marsh et al. 2003, Branoff and Mapson 2009, Groves 2001) note that these technologies can also allow for the following:

- allow the educators to communicate up to date information.
- display class results, and highlight schedule changes in an easy fashion.
- cost saving to institutions.
- enhanced interaction between the educator and the student,
- increased flexibility and accessibility.
- self paced or personalised instruction.
- makes students more responsible for their learning.
- allows for greater focus on knowledge during face to face instruction.

The constant use of these Web 2.0 technologies and course websites promotes working online and help students “acclimatise” to using technology and align with technological changes in the workplace (Cho and Schmelzer 2000). Like “critical thinking” and “effective communication skills” the ability to learn and work online is
now considered an essential life skill that is required in the workplace (Sigala 2002, Witt 2003, Zhang et al. 2006).

Groves (2001) highlighted that course websites can positively effect individual student exam scores. It was noted that this was a non-scientific evaluation of student scores however this is an important benefits to any students.

Not everything associated with course websites is positive. Many of the drawbacks linked to course websites stem from their creation. Instructors creating websites with little reference to pedagogical theories (Branoff and Mapson 2009). Rather than redesigning courses to allow the integration of a website some instructors merely transfer elements of their face-to-face teaching into online formats losing many of the benefit this technology has to offer (Murphy 2002). Further drawbacks associated with course websites are highlighted below:

- lack of a reliable internet connection outside the college limits usage.
- students who lack the skill to use technology fall behind or drop out.
- the notion that technology is more trouble than it’s worth.
- lack of support for student as instructors don’t know-how to use technology correctly.
- material is out-dated or not updated regularly.
- students not showing up for face to face elements.
- increased cost for students.

(Witt 2003, Branoff and Mapson 2009)

Witt (2003) points out that using this technology is only beneficial when its accessible and that not all students had access to the internet outside of the college. However this is changing rapidly as internet penetration increases around the country (Comreg 2011). Many instructors fear that using a course website as an instructional tool will have an adverse effect on attendance, however studies Walls et al. (2010) have pointed out that using technology has little impact on student attendance in classes and in some cases encouraged students to attend.

Witt (2003) poises some questions regarding the actual use of these technologies asking if students actually use these technologies as much as teachers think they do and are in-class demonstrations, which are presented on course websites more
effective than traditional demonstration methods. These are important questions and ones which I hope to shed some light on.

2.10 International Students and E-Learning

One would believe that students with English as a Second Language (ESL) would benefit greatly from e-learning. A study by (Koch et al. 2010) discussed how ESL students may benefit and become more engaged as a result of web-based or e-learning as it allows them to “learn at their own pace” and in a location that is suitable to them. Selwyn and Husen (2010) found that Asian students had a greater acceptance in the benefits of technological competence when compared to Western students, however the Selwyn and Husen did note that this may have been due to the smaller number of Asian students partaking in the study. However a study by Zhang and Huang (2006, pp. 380-381) on the perceptions of Chinese students on e-learning found that it was “defective in nature and can not match face-to-face teaching and learning” as there is little guidance and communication. They point out that e-learning is merely an alternative for those that cannot access face-to-face learning. The study reported that students felt that computers were “cold” and that they “liked the feeling of the classroom” as they were close to the teacher and their peers. On the other hand students who used e-learning, as they could not attend the campus, noted that the greatest benefits were that it allowed “self-paced, self-regulated and self-controlled” learning and that it gave access to additional material that would otherwise not be available to them.

These findings echo the writing of Barron and Arcodia (2002) who point out that the teacher’s role in Chinese education is that of a moral role model and an imparter of wisdom. Others (Samuelowicz 1987, Kember and Gow 1990) point out that these students tend to rely on rote learning, which results in surface learning rather than deep learning.
2.11 Engagement and Motivation

According to governments around the world, developing and sustaining technological skills and competencies are seen to be a key part of a student’s ability to engage with twenty-first century schooling.

(Selwyn and Husen 2010, p.137)

Getting students to engage in the learning process is extremely important. Schlecty 1994 (cited in Mandernach 2009) suggests that students with high levels of engagement enjoy the learning process and do not allow obstacles to obstruct their learning goals. This develops a link between engagement and motivation. Kalganova (2001) explains that motivation is one of the main issues affecting universities and highlights one of the reasons behind this being the number of students attending university with low level of preparation and lack of engagement. Kalganova highlights that giving students access to basic information in a multimedia format, on an any time basis, such as the internet, as well as encouraging students to take an interest and engage in a subject can help overcome basic understanding and therefore increase motivation.

(Chen et al. 2010, p. 1230) found that web-based information technology is important to student engagement in class and that the earlier it is adopted in the educational environment, the more beneficial it becomes to the student. It was also established that where web-based technology was used in a course, students were found to be utilising deeper approaches to learning and reported higher levels of “…practical competence and personal and social development”. It was also noted in other studies (Kuh and Hu 2001, Robinson and Hullinger 2008, Laird and Kuh 2005) that using computers and information technology has an effect on student motivation. Robinson and Hullinger (2008) also found that instructional technology encouraged learners to become more reflective and critical thinkers, which in turn encourages “higher-order” thinking. As mentioned earlier, Baird and Fisher (2005) highlight that emerging web 2.0 technologies such as blogs, social networking, wikis, to mention just a few, have the potential to engage learners and already, both lecturers and students are seeing their benefits.

Previously in this chapter we have discussed student self-efficacy and its importance on student motivation and impact of achieving learning outcomes. Just as important
to student motivation is teacher efficacy (Eggan and Kauchak 2004). Teacher efficacy focuses on personal traits of individual teachers. Student motivation can be effected by a teacher who is caring, has high expectations and is a good role model. In the same way a teacher will be able to help any student to learn if they have high levels of personal teaching efficacy (Eggan and Kauchak 2004).

2.11.1 Using Video to Increase Student Engagement

The previous section identified that for the video to be effective in a learning environment, it must be used in a focused manner. This encourages students’ interest in a topic by bringing themes to life in a way that words alone could not (O’Hagan 2001, Zhang and Huang 2006). O’Hagan also suggests that when videos is utilised in a classroom it should be shown in shorter clips and that students should be involved and engaged in what the focus of the video is through discussion. To make this effective, teachers need to be selective in their use of clips. It is essential that teachers guide the students and inform them of the relevance of any video material before viewing it. This will assist them in thinking critically when watching any such material. Facilitation of student response is also key to engaging students when using video, so that the content is not seen as entertainment, but rather as a tool to reinforce learning, provokes discussion and questions (Mitra et al. 2010). They also found that it is essential for video to be used as part of a blended approach to learning and that showing videos in shorter clips, where students can watch longer sections in their own time worked best.

A study by Mandernach (2009) into the use of instructor-personalised multimedia in the classroom found that enhanced engagement was a direct result of the personalised multimedia. This can highlight the benefit of personalising the multimedia available to the learner. However this study did point out that quantitative results showed no major difference in student test scores. Mitra et al. (2010) note that increased engagement can be a result of using video, as it makes use of audio and visual processing rather than just one sensory channel (Mayer 2003).
2.11.2 Utilising Online Video

Kelly et al. (2009) studied the effectiveness of, and student attitudes to, online instructional videos for teaching clinical nursing skills. The authors point out that one single demonstration of a skill was insufficient and that students would benefit from seeing the skill multiple times if necessary. As part of their study they created instructional videos of twelve individual tasks. The authors concluded that instructional videos ensured a “defined standard” in skills teaching and individuals enjoyed the flexibility in learning by using this method. However they also concluded that this technology should be used as a blended approach to learning and not as a replacement to lecturer demonstration. In a similar study Cannon et al. (2009) investigated using online videos in order to prepare students for in class practice. During the investigation it was hoped that by getting students to watch videos of practical demonstrations before coming to class would allow more time for practice during class. The study found that this was not entirely the case as the students immediate feedback during the course of the study highlighted that they would benefit more from seeing an actual demonstration in combination with the videos before practice. The results of the study showed that almost 60% of all student enjoyed using video during study and that over 80% of the students liked the any time any place dimension that videos allowed when it came to class preparation. Cannon and associates also noted that

> the increase in self-efficacy engendered by previous viewing of the upcoming skills videos among students also came to the fore with students being more comfortable and confident approaching a practical skills session while lecturers also cited the increased industriousness this created in the class.

_Cannon et al. (2009, p. 9)_

This statement further identifies links between the use of video and self-efficacy. It was also noted that other staff members have produced their own instructional videos since the study started. Zhang et al. (2006) noted that access to videos online give the learner the opportunity to see the first hand the materials and realistic environments while also being able to listen to an explanation of that is being shown. The study concluded that the mere addition of video to the e-learning environment was insufficient to creating greater learning opportunities for learners. Zhang and associates added that interactivity is key to gaining increased levels of learning.
However they also noted that even though the results showed that interactivity is key to the success of videos in e-learning environments, it does not show that they are always superior than traditional classroom learning. This somewhat answers a question posed by Witt (2003) when he asks if class demonstrations carried out on the website are more effective than traditional demonstration methods. This could suggest that a blended environment where video is used alongside face-to-face instruction may be an acceptable solution.

2.12 Conclusion

The above discussion has highlighted a number of possible benefits to utilising faculty created course content in Higher Education in addition to other freely available content. It shows the Web2.0 technologies are opening technological doors to educators that were not possible in the past. Its has identified that importance of ensuring that any introduction of this type of learning support into an educational environment is underpinned by pedagogical theory in order for it to be a success. It also suggests that a blended approach to this implementation whereby technology is used along side face-to-face instruction will see greater adoption by the students while creating a student centred, constructive approach to learning.
CHAPTER 3 Methodology

3.1 Introduction

The objective of this research project is to explore whether faculty created online content is beneficial to students’ learning in a practical training environment. This chapter will outline the different research methodologies used in this study and discuss the reasons why these methods were selected. One section will focus on resource creation and implementation. A detailed description of the tools used in the data collection process will be discussed. Finally the limitations of the research process will be discussed.

Both primary and secondary research was carried out in the course of this research project and the advantages and disadvantages of these two research processes will be highlighted later in this chapter.

3.2 Rationale for Research

As ever increasing demand is being placed on students in HE it is important for HEI’s to look beyond the traditional teaching methods. As highlighted in the previous chapter, the use of ICT in HE is becoming more the norm than the exception in HE and within a non-traditional classroom environment. However merely introducing ICT tools into the educational environment is not enough, these innovative tools that claim to enhance student learning must be efficient and effective (Corbally 2005). This study will focus on using the internet and the World Wide Web (WWW), in the form of a website, as a platform to integrate ICT into hospitality education. Many authors have focused on using the above methods to integrate ICT into education, labelling it as being the future of teaching and learning that will have immense benefits to both the student and the teacher (Leung and Ivy 2003).
Many practical areas are looking at this technology to assist students in their learning and improve the overall learning experience on offer (Kelly et al. 2009). Much has been written about the use of ICT in practical teaching, mainly in the area of Medicine and Nurse education (Corbally 2005, Cannon et al. 2009, Kelly et al. 2009). Much like Nurse education, the hospitality education sector has a major focus on practical training. With this in mind, this study will look at the use of ICT in the form of a course website in first year restaurant practical training where the main focus is skill development. Leung and Ivy (2003) highlight that course websites offer an extension of the traditional classroom and allows for the delivery of additional material to the students through links to external sources, support through forums and email communication while also supporting the delivery of multimedia content.

3.3 Aims and Objectives

Before carrying out any research it is important to define the research problem (Decrop 2005). This section will present the aims and objectives of this research

3.3.1 Research Question

Do web-based training materials lead to increased engagement and better learning outcomes among HE participants?

3.3.2 Research Objectives

The research objectives are listed in order to answer the research question already stated in this chapter. The primary objectives of this research are as follows:

- To investigate students’ engagement with online course content in practical training.
- To evaluate the overall benefits and constraints of using faculty created online content in practical training.
- To investigate the importance of content to student learning outcomes with regular use of online course content.
• To explore the instructional value of personalised multimedia compared to other freely available material.
• To identify possible areas for development of faculty created online content.

3.4 Research Subjects

All students’ who took part in this study were first year undergraduate business students studying International Hotel Management.

3.4.1 Selection of Research Subjects

All first year students spend five weeks in a practical restaurant environment learning the basics of working and managing a restaurant, therefore all first year students were possible subjects for this study. The students are divided into five class groups containing no more than eighteen students. Due to the time constraints of this study one class of students were eliminated from the study as they had completed more than two weeks in the restaurant prior to the research period. The remaining four groups took part in the study as they had three weeks of training left and as such were available to the researcher. This made these students suitable subjects to take part in the study. The period of research for this study was the Spring semester 2012, taking in a twelve-week teaching period from January 2012 until April 2012.

3.5 Approaches to Researching Education

In the past, educational research has been criticised for not meeting the needs of the end user in the classroom, both the student and the educators. Hargreaves (2007) notes that teaching is not currently a research profession and that if it were, teaching would become more rewarding and satisfying. In an effort to make educational research more useful it is important to underpin research by using specific approaches to carrying out research.
A number of approaches have been developed in the area of educational research. Verma, 1999 highlights descriptive research as one such approach. According to Cohen et al. (2000, p. 167) descriptive studies “set out to describe and interpret what is”. Cohen and associates further noted that descriptive studies investigate:

\[
\text{individual groups, institutions, methods and materials in order to describe, compare contrast, classify, analyse and interpret the entities and the events that constitute their various fields of inquiry”} \\
\text{Cohen et al. (2000, p. 167)}
\]

There are many ways to carry out descriptive research studies, Cohen et al. (2000) lists a number of these:

- Survey studies
- Cross-sectional studies
- Trend studies
- Case studies

For this study the author has chosen to utilise a case study method as it best fits the purpose of this research study into exploring whether faculty created online content is beneficial to students learning in a practical training environment.

### 3.6 Research Methodology

As already stated a case study was chosen in order to carry out this research study. The next part of this section will highlight why this method was chosen and identify some of the strengths and weaknesses behind it.

#### 3.6.1 Case Studies

There are many ways to describe a case study. Adelman et al.1980 (as cited in Cohen et al. 2000, p. 181) describes it as “the study of an instance in action”. Stake 1995 (as cited in Creswell, p. 13) defines a case study as “a strategy of inquiry in which the researcher explores in depth a program, event, activity, or one or more individuals”. It also notes that they are bound by activity and time and that detailed
information is collected using a variety of different data collection methods, which will be discussed later in this chapter, over a period of time. This definition further strengthens using a case study methodology in this research project.

Hartley (2005) notes that the aim of a case study is to “provide analysis of the context and processes which illuminate the theoretical issues being studied”. Hartley points out that it is important to understand the strengths and weaknesses of this strategy towards carrying out research. Nisbet and Watt’s 1994 study (as cited in Cohen et al. 2000, p. 184) noted a number of strengths and weaknesses of case studies. A number of these strengths and weaknesses are outlined in the next part of this section.

3.6.1.1 Strength and Weaknesses of a Case Study

Nisbet and Watt 1994 (as cited in Cohen et al. 2000, p. 184) identified a number of strengths and weaknesses of case study research. It is noted that case study results tend to be more easily understood, especially by non-academic people reading the research. They can identify some unique features that other research methods may not and they can also be a reliable source of data. A final strength is that an individual researcher can carry out a case study without the need for a large research team. However one of the major drawbacks of case study research is that the results cannot be generalised except where other readers see their application. They are also open to being subjective, personal and biased.

3.7 Research Design and Planning

According to Domegan and Fleming (2003) research design can be defined as a
“blueprint, guidance, a plan of action or a framework to facilitate the research process and to assist in future decisions that need to be made”
(Domegan and Fleming 2003, p.65)

Cohen et al. (2000) point out that research design depends on what is being researched and comes about by being “fit for purpose” and that there is no one size fit all approach. It involves the researcher having an understanding of what type of data is required and how the research subjects will react to different techniques
Malhotra and Birks (2007). Chisnall (1997) states that successful research is underpinned by the research design and that a good design approach to research will result in the collection of information relevant to the research objectives.

### 3.7.1 Secondary Research

Secondary research data can be defined as data that has not been gathered for the immediate study at hand but instead for some other purpose. It provides background information of the current research problem (Hair et al. 2003). Malhotra and Birks (2007) point out that secondary research assists in the development of a research approach as it represents already published literature that is found in journal articles, case studies and other publications. This information can be both academic or non-academic (Clarke et al. 1998).

A detailed literature review can assist in the identification of research questions while also identifying methods by which these research questions can be answered. Webb (2002) poses the question, why if there are so many advantages to secondary research do we bother to carry out primary research? Webb points out that the answer lies in the fact that there are so many disadvantages associated with secondary research and that before secondary research is used that certain questions should be asked:

- Is the data relevant?
- Does it fit the requirements of the research objectives?
- Is there a possibility that the data is biased, based on who collected it and for what reason?

### 3.7.2 Primary Research

Primary research can be described as data, which is collected at source (Collis and Hussey 2003), and is carried out by the researcher to allow them to answer the specific research question (Malhotra and Birks 2007). As already noted in the introduction to this section, the key to successful research is the research design used. There are many different methods of carrying out research, with each method
having specific advantages and disadvantages. The selections of a specific research method or methods used in a research study depends on what the author wishes to discover from the research. Both Domegan and Fleming (2003) and (Cohen et al. 2000) identify that there is “no one size fits all” approach to research and that one method is no better or worse than another method. It is there for up to the researcher to select the most appropriate research tool (Domegan and Fleming 2003). Different research approaches can be discussed under research paradigms.

3.7.3 Research Paradigm

Research paradigms refer to different approaches that are available to researchers in order to carry out research. A paradigm is an interpretative framework a “basic set of beliefs that guides actions”(Guba 1990, p.17). Authors Denzin and Lincon state that,

> “all research is interpretive and that it’s guided by a set of beliefs and feelings about the world and how it should be understood and studied”.
> (Denzin and Lincoln 2003, p.33)

In other words a paradigm is a “worldview” or set of assumptions governing how we interact and interpret the (Jennings 2001). Two major research paradigms have emerged in today’s society, these are the positivist paradigm, or quantitative research, and interpretivist paradigm, or qualitative research.

3.7.3.1 Positivist Paradigm

Positivist approach to research is seen as an organised method of research,

> … surrounding precise empirical observations of individual behaviour in order to discover and confirm a set of probabilistic causal laws that can be used to predict general patterns of human activity.
> (Neuman 1997, p.63)

It is linked with the quantitative approach to research. Clarke and associates see a positivist paradigm,

> as a doctrine or belief, that only true knowledge is scientific in character, describing the interrelationships between real, observational phenomena whether social or physical.
> (Clarke et al. 1998, p.10)
According to (Hines 1993) the positivist paradigm is an excellent research method as its results are easily analysed, compared and replicated due to the structured format of the research.

3.7.3.2 Interpretivist Paradigm

The interpretivist paradigm or anti-positivist paradigm as it is also known, identifies that research should explore

socially meaningful action through the direct detailed observation of people in natural settings in order to arrive at understandings and interpretations of how people create and maintain their social worlds.

(Neuman 1997, p.68)

According to Terre Blanche and Kelly (1999) interpretive methods of research are concerned with the interpretation of people’s experiences and feelings in human terms instead of quantifying and measuring them. This paradigm therefore relates to the qualitative approach to research. This method of research normally uses words rather than numbers to report findings. In qualitative research information is gathered by observation, listening and examination of what people say and do.

3.8 Resource Creation

In order to carry out this research study a number of resources were required. The author elected to create the resources “in house” as no funding was available at the time to purchase materials or have resources produced professionally. Corbally (2005) highlighted that cost was a major factor when considering using digital resources and one that often put people off considering them. Corbally also noted that when purchasing such content, it is not always possible to have it tailored to particular student groups.

The two main resources that needed to be created specifically for this study were the course website and the instructor personalised content.
3.8.1 Creation and Testing of Website

The website was created using the wordpress platform. Wordpress is an open source content management system that can be used to create blogs and websites. Wordpress was selected as the author had previous knowledge of using this platform for website creation, detailed online support was available and a huge number of complementary tools were available online to enhance the standard wordpress features on offer. The website was created and tested during the winter semester of 2011. Both students and teachers were introduced to the website at this time to allow any issues with the website functionality to be solved prior to the research period in Spring 2012.

Shneiderman’s eight golden rules of interface design (Shneiderman and Plaisant 2004) were used as a reference tool during the website creation process (see Appendix A).

3.8.2 Creation of Content

Based on the review of material in this area, it was decided where possible to create personalised content. This would then be hosted on the course website.

3.8.2.1 Videos

Cannon et al. (2009) identified that instructional videos need to be of a high quality as this shows the skill being carried out in more detail. It was also highlighted that when videos are required to be viewed repeatedly there is a greater need for high quality. As already identified in the previous chapter (Mandernach 2009) identifies that instructor-personalised multimedia enhances the student’s engagement. Lashley (2005) points out that when an instructor develops their own video they can ensure that it is professional and tailored to the specific course in which they will be used. Cannon et al. (2009) adds that producing tailor-made videos “in-house” also allows costs to be kept under control.
The author used two cameras when recording scenes, so that important parts of the videos could be filmed close up and from a distance at the same time. This allowed more flexibility in editing as the important elements could be shown close up breaking the monotony of a single distance shot (Corbally 2005). The videos were recorded on site in the restaurant using the equipment, which would be utilized in class by the students.

The videos were edited using iMovie, an Apple computer program. During the editing stage, the author referred to Mayer’s Cognitive Theory of Multimedia Learning (Mayer 2001) to maximise the educational potential of the videos. A voiceover, using the author’s own voice, was also added to all the videos. This narrative explained in details the tasks being carried out.

The videos were hosted on Vimeo, a repository for user-generated material. Vimeo was chosen over other video hosting sites such as YouTube as it allows detailed statistical data to be collected on the number of plays of each video and when the videos were viewed. This information was deemed important by the author as it would allow for comparison with other statistical information from the website and information collected in focus groups.

3.8.2.2 Other Content

Additional interactive content was created using Opus Pro and exported as flash media. It was then hosted on the website. These elements mainly showed the set up procedure in preparation for carrying out tasks. It allowed the students to view in detail how to prepare for a task before watching the video detailing how the tasks were carried out.

Other material such as lecture notes, standard operating procedures (SOP) and assessment results were also hosted on the website.
3.9 Data Collection

It has been argued that secondary research on its own is insufficient when collecting data for analysis (Kotler 2003). This study has utilised both primary and secondary research in order to achieve the objectives of this research. When carrying out secondary research the author has used a number of resources including journal articles, government reports, textbooks, internet papers and other publications. Chapter 2 of this research study has summarised the use of ICT in Hospitality Education and how course websites and faculty created online content have been developed to support learning in education.

Bryman (2006) states that a mixture of qualitative and quantitative data can be used to carry out primary research. In order to carry out primary research for this study, it was decided to use both qualitative and quantitative research methods. A multi-method approach to research allows the researcher to incorporate elements from different paradigms and get a broader view of the research question (Collis and Hussey 2003). This gives a greater opportunity for interpretation, analysis and presentation of what has been researched while also providing a more general understanding of the research. This understanding may not be possible where one paradigm alone is relied upon (Creemers et al. 2010). Saunders et al. (2003) see one of the major advantages of a multi-method approach being that it allows for triangulation. (Creswell 2009) does however point out that there are limitations to this a multi-method research approach. One of the major limitations being how to resolve discrepancies, which happen when comparing results between the different methods used.

This research project will utilise three methods of data collection: focus groups, questionnaires and statistical information collected from the course website and video hosting platform. These data collection methods will be discussed in the next section.
3.10 Research Tools

3.10.1 Focus Groups

A focus group can be defined as an interview of a small group of people in a non-structured manner by a skilled interviewer (Malhotra and Birks 2007). The interviewer leads the discussion in such a way to encourage participation of all the members of the focus group. These discussions should be relaxed and participants should enjoy being part of the group (Krueger and Casey 2009). According to Krueger and Casey (2009) a focus group should be made up of five to ten participants with all the participants having certain characteristics in common that relate to the purpose of the focus group.

Krueger and Casey (2009) highlight five key characteristics of a focus group interview. They view these characteristics as “ingredients” to a successful focus group: “(1) people, who (2) possess certain characteristics, (3) provide qualitative data (4) in a focused discussion (5) to help understand the topic of interest” (Krueger and Casey 2009, p.6)

Focus groups (Krueger and Casey 2009, Cohen et al. 2000) are used when a researcher needs:

- To gather feedback from a study.
- To ascertain a range of ideas and feeling that people have on a certain topic
- To understand perspectives between different groups.
- To examine factors that influence opinions, behaviour or motivation.

For this study two focus groups were carried out. The decision to carry out two focus groups allowed for the comparison of answers between the two groups. Both focus groups had equal numbers of male and female participants; this was in line with Domegan and Fleming (2003) suggestion that it created a balance of views within the group. All first year students were asked if they would like to participate in the focus group and a selection was randomly chosen from those who were interested in taking part. The focus groups were divided into EU and Non-EU students for the purpose of comparing their responses. It was also the experience of
the author that Non-EU students tended not to participate in group discussions when other EU students were involved.

Both focus groups were carried out in the college restaurant, which is a less formal environment than a classroom. All the participants were offered refreshments on arrival and had the opportunity to help themselves to a selection of biscuits during the focus group. According to Horsky et al. (2004) an incentive can be offered to ensure participation. Following this, the author entered all the participants that took part in the focus groups into a draw for a €50 One4All voucher.

A focus group protocol (see Appendix B) was prepared in order to keep the focus of the discussion. All students signed into the focus group to show that they understood its purpose.

The first focus group contained only six participants as two failed to show up. This was the focus group where the participants were from the EU. All the participants present contributed, with some being more vocal than others. The second focus group was the Non-EU focus group. All eight participants participated. None of the participants were shy in getting their points across and many interesting discussions took place.

Both focus groups took approximately 50 minutes. The discussions were recorded on both occasions and a full transcripts for each focus group was produced. Copies are available in Appendix G and Appendix H.

Krueger and Casey (2009) highlighted a number of criticisms of focus groups. These are listed below.

- Focus group participants tend to intellectualise.
- Focus groups don’t tap into emotions.
- Focus group participants may make up answers.
- Focus groups produce trivial results.
- Dominant individuals can influence results.
Even with these criticisms, focus groups have been used widely in the past and are a popular way in which to collect qualitative data. With the correct skills in focus group management many of these criticisms can be overcome.

3.10.2 Questionnaires

Domegan and Fleming (2003, p.28) state that a questionnaire is a “structured list of questions asked to the respondents”. They also highlight that there is an art to questionnaire design, which is plagued by potential pitfalls which must be avoided in order for the questionnaire to be useful. Cohen et al. (2000) points out that there are many types of questionnaires but the larger the sample size the more structured the questionnaire should be. They identify that highly structured questionnaires generate “frequencies of responses” which allow in-depth statistical analysis as well as allowing comparisons across groups within a sample.

For this study the author used highly structured questionnaires. Likert scale responses were used. The questionnaire was divided into five main sections to allow for easier analysis of the completed questionnaires. Cohen et al. (2000) highlight that rating scale responses are used on a regular basis in research and that they allow the “opportunity for a flexible response with the ability to determine frequencies, correlations and other forms of quantitative analysis” (p. 253). However it’s also highlighted that there many limitations to this style of questionnaire as they don’t allow further comment, there is no way of checking if responses are correct and many people shy away from being extremists when answering and therefore tend to avoid the extreme poles at each end of the scale (Cohen et al. 2000).

The questionnaire was administered to all the participants at the beginning and at the end of the research period. Both questionnaires were identical except for an additional section being added to the end of the research questionnaire in order to evaluate the research process. In order to ensure a high response rate the questionnaires were printed out and handed directly to students with instructions on how to fill them out. A copy of both questionnaires, pre-study and post-study, can be found in Appendix C and Appendix D.
The questionnaires were divided into 5 parts with the post survey having an additional section to evaluate the course website. The first two parts of both questionnaires looked at the demographics and background of the participants. The next three parts looked at using web-bases learning, reflecting on restaurant practical training and the content of a course website. Grouping the questions in this manner allowed the collection of data, which could be analysed in a statistical manner and compared over the period of the research.

Prior to distribution, the questionnaire was piloted to a small number of students. This allowed the author to ensure the clarity of the questions, receive feedback on the layout and appearance and eliminate any ambiguities or difficulties in wording (Cohen et al. 2000). Following the pilot, a small number of changes were made to category titles and the wording of some questions.

### 3.10.3 Online Data

Van der Heijden (2003) highlights the importance of using data analysis of website traffic. Website traffic is an important performance indicator in the area of ecommerce while also reflecting the popularity of a specific website. This type of analysis has also been used by advertising agents in generating revenue from websites.

In order to collect data on website traffic, a data collection plugin was installed onto the course website. All student were required to register to use the website. The registration process facilitated the collection of user specific data such as name, class and student ID number. Registration ensured that only students participating in the study were gaining access to the website and that data being collected was not being diluted by third-party access. The WassUp plugin allowed specific data to be collected every time a student logged on to the website. This information included date of registration, number of logins over the research period and the most popular pages visited. All this data was time-stamped which further facilitates deeper analysis of the information.
Vimeo, an online video hosting platform, was used to store the videos which enabled them to be streamed on the website. Vimeo was utilised as the hosting platform as it allowed videos longer than 10 minutes to be uploaded, YouTube will not allow videos longer 10 minutes to be uploaded (McAndrew 2010). Vimeo also allows for stricter control of where the videos can be embedded (Bauer et al. 2012) – an important function when usage date of the videos is being collected. Vimeo further facilitates the collection of detailed data on the usage of each video, which is important in order to back up the information collected both in the questionnaires and the focus groups. All data was exported to Microsoft Excel 2010 for analysis.

3.11 Data Preparation and Analysis

Once all the primary research had been gathered the author carried in-depth analysis of all the information collected. The results of this analysis will be discussed in the next chapters. As already stated above this research study employed a case study approach to data collection. This included the use of both qualitative and quantitative data collection tools.

For analysis of the qualitative data - the focus groups, an analytical package called Nvivo was used. However before any analysis could take place, the focus groups has to be transcribed in detail. The author recoded both focus groups using an application on an iPad. A highly sensitive microphone was connected to the iPad to achieve better quality audio. The audio was then exported and Express Scribe, a transcription software package, was used to assist in the transcription. Once the transcription was complete the information was first analysed simply by reading the transcripts and taking notes. Secondly Nvivo was used to get more meaningful analysis, where data was grouped into themes as suggested by Rubin and Rubin (2011).

In orders to analyse the quantitative data the author decided to use the Statistical Package for Social Science (SPSS). Once raw data is entered into SPSS, the computer can process the data and indicated the level of statistical significance of the
A paired samples t-test was used (via SPSS) to assess the difference in responses in the pre-study and post-study questionnaires. This test highlights any statically difference between the responses. This test is key to establishing any statistical difference in efficacy levels, learning support use and content over the course of the study. The effect size was also measured during the analysis of the data. An effect size is a measure of the strength of the relationship between two variables in a statistical population, or sample. An effect size calculated from data is a descriptive statistic that conveys the estimated magnitude of a relationship.

A total number of 62 responses were recorded for both the initial questionnaire and the final questionnaire and making use of SPSS allowed a much greater analysis possible. Comparisons were made between the initial and final questionnaire. These results will be discussed in the next chapter.

### 3.11.1 Considerations in Data Analysis

This section will look at different considerations, which need to be taken into account when analysing data for research purposes.

#### 3.11.1.1 Ethics

Social scientists generally have a responsibility not only to their profession in their search for knowledge and quest for truth, but also for the subjects they depend on for their work.

(Cohen et al. 2000, p.56)

Creswell (2009) highlighted the need to respect the participants in any study. Creswell noted that in order to carry out research, permission should be granted from someone in authority in order for the research to be carried out at the research site. For this research study, the author requested permission from the College Registrar. Permission was given by email (see Appendix E). The Registrar noted that permission was not required from each student who was participating but that students should understand what research is being conducted. In order to communicate effectively with the research subjects regarding the purpose of the
research the author prepared a cover letter, which was attached to all the questionnaires. The author used guidelines highlighted Sarantakos (2005) when creating the cover letter (see Appendix F)

Creswell (2009) points out that participants should not be put at risk by the study and individuals’ anonymity should be respected. In order to ensure anonymity students were not required to identify themselves on the questionnaire and all names were removed during the transcription of the focus groups. Participants’ names were required to use the course website; however this was only so that data could be grouped when it came to analysis.

3.11.1.2 Reliability and Validity

When carrying out research evaluation, validity and reliability are two extremely important elements and should not be underestimated (Lanoë 2002). For research findings to be credible they must be reliable (Malhotra and Birks 2007). Reliability is generally concerned with the consistency of the results but also with errors that occur in data collection (Bryman and Bell 2003). Both Cohen et al. (2000) and Creswell (2009) highlight that a multi-method approach to research increases the validity and reliability of any study. However Lanoë (2002) notes that just because a research tool is reliable, it does not mean it is measuring what it is intended to measure. This is where validity is important, Lanoë (2002, p.23) states that “validity is concerned with whether the tool measures what it is supposed to measure”.

Cohen et al. (2000) highlights the importance of validity by identifying it as a key element to any research and notes that without validity, research would be worthless. The importance of validity is also suggested by Bryman and Bell (2003, p.33) who state that it is “concerned with the integrity of the conclusions that are generated from a piece of research.”

To ensure the reliability and validity of this study the author had used a multi-method approach by combining quantitative and qualitative data collection methods when carrying out the primary research. All questionnaires that were distributed to the participants both at the beginning and at the end of the research period were identical
allowing for detailed comparisons of data from both. In addition by preparing a protocol for the focus groups (see Appendix B), this ensured that both were carried out in a focused manner.

3.11.1.3 Triangulation

Triangulation has been defined by numerous authors. Creswell (1998) defines it as

the use of multiple and different sources, methods, investigators and theories to provide corroborating evidence from different sources, designed to shed light on a theme or perspective.

(Creswell 1998, p.202)

Cohen et al. (2000) states that triangulation is the use of two or more methods of data collection. Patton (2002) highlights that the research results are strengthened when triangulation is utilised. This is echoed by Creswell (2009) who argues that one of the main advantages of using triangulation is that it allows for the offsetting of a weakness of one approach to research with the strengths of another. It also combines the strengths of quantitative and qualitative research. Jick (1979) notes that researchers can be more confident in their results when triangulation is utilised. Triangulation was utilised in this study by examining and comparing both qualitative data (focus groups) and quantitative data (questionnaires and online data). By using a mixed method approach the author hopes that the findings will be strengthened.

3.12 Research Limitations

Prior to the start of the research period the author took ill for a number of weeks and could not attend work at the research site. This resulted in not being able to split the research participants into a control and experimental group as the author relied heavily on the course website and its contents to help the students catch up on any lectures missed.

The time dimension of the research period placed a limit of the amount of research that could be carried out. All the research was carried out over a 12 week. It may have been beneficial for the research to have had a longer research period allowing for further data to be collected.
On one occasions access to the course website was restricted due to errors with the hosts server. This resulted in the website being taken off line in ordered to find a solution. This happened during class time meaning that the author could not utilise the website during class. However as a back up the author did have access to the files that were loaded on the website on his laptop. The author was able to use these files in place of the website as a backup.

During the recording of the second focus groups, the authors recording device failed to record a period of 12 minutes in the middle of the focus group due to technical failure. The author had some basic notes covering the whole focus group. These needed to be referred to while transcribing the audio files to help fill in the missing conversation.

3.13 Conclusion

This chapter discussed the approaches to researching in education and highlighted which approach best suited this study and the reasons behind that choice. It also outlined the research methodologies and processes used in carrying out this research study. It has identified the strengths and weakness of each research method and how these methods fitted into this study.
CHAPTER 4  Research Findings

4.1 Introduction

In this chapter the author will identify the findings from the research. Data was collected from a number of different sources including pre-study and post-study questionnaires, focus groups and online statistics from the course website. Each of these areas will be explained in the next section below. The research findings will be discussed using the research objectives listed in Chapter 3.

4.2 Questionnaire

Two questionnaires were completed over the course of the study; the first questionnaire was completed in January (pre-study), while the second questionnaire was completed in April (post-study). Both questionnaires carried the same questions, with the post-study questionnaire having an additional section in order to obtain information about the study itself. All the questions contained in both questionnaires were answered by ticking a box. No section of the questionnaire allowed for individual comments by the participants. Copies of the pre-study and post-study questionnaires are contained in Appendix C and Appendix D.

4.3 Focus Groups

Two individual focus groups were carried out in April (post-study) in order to get qualitative feedback. The focus groups were broken down into EU and Non-EU groups of students. The author decided to take this approach as it would create more comments than just using a questionnaire and by splitting the students into EU and Non-EU, this allowed for comparison of their answers.
4.3.1 Focus Group Participants

The participants were randomly selected from first year students as all the students were given access to the course website. Eight students were selected for each focus group, divided equally between males and females. For the Non-EU focus group the breakdown of nationality was also taken into account with four Chinese students and two Indian students selected to participate.

On the day of the focus group two students failed to attend for the EU focus group leaving six participants evenly split between male and female. All the Non-EU students who opted to participate attended. Each focus group lasted approximately fifty minutes. A full transcript of both focus groups is available in Appendix G and Appendix H. A protocol for carrying out a focus group was also prepared; this is available in Appendix B.

4.4 Online Statistical Information

The final data source comes from statistical information taken from the course website and the video hosting website. Both these websites gathered data during the study period. This information allowed the deeper analysis into the participants usage of the course website and its content, highlighting the most used elements of the course website and usage patterns of the participants.

4.5 Profile of Research Participants

This research study focused on first year business students studying a Hotel Management at a college in the west of Ireland. A total number of 84 students were available to the author to participate in the study, however for a number of reasons detailed below some students were not eligible to participate.

During first year, students are divided into five individual practical classes that rotate between different practical areas associated with their training. Each student spends
five weeks in each practical area. This five-week rotation is broken down further into two fortnightly blocks followed by a one-week block.

The study period for this research project took place during the second semester of teaching. This resulted in one class being excluded from the study as no data was collected during their second two-week rotation, which had taken place in the first semester. This left a total of sixty-seven students available to participate in the research project. Information was gathered from the remaining four classes over their final three weeks in practical restaurant training, in total twelve weeks of data were collected. Each week of the rotation used for this study is referred to as Week 1, Week 2 and Week 3, with each of the four class groups completing this cycle.

Two of the students were absent on the day the pre-study questionnaire was completed leaving a possible 65 participants.

The majority of the students participated in the study, choosing to filling out the pre-study questionnaire (Fig 4.1). Only 5% chose not to complete the questionnaire and participate in this part of the study. This left a total number of sixty-two participants reflecting a 95% response rate to the questionnaire.

**Participant Responses**

![Pie chart showing 95% completion rate and 5% non-completion rate, n=65](image)

Figure 4.1 - Number of pre-study questionnaires completed
All participants stated that they had access to a computer with an internet connection outside of the college. The participants were also questioned on their previous experience of using web-based learning resources prior to being exposed to the online content at the centre of this study. Figure 4.2 below details their response to this question. The vast majority of students (79%) had used web-based learning resources in the past.

![Pie chart showing previous experience of web-based learning](image)

**Previous experience of web-based learning**

![Pie chart with labels](image)

n= 62

Figure 4.2 - Breakdown of student with previous experience of web-based learning

### 4.5.1 Demographic of the Participants

The participants were divided into two groups, EU and Non-EU for the purpose of comparing the responses when necessary. There was an equal split between both groups giving a total of 31 participants in each group. The EU participants were mainly made up of Irish students with a small number from other EU countries such as Hungry, Estonia and Bulgaria. The Non-EU group participants were mainly from China (76%) with a small number of participants from India (20%) and United States of America (4%). The participants were aged between 18 and 31 years old. The majority of the participants were either 18 or 20 years old, with the average age of the group being 19.81.
4.6 Findings by Research Objective

In Chapter 3 the aim of this research was outlined using a research question: Do web-based training materials lead to increased engagement and better learning outcomes among Higher Education participants? In order to answer this research question, a number of research objectives were also highlighted.

- To investigate students’ engagement with online course content in practical training.
- To evaluate the overall benefits and constraints of using faculty created online content in practical training.
- To investigate the importance of content to the students learning outcomes with regular use of online course content.
- To explore the instructional value of personalised multimedia compared to other freely available material.
- To identify possible areas for development of faculty created online content.

In the next section, the author will outline the findings of the study under each of the research objectives.

4.6.1 Objective 1: To Investigate Students’ Engagement with Online Course Content in Practical Training

4.6.1.1 Usage of Course Website

4.6.1.1 Registration

To engage with the online course website, all the participants were required to register for the website. Without registering the participants could not access any of the information contained on the website. The registration process was available to the students at any point over the study period. Registration was available to all students regardless of whether were part of the research study. The registration process required all the students to tick a box selecting their class, which ensured that the class that was excluded from the study was not part of the information gathered.
Figure 4.3 outlines the number of registrations to the website over the study period and at what period the registration happened. In total 65 students registered out of a possible 67 giving a 97% registration rate for the course website over the research period.

Number of Registrations by Week

<table>
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<tr>
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<th>Week 3</th>
<th>Not Registered</th>
</tr>
</thead>
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<tr>
<td>33</td>
<td>16</td>
<td>16</td>
<td>2</td>
</tr>
</tbody>
</table>

n=67

Figure 4.3 - Registrations by Class Rotation

The focus groups identified that the EU students felt that the registration process was “easy” and “user-friendly”, highlighting that “most things you have to register for so it wasn’t a problem”. It was noted that the registration process may put others (non students) off using the website, but that was felt to be positive (EU 4). However a Non-EU student did point out that the password that is automatically generated by the website was too complicated and it may cause problems.

Figure 4.3 identifies that on average 73% of the participants had registered for the course website within the first two weeks of their class rotation in the restaurant. The remaining 24% registered either before or during the final week, when the final practical assessment was taking place. Only two participants decided not to register at all for the course website.

During the focus groups, the participants were asked how the initial registration on the website could be increased. A number of the EU focus group suggested offering an incentive to encourage students to signup to the website. These incentives
included discount cards for local business or offering a draw for a free meal in the
restaurant. However one EU student pointed out that;

“...its pretty much their choice to go on there or not... if you stress the
importance of it enough and someone doesn’t really care, they are not going to
used it if they don’t want to.”

EU 2 – EU Focus Group

This was also echoed by another EU student who stated;

“...it’s your own choice, if you want to use it or not, it’s up to you... When I
have to make a choice to do something I prefer it much better than someone
telling me what I have to do.”

EU 3 – EU Focus Group

A Non-EU participant suggested removing the registration process for part of the
website and only having the “student results” area password protected. None of the
Non-EU focus group participants felt the login process should be removed fully.
They also suggested that if more references were made to the website in class, this
may encourage students to use it more. One Non-EU student did mention that
students were too lazy and that it would not matter what you did, if they did not want
to use it they would not.

Based on the results of the post-study questionnaire (see Figure 4.4) 86.9% of the
participants either agreed or strongly agreed that the course website was easy to
access, highlighting that the majority of the students had no issue with the login
process. Figure 4. 4 shows the overall evaluation of the course website and will be
referred to through out this chapter.
4.6.1.2 Access Location

During the focus groups, the participants were asked if they access the website in the college or when they were at home. All the EU and Non-EU participants used the website at home. One EU female participant identified using the website on one occasion in the college to research a topic for the following day. It was highlighted that none of the college computers have earphones connected to them and a Non-EU student suggested that without sound you could not listen to the videos.

Broadband speed was identified as a barrier to using the website in the student accommodation. A number of Non-EU students highlighted that the college internet was much faster and that therefore the website was much easier to use when in the college.

It was also interesting to note that only only 8% of all interactions on the course websites were from mobile devices such as tablet devices and smart phones. The remainder of the interactions came from laptops or PCs.
4.6.1.3 Ease of Use

Figure 4.4 (Evaluation) identifies that that 86.9% of the participants found that the website was easy to use and navigate around, with only 1.6% disagreeing. Most of the focus group comments in this area were also positive with the participants stating that that course website was both “very easy and very useful” (Non-EU 1). One EU participant noted that the drop down menus were really useful as they help in finding out information but they did note that unless you clicked on the menu, you might not know that there was information available. This therefore was a negative point.

<table>
<thead>
<tr>
<th>Learning support use</th>
<th>Pre-study</th>
<th>Post-study</th>
<th>t</th>
<th>Sig.</th>
<th>Effect Size (r)</th>
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<td>SD</td>
<td>Mean</td>
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</table>

N= 62

Table 4.1 - Using web-based learning - comparison of pre-study and post-study questionnaire

Table 4.1 compares the mean scores from Part 3 of the pre-study and post-study questionnaires which related to the students opinions of web-based learning. Based on the results which are displayed in Table 4.1. There is a significant difference between the pre-study and post questionnaire answers. When the sig value of 0.00 is taken into account this highlights that this difference is statistically significant. In addition, this increase in the result is reflected in the moderate effect size increase (0.37). It can therefore be noted that using the course website had a positive effect on the opinions of the participants towards using online learning.

4.6.1.4 Website Usage and Online Statistics

The usage of the website was tracked over the 12 week period of the study using an online plugin for wordpress called WassUp. The plugin tracked all page visits by student-login and date allowing for a detailed analysis, highlighting when the website was used most and what pages on the website were visited more. Usage of the embedded videos was also tracked over the course of the study. This in turn allowed
for a detailed analysis of their “plays” and “loads”. The post-study questionnaire also asked students about their usage of the website.

4.6.1.4.1 Login Statistics

Over the course of the twelve week data collection period, 65 students registered for the course website. In total 498 logins took place over this period. Figure 4.5 highlights how often students access the course website over the study period. More than half the participants logged onto the website more than 6 times with only 30 participants logging on less than five times. Unfortunately a plugin which was installed to keep track of events, when exactly students logged on to the course website malfunctioned during the course of the study so therefore detailed statistics on student login patterns is not available.

Figure 4.5 - Student logins over study period

4.6.1.4.2 Website Statistics

Detailed statistics from the website were recoded over the twelve week data collection period. In total 3692 page visits were made on the course website. The final four weeks of the study in which each class was sitting their final practical exam saw the greatest usages of the website with 49% of all page visits happening in that four week period. This final four weeks reflects week 3 of each class’s rotation
in the restaurant in which the final exams were carried out. Week 1 of each rotation saw the least number of visits with only 20% of visits happening during this time. The majority of page visits during week 1 and 2 of each rotation were attributed to students logging on to check their class assessment results on the class pages. Figure 4.6 identifies the top ten pages that were visited over the course of the data collection period. It also identifies how many of these visits happened during week 3 or each rotation. It is interesting to note that the top four pages visited overall and in the final four weeks are pages that contain videos of how to carry out exam tasks. The class pages (classes 1-4) were visited very little in the final four weeks, having been very popular earlier in the study period. It is also worth noting that the next most popular web pages visited contained either videos or standard operating procedures (SOP’s) which would have been useful to students in the preparation for their exams. These statistics from the course website are further backed up by the statistics from the video hosting website Vimeo which are highlighted in Figure 4.7.

**Top 10 Page Visits**

<table>
<thead>
<tr>
<th>Most popular pages</th>
<th>Total Visits</th>
<th>Visits in Week 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crepe Suzette</td>
<td>300</td>
<td>150</td>
</tr>
<tr>
<td>Irish Coffee</td>
<td>250</td>
<td>125</td>
</tr>
<tr>
<td>Banana Flambe</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>White Wine</td>
<td>150</td>
<td>75</td>
</tr>
<tr>
<td>Class 2</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>Class 4</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>Class 1</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Class 3</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Table Setting Up</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Red Wine</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>SOP’s</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Wine Notes</td>
<td>50</td>
<td>25</td>
</tr>
</tbody>
</table>

Figure 4.6 - Top ten pages visited
4.6.1.4.3 Vimeo Statistics

Figure 4.7 identifies the most popular videos over the course of the entire twelve-week study period. When compared to Figure 4.6, which highlights the most visited web pages on the course website, there is a correlation of information. The most played videos were crepe suzette, preparing an Irish coffee and banana flambé, which were also the most viewed webpages.

![Individual Total Plays](chart.png)

**Figure 4.7 - Number of plays per video**

During the course of the study period, over 3900 video loads occurred (Figure 4.8). A load occurs when you access a webpage containing a video. The video automatically loads to allow a smoother playing experience when the play button is selected.

In contrast to the number of loads, the play button was only selected 952 times with only 298 finishes being recorded. Once the play button is selected Vimeo logs it as a
play. This could highlight that the participants were having issues with the course website and playing the videos, however it was noted in the EU focus group that there was no real issue with the videos loading in the student accommodation. A Non-EU focus group participant did comment that the videos could be a little smaller (shorter) as some of them were quite long.

![Vimeo Summary Chart](chart.png)

Figure 4.8 - Summary of total loads, plays and finishes from Vimeo online statistics

4.6.2 Objective 2: To Evaluate the Overall Benefits and Constraints of Using Faculty Created Online Content in Practical Training

4.6.2.1 In Class Usage of Course Website

The author used the course website during practical classes on a regular basis. The website was not used as a replacement for any teaching but as an additional resource to reinforce what was being taught in the restaurant. The third bar in Figure 4.4 highlights the participants response to the question about using the website more in class. The bar chart identifies that the participants are almost evenly split as to whether it should be used more in practical classes with only 14.8% strongly agreeing and 32.8% agreeing that it should be used more. Interestingly 13.1% disagreed with the statement, which was also highlighted in both focus groups. Figure 4.9 takes a closer look at the differences between the EU and Non-EU responses to the same question. This highlights some major differences in terms of
how each group believe the website should be utilised. The Non-EU participants are much more in favour of the course website being used more in class while the EU participants take a more neutral view towards its use.

![EU and Non-Eu Comparison](image)

**Figure 4.9 - Should the course website be used more in class - EU and Non-EU comparison**

The Non-EU focus group noted that the website could be mentioned more in practical classes which might also help increase the website's usage, however one Non-EU participant noted that it should really only be used “when time is limited” (Non-EU 5) or when a “real demo takes a lot of time” (Non-EU 8). The EU focus group felt that it could be used to re-enforce a practical demonstration, rather than spending time preparing the demonstration again the information could be projected onto the screen. However it was noted that it should not replace the practical demonstration when a EU female participant stated,

> “but definitely don’t replace the video’s on the websites from what you do in class because to see it live is much better obviously.”

EU 2 – EU Focus Group

This was also noted in the Non-EU focus group. The EU focus groups also highlighted that by using it too much in class would take away from
students seeing it as “their own resource at home” (EU 3) and students would get “sick of it” (EU 6) and “see it as something they had to do rather than something they want to do” (EU 3).

4.6.2.2 Class Preparation

During the focus group discussions, both groups were asked if they used the website to prepare for class. The majority of the EU participants pointed out that they rarely used the website to prepare for class however they did note that it would be a useful tool to those students that my not be so confident in carrying out tasks, if it was used prior to coming to class.

The Non-EU focus group participants were very much in favour of using the website to prepare for class. Almost all the participants suggested that they used the website in order to prepare for class. They also noted that using it after class was a major benefit as it allowed them to clarify points that they may have not understood during the class.

4.6.2.3 Investigating Student Self-Efficacy

The pre-study and post-study questionnaires contained a section (Part 4), which focused on the participant’s reflection on restaurant practical training. This section was designed in order to look at the self-efficacy levels of the participants in relation to practical restaurant training and compare the results from the pre-study and post-study questionnaires in order to see if there was any increase in self-efficacy levels. When the individual responses are analysed it shows that 46.6% of the participants noted in the pre-study questionnaire that they had some level of nervousness before attending practical classes. This level reduced to 35.5% in the post-study questionnaire. In the same way the level of anxiousness felt by the students decreased in the post-study questionnaire. When the results for the entire section were analysed using SPSS it was identified that there is a significant difference between the pre-study and post-study answers. Additionally when the Sig. value of 0.02 is taken into account, it can be concluded that the difference is statistically significant. This identifies that the experience and usage of the course website has a
positive effect on the efficacy perceptions of the participants. Table 4.2 outlines the comparison of the pre-study and post-study questionnaire.

<table>
<thead>
<tr>
<th>Self Efficacy</th>
<th>Pre-study</th>
<th>Post-study</th>
<th>t</th>
<th>Sig.</th>
<th>Effect Size (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.78</td>
<td>0.6</td>
<td>4.14</td>
<td>0.61</td>
<td>-2.4</td>
</tr>
<tr>
<td></td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
<td>0.21</td>
</tr>
</tbody>
</table>

| N= 62 |

Table 4.2 - Reflection on practical restaurant training - Examining self-efficacy levels – Comparison of pre-study and post-study questionnaire

The focus groups also highlighted how the course website can have a positive effect on the confidence levels of students in class. One EU participant noted that they could “look over the step by step process and figure out what they are doing” (EU 5) while a Non-EU participant highlighted that “it made class a little easier” (Non-EU 2). Another Non-EU student said that the course website had a positive effect however that more actual practice time in the restaurant is needed.

4.6.2.4  Exam Revision

The participants were very much in agreement that the course website was a benefit to them in preparing for their practical exam. Figure 4.4 identifies that 96.7% of the participants either strongly agreed or agreed that the course website was of benefit during their exam preparation. The remaining 3.3% neither agreed nor disagreed to the statement. This was also highlighted in the focus groups with participants stating “I thought it was really helpful when I was getting ready for the exams, the practical exam” (EU 2), “It was very helpful just prior to doing the service exam…” (EU 3), “…before the exam we used it a lot… for watching videos…” (Non-EU 6) and “it was good for revision” (EU 4). Further to this, a number of the focus group participants stated that they only registered for the website in order to revise for the exams, with one participant stating that “Your website was the only thing that I used for my practical exam” (Non-EU 3). The usage statistics from the website and the videos also highlight that the majority of the usage happened in the run up to the exam period (Figure 4.6).
4.6.2.5 Motivation

Student motivation is a challenge in all aspects of education. The course website offered the students something different from the norm in terms of accessibility to educational content. Figure 4.4 highlights the results of the evaluation of the course website. One of the statements presented in the post-study questionnaire looked at motivation to learn using the course website. The results showed that 83.3% of the participants either strongly agreed or agreed to the statement only 3.3% disagreed.

The focus groups noted that when something, in this case the course website is not compulsory, then it becomes more attractive. This was the case with the course website, students were free to use the website as they sought fit, thus motivating them to utilise the website in their free time.

4.6.2.6 Communication

It was noted that the lack of instant communication offered on the website was a constraint. A possible solution that was suggested was to have a chat facility on the course website would allow students to discuss projects and other topics online, it was also noted that this could be achieved by adding a forum area to the website. It could also be used to ask the lecturer questions if they were online. A Non-EU participant did point out that there was a comment section available but it seemed that no one every used it. The “contact us” facility on the course website was only utilised six times over the course of the study period, however one of the EU focus group participants identified its benefits stating that “it was quite fast to get an answer from you” (EU 2).

4.6.2.7 Future Usage on Placement

In the post-study questionnaire the participants were asked if they would utilise the course website when they were on placement. The last bar in Figure 4.4 displays the results for this question. 80.6% of the participants stated that they would use the course website when on placement with 17.7% not sure and 1.6% disagreed.
4.6.3 Objective 3: To Investigate the Importance of Content to Student Learning Outcomes with Regular use of Online Course Content

4.6.3.1 Learning Content

One of the most important areas which was examined in this study was how the content on the course website could effect student learning in the area of practical restaurant training. The findings have already shown that the course website had a positive effect on both students perceptions about using online learning and on their self-efficacy levels over the course of the study period. Online content is extremely important when it comes to learning and if the online content is not what the students are looking for then they will not interact with the course website.

Part 5 of the questionnaire focused on this element of the study. On analysis of the importance of content, the pre-study and post-study questionnaire investigated what level of importance the participants placed on each content element. The students rated each area in terms of how important they felt it was to the course website. A summary of the results that compares the mean score for each element is shown in Table 4.3.

<table>
<thead>
<tr>
<th>Importance of Content Area</th>
<th>Pre-study Mean</th>
<th>SD</th>
<th>Post-study Mean</th>
<th>SD</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes</td>
<td>4.23</td>
<td>.71</td>
<td>4.38</td>
<td>.71</td>
<td>-1.18</td>
<td>.24</td>
</tr>
<tr>
<td>Videos</td>
<td>4.26</td>
<td>.77</td>
<td>4.79</td>
<td>.45</td>
<td>-4.72</td>
<td>.00</td>
</tr>
<tr>
<td>SOPs</td>
<td>4.37</td>
<td>.68</td>
<td>4.55</td>
<td>.62</td>
<td>-1.52</td>
<td>.13</td>
</tr>
<tr>
<td>Other</td>
<td>3.90</td>
<td>.90</td>
<td>4.00</td>
<td>.79</td>
<td>-.64</td>
<td>.53</td>
</tr>
</tbody>
</table>

N=62

Table 4.3 - Level of importance of specific learning content - Comparison of pre-study and post-study questionnaire

The results from the pre-study questionnaire identified that the participants rated SOP’s (48.8% very important) as being most important element, with videos in
second place (43.5% very important). However the post-study questionnaire highlighted that videos (80.6% very important) were the most important content element followed by the inclusion of SOP’s (61.3% very important) then lecture notes (48.4% very important) and lastly other miscellaneous content (30.6% very important).

When the mean importance of each individual content element was compared, videos were the only content element that showed a statistical significant increase in importance between the pre-study and post-study questionnaires results. The other elements also saw an increase in importance however it is not deemed to be significant.

On further evaluation of this data (Table 4.4) it was once again identified that there was a significant statistical difference in student perceptions towards the importance of online content between the post and pre-study questionnaire. This shows that after using the course website over the study period the participants had a greater appreciation for its general content.

<table>
<thead>
<tr>
<th>Learning Content</th>
<th>Pre-study</th>
<th>Post-study</th>
<th>t</th>
<th>Sig.</th>
<th>Effect Size (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.19</td>
<td>0.55</td>
<td>4.43</td>
<td>0.46</td>
<td>-2.6 0.01</td>
</tr>
</tbody>
</table>

N= 62

Table 4.4 - Importance of course website content - Comparison of pre-study and post-study questionnaire

Another benefit of the course website highlighted by the focus group participants was the added flexibility that the course website offered to their learning experience. The course website allowed students access anytime anywhere. One EU participant noted that it allowed the students access to learning when they had a “spare hour” at home in the evening rather than having to come and speak to the lecturer for clarification. A Non-EU students identified how it had helped when she had to miss a practical class due to illness, the course website allowed the student to catch up in her own time.
As well as adding flexibility to the learning process a number of the focus group participants suggested that it added additional convenience to the learning process. Students were able to go into topics in more depth using the course website. They found it more interesting than using a book. A number of the participants in the EU focus group said that they are more likely to study using the web than picking up a book.

The Non-EU focus group also highlighted that it was “easier to learn from audio and video” (Non-EU 2) and that it allowed for repeat viewing of tasks over and over again. One EU participant states that the website was more interesting than using a book as it offered more than just looking at words on sheet. Both focus groups also noted that it was easier to take notes while watching the videos and using other elements of the website.

The focus group participants were strongly opposed to the course website taking the place of actual practical class, noting that live demonstrations were much better and that practicing the tasks was really important to gaining a better understanding of the topic.

4.6.4 Objective 4: To Explore the Instructional Value of Personalised Multimedia Compared to Other Freely Available Material

4.6.4.1 Multimedia Content

The course website was used to host a number of instructor personalised multimedia elements. In total, ten instructor personalised videos and two OPUS Pro projects, in flash format, were available on the course website. The videos were embedded through Vimeo and the flash elements were hosted directly on the website.

Figure 4.7 and figure 4.8 earlier in this chapter show the total usage statistics of the personalised videos over the course of the research project. Figure 4.10 graphs the number of plays over the study period grouped by week, showing total plays from
week 1 to week 3. From this we can see that Week 3 of the practical rotation (exam week) saw a huge increase in the number of plays of the videos.

### Total Plays by Week

![Total Plays by Week](image)

**Figure 4.10 - Total number of plays by practical rotation week over the course of the study**

The focus groups also discussed the videos in great detail. The focus group participants spoke very positively about using the videos as part of their study. The findings have already shown that the participants preferred using the website as it was much more interesting than using a book. The participants also highlighted this in relation to the videos hosted on the website. Below is a selection of comments from both the EU and Non-EU focus group participant in relation to using videos on the website.

“…anything like that makes it much easier to visualise, when you are going it yourself”

(EU1 – EU Focus Group)

“Actually I can say without it (videos) I would probably always coming over to your asking you how you made the crepe suzette and writing it down”

(EU 2 – EU Focus Group)

“for practical demonstrations it obviously much better than reading a sheet”

(EU 4 – EU Focus Group)

“sitting at a book you get bored eventually, so when you have pictures and videos in front of you, you would happily sit there”

(EU 5 – EU Focus Group)

“Videos were most helpful”

(Non-EU 2 – Non-EU Focus Group)
4.6.4.2 Personalised Multimedia

During both focus group discussions the use of instructor-personalised multimedia was discussed in great detail. The EU focus group were asked if they felt the personalised videos were better than generic videos that are available from YouTube and all agreed they were better. They highlighted that the instructor-personalised videos were better as they are specifically designed for the students and the same equipment was used in the videos that would be used in practical classes. They also noted that the personalised videos show exactly how a task should be carried out whereas generic videos might show a different method. One EU participant pointed out that generic videos are not necessarily bad as they do highlight that “things can be done different ways” (EU 2) which is important to learn. It was suggested that both videos could be hosted on the website so that comparisons should be shown between different methods. Another EU participant pointed out that prior to registering for the course website, they had tried searching on YouTube for videos of tasks but could not find anything specific. Once they registered for the website they felt the videos on the website were much better than those on YouTube, but still noted that the YouTube videos were also useful.

The Non-EU focus group highlighted similar points to the EU group. They noted that it is hard to find videos “that are dedicated to teaching” (Non-EU 1) on YouTube. They also highlighted that YouTube tends to be more social viewing whereas the videos hosted on the course websites are for study and you know you are learning the correct method and to the highest standard (EU 3). They also suggested the importance of seeing tasks being carried out differently by watching generic videos but suggested that other generic videos could be approved but the lecturer and maybe a short explanation on how the videos differ. The Non-EU group agreed that having the same equipment in the personalised videos was a benefit to learning. They further added that the personalised voiceover was also an important element about the videos.
4.6.5 Objective 5: To Identify Possible Areas for Development of the Faculty Created Course Content

4.6.5.1 Future Development

Development of the course website was a very important area for investigation during this project. As this was the first time the course website had been introduced into the college, the author felt that it was important to see how the students felt about its continued use and how it could be improved.

The research in this area came solely from the focus groups. The focus group participants were all in favour of the website being developed further. They identified a number of areas which could benefit from its development.

4.6.5.2 Integration into other areas

The participants felt that other areas in the college could benefit from having a resource like the course website for practical restaurant training. The two areas that were highlighted as being most suitable for a course website were the kitchen and accommodation services areas.

4.6.5.3 Videos

A number of suggestions were made during the focus group discussions about developing this element of the course website. These have been summarised below.

4.6.5.3.1 Basic Task Videos

The EU group suggested creating additional videos for basic tasks that are carried out when setting up the restaurant on a daily basis. It was noted that just because a task is basic, such as polishing cutlery or slicing butter, does not mean everyone knows how to carry it out. One EU participant stated that some people have never worked in a hotel before and what some of us think is basic might be a challenge to them. However, this suggestion was not so well received by some of the Non-EU
participants who said it would “spoon feeding” to have videos of some of the easier tasks. In particular one participant stated that

“People need to learn from you and pay attention in class and just practice more rather than making videos of it. Twenty years ago when there were no videos, people still manage to do their service exams, how did they do it? They listened in class. This is like spoon feeding, its too much.”

(Non-EU 1 – Non-EU Focus Group)

A number of the other Non-EU participants agreed with this statement saying that it would be too much.

4.6.5.3.2 Additional Videos

A number of suggestions were made about creating videos for other areas of the restaurant course such as making cocktails and pouring pints as well as different elements of the sequence of service. It was noted early in this chapter that one participant suggested that the videos be made shorter or cut into smaller stages to make viewing specific elements easier.

4.6.5.3.3 Videos of Service

The author suggested the possibility of videoing students during lunch service and a video summary of the lunch service being posted on the course website, where students could critically assess the video in terms of skills. This had been carried out prior to the research study with one practical group. However due to limited resources available to shoot the video and edit it, this process did not continue.

Many of the participants felt this would be an excellent exercise as you can learn from each others’ mistakes. They also noted that “seeing yourself one time making a mistake would make you not do it again and again” (EU 6). Only one participant suggested that this would be a waste of time.

Both groups suggested having a forum like structure where everyone could share their comments on the videos. It was also noted that students could see how much they have improved over the course of the year by having a bank of these videos. A
few focus group participants had been in the class where this had been trialled and they noted that it was very good.

4.6.5.3.4 Indexing and Downloading Videos

One participant suggested indexing the videos on the course website on one page with links to the pages where the videos are located. Another suggested making the videos available to download to a portable media player.

4.6.5.4 Forum/Chat area

A number of the participants felt that it would be useful to have a forum or chat elements to the course website. However not all the participants were in favour of it. One participant pointed out that what would happen if there were too many question on there, who would answer them? Others suggested that students would be able to help other students out by answering questions.

4.6.5.5 Quiz Section

One participant suggested making students answer a quiz after watching part of a video and if they got a low score they would have to watch the video again. Another participant pointed out that this would help students realise if they have actually learned something from the videos or not. It was also noted that this would increase the interactivity of the course website.

4.6.5.6 Menu Knowledge Section

This suggestion mainly came from the Non-EU students who suggested that having an area on menu knowledge would help them understand the menus better. One of the Non-EU participants suggested that having sample menu descriptions would be beneficial, especially to the Non-EU students, as they are not familiar with many of the menu items and as a result find it very difficult to describe items.
CHAPTER 5  Discussion of Findings

5.1 Introduction

This chapter will examine the findings that are documented in Chapter 4. As with Chapter 4, the discussion of findings will be divided by research objectives.

5.2 Overview of Research

This study set out to investigate if the use of web-based training materials would lead to increased engagement and learning by the participants of the study. The study took place at a third level college in the West of Ireland. The participants of the study were all first year undergraduate students who were studying a Bachelor of Business Studies in International Hotel Management. The study took place in the second semester (January to April) of the 2011/2012 academic year. An online course website was used in the study, along with instructor personalised online videos which were displayed on the course website along with additional educational material.

In order to gather relevant information for this research, pre-study and post-study questionnaires were distributed to all the students. In addition, two focus groups were carried out and usage information from the course website was analysed.

5.3 Discussion of Findings by Research Objective

5.3.1 Objective 1: To Investigate Students’ Engagement with Online Course Content in Practical Training

The results of this study identify that usage of the course website had a positive effect on opinions of the participants towards online learning over the course of the
study. With almost full participation (97%) it could be suggested that student see online learning as an integral part of any learning environment and have no issue with utilising technological elements available to them. Herrera-Batista and Gonzalez-Martinez (2008) noted that young people have a natural skill when it comes to including technology in their lives. Prensky (2001) suggests that today’s students or “digital natives” expect technology to be integrated into education as it is such an integral part of their day from the moment they wake up to the moment they go to bed. The average age demographic of the participants in this study was 19.81 years old, identifying them as the “digital natives” that Prensky (2001) is referring to above.

Little encouragement was required to get the participants to engage with the course website with the vast majority of the participants registering in the first few weeks and the remainder registering once they realised the benefits it could offer in terms of exam preparation. This was in line with a study by Koch et al. (2010) who noted that little encouragement by the educator was needed to get students to engage in an online environment.

The focus groups highlighted that the majority of the participants accessed the website while at home with only a few suggesting that they utilised the website while in the college. It was highlighted that the computers in the college did not have earphones connected to them resulting in students not playing the videos. Kenny (2002) identified that often college computers are out-dated giving students no option other than to access e-learning facilities from home. Other studies have noted that students enjoy the fact that e-learning allows them access information outside the confines of the college (Clarke 2008), again highlighting a reason for lack of usage in the college itself. The social aspect of e-learning was also identified by the participants, who enjoyed using the course website when they had a spare hour in the evening.

Access to a good quality and reliable internet connection is essential for the success of e-learning outside of the college environment, Witt (2003) did note that the lack of a reliable internet connection outside of the college resulted in limited usage. As
already note above the participants in this study stated that they utilised the website more at home than in the college. Additionally 100% of the participants had access to a computer with an internet connection, however the participants did note that the broadband connection available in their accommodation was often not very fast and impacted on their ability to use certain elements of the course website. Some participants noted that they stayed up late to take advantage of faster internet connections when others were sleeping. In addition to highlighting the importance of a good quality internet connection, this also shows how significant the participants felt the course website was during the learning process. The participants who accessed the course website in the college cited the better quality broadband as a reason behind this. This was also noted in studies by Heaton-Shrestha et al. (2009) and Cosgrave et al. (2011).

During the process of preparing the literature review, a UNESCO report (Balasubramanian et al. 2009) identified the importance of mobile technology when ICT is being introduced into education. It is interesting to point out that over the course of this study only 8% of all interactions on the course website came though mobile devices. This either highlights that students preferred to use a laptop or PC when carrying out study at home, or the adoption of tablet computers is still in its infancy with students of this age group. The use of mobile devices may have been hindered as a mobile version of the course website was not available making navigation tricky on a smaller screen, however the website was compatible with mobile devices.

The findings showed that the participants enjoyed the flexibility that the course website offered, but they suggested that it should remain an additional resource and that it should not become a compulsory element of the course. A few participants noted that they preferred using the website when it was their own choice to use it rather than the instructor insisting that they use it. This finding ties in with the constructive approach to learning as outlined by Dalgarno (2001) where students are responsible for the construction of their own learning with the teacher acting as the facilitator, in this case the website, created by the instructor, is facilitating this.
learning. White-Clarke et al. (2008) also noted that by the instructor becoming a “guide on the side” students created a better understanding of what is being learned.

The detailed statistics from the website identified a number of interesting results in relation to usage patterns. The most important finding was that the videos were identified as being primarily the most important element on the website when it came to engaging the students. This was identified in the analysis of the statistics for the video hosting website, Vimeo, and that analysis of the pages visits on the website. Additionally this was also noted in the analysis of the questionnaires. These findings are in line with those of Mitral et al (2010), who noted that increased engagement came about by using video as it utilized both audio and visual processing. This can further be enforced by the comment of one of the focus group participants who stated that it was easier to learn from videos as they contained both audio and video. This also links in with Mayer’s cognitive theory of multimedia learning, where it was shown that pictures and words when together offer a powerful platform to improving the understanding for the learner (Mayer and Moreno 2002).

The usage statistics of the embedded videos raised a number of interesting points. When the loads, plays and finishes are compared there are vast difference in the figures. Over the course of the study 3900 video loads were recorded with only 952 plays and 298 finishes. This could highlight a major issue with the videos not loading/playing correctly. It could also be explained by a number of the videos being hosted on the home page of the website in the “features video” section. These videos would load each time the home page was visited. The feedback from the focus groups did identify that some of the videos were too long and that breaking them into smaller segments would be beneficial. This could be a reason for the small number of finishes. O’Hagan (2001) did note that when videos are being used in classrooms they should be shown in shorter segments to keep the students engaged. The findings of this study also suggest that this is also the case when videos are being hosted on line for student use.
5.3.2 Objective 2: To Evaluate the Overall Benefits and Constraints of Using Faculty Created Online Content in Practical Training

The findings identified that the participants were equally split as to whether the course website should be utilised more in class. 47.6% of the participants identified that it should be used more with the remainder either disagreeing or giving a neutral response. It was strongly noted that the website should not replace the practical demonstration and that it should only be used when needed, for example when a real demonstration would take too long. This corroborates the findings of a number of previous hospitality related research projects (Sigala and Baum 2003, Abuke 2007) which concluded that the integration of ICT into hospitality education should be approached by blending the traditional teaching with ICT rather than total substitution and that its use should be appropriate to the environment.

It was also found that the Non-EU participants were more strongly in favour of increased utilisation of the course website in class with 80% identifying that it should be used more compared to 45.8% of EU participants. Its important to note that the Non-EU participants did note that it should not replace the practical demonstration, which takes place in class. The finding above could highlight a greater acceptability of web-based learning by Non-EU students over their EU counterparts. This could also suggest that Non-EU students may learn better from practical demonstration because of possible language difficulties. Koch et al. (2010) found that ESL students may benefit from web-based technologies as it allows self paced learning, in addition Selwyn and Husen (2010) highlighted that Asian students in particular had a greater acceptance of the benefits of technology over western students. This could justify the difference in their opinions when it comes to utilisation in class.

The EU participants suggested, if the course website was over-used in class, that it would lose its appeal and would result in students not engaging with the website at home. This highlights its use as a blended approach to learning rather than a replacement for the traditional teaching methods. It also shows the importance that the students place on the practical elements of the course, that they enjoy these elements and would not like to see them being replaced by technology. Horton et al.
(2005) noted that hospitality students tend to be attracted to the vocational nature of the learning environment rather than the course itself.

The results also identified that the course website was utilised as a tool to prepare for class, however like the previous finding, the Non-EU students tended to use it more for this purpose. This shows the ability that e-learning has in supporting self-paced learning allowing the students to get a greater understanding of individual topics before encountering them in class. The ability for students to prepare in this way can allow them to focus on knowledge retention rather than understanding during the face-to-face instruction (Groves 2001).

The use of the course websites during the exam preparation period should not be underestimated. The study found that 96.7% of participants agreed that the course website benefited them in their exam preparation. With a number of participants noting that it was the only tool they used in the preparation for their practical exam. This was further backed up by the usage statistics of the website during the exam period. These statistics showed that almost 50% of all of the website interactions happened in the lead up to and during the exam period. Kelly et al. (2009) noted that a single demonstration was not sufficient to allow students learn a practical task and that seeing a skill multiple times would lead to better retention. This would highlight why the students used the website as a primary tool in order to prepare for their practical exam.

Bandura (1997) highlighted that individuals’ efficacy beliefs play an important role in how individual feel, think, act and motivate themselves. This is extremely important in a practical training environment and participation is generally a key factor to gaining an understanding of the task being carried out. Zimmerman and Bandura (1995) note that students with higher levels of self-efficacy beliefs will be more likely to put themselves forward to participate in class. The results of this research study highlighted that using the course website had a positive effect on the individual efficacy perceptions of the participants. It also found that using the course website has a positive effect on the confidence levels of the students in class. A
study by McConville and Lane (2006) found that increased levels of self-efficacy are present in students who view a situation by video before encountering it.

Many studies such as those carried out by Kuh and Hu (2001) and Robinson and Hullinger (2008) have identified that the use of ICT in education has a direct effect on student motivation. The findings identified that students were highly motivated to use the website and that content had a major impact on that usage. This highlights the importance placed on getting the content right and this being a key factor for success when implementing a course website into an educational course. Southwell (2008) identified that many course websites are ineffective when the content is created without the end user in mind.

Lack of instant communication was identified as a constraint when using the course website. The participants suggested having additional facilities such as chat options or discussion forums where students could come together to discuss different elements of the course would be a benefit and further increase the engagement with the website. Comment facilities were available in addition to a “contact us” section, however both of these sections got little use over the course of the study. Bailey and Morais (2005) highlighted interaction as a critical component of any learning experience and therefore this would be a possible area for development for the course website. The integration of the course website with a CMS such as Moodle or Blackboard could also facilitate this interaction while also adding additional functionality for the students. Forums could also assist in the creation of a collaborative learning environment which would increase the quality of the learning for the students (Commission of the European Communities 2001). Garrison and Akyol (2009) also highlighted the importance of embracing the collaboration that comes with the integration of ICT into HEIs.

5.3.3 Objective 3: To Investigate the Importance of Content to Student Learning Outcomes with Regular use of Online Course Content

It has already discussed earlier in this chapter that the course website had a positive effect on the opinions of student when it came to using an online learning resource to
support their learning. The content on the course website has also been identified as a major factor when students are considering using such a facility. The findings highlighted that after using the course website the participants had a greater appreciation for the general content of the website.

Clifton and Mann (2011) identified that students have very low attention spans due to their constant interaction during their every day lives with digital tools. They highlight that educators need to adapt to meet their needs and that utilising video could be a solution. This research study found that over the course of the research period the importance level that participants placed on content increased across all content elements. Prior to the research study taking place the participants noted that SOP’s were the most important element. The high usage of SOPs during the semester prior to this research could have explained this result. However following the research period, videos were seen as the most important content element of the course website. This was further confirmed when the usage statistics were evaluated, showing that out of the top 12 pages visited on the website, videos were contained on at least 50% of these pages with the remainder having either student results or SOP’s.

During the focus groups it was also suggested that the students enjoyed using the content on the website. However it was noted that students felt that more interactivity could be added to the website. Frand (2000) highlighted that interactivity was one of main the benefits of Web 2.0. Garrison and Akyol (2009) also noted that interactivity was one of the main advances of internet technology with Zhang et al. (2006) noting that this could result in an increased level of learning.

The focus groups also noted that the information on the website was exactly what was being shown in class and that this further enforced what was being taught. This identifies the importance of the website being current and up-to-date, something that is really only possible when the instructor is the person maintaining the website. Witt (2003) and Brandoff and Mapson (2009) noted that the major drawbacks of course websites was that they are often not updated regularly or the material is outdated.
Its also interesting that the focus participants suggest that the website should not replace in-class teaching. This highlights the emphasis that the students place on being in the classroom for actual demonstration and that the course website offers an additional resource rather than a replacement. Absenteeism is constantly being identified as a negative aspect to using the web in education (Witt 2003). However the findings of this study show that the student preferred to use the course website in a blended manner which can help to increase engagement and student achievement (Bailey and Morais 2005). This was in line with the findings of Williams (2001).

Being able to investigate the direct impact on student learning outcomes was very difficult in this study, as there were a very high number of participants. However through observation of the students over the course of the study, the author could identify the benefits of the course website to the students in terms of their understanding and in turn its effect on their learning outcomes. Also in a non-scientific evaluation of the final exam results, a small increase compared to the previous year was noted. Other studies by Chen et al. (2010) and Selwyn and Husen (2010) have reported that web-based learning technologies have had a positive impact on the learning outcomes of students. A further study by Groves (2001) showed that students who engaged with a course website had increased exam scores as a result.

5.3.4 Objective 4: To Explore the Instructional Value of Personalised Multimedia Compared to Other Freely Available Material

Content is an important element when it comes to motivating students to interact with a course website. The results of this study showed that videos were of highest importance followed by SOP’s, lecture notes and other relevant material.

The use of these videos over the course of the project was interesting. The videos were played over 950 times in total during the study with almost 300 finishes, meaning that approximately two thirds of all plays resulted in the video not being watched in full. As already suggested earlier in this chapter videos should be made
available in shorter clips in order to keep the student involved and engaged in the viewing process (O’Hagan 2001). This was possible when showing the videos in the restaurant, as the instructor could stop videos at certain points, however many of the videos on the website were over five minutes in duration. A number of the focus group participants also noted that the videos should be made available in shorter clips in order to allow them review specific aspects of a task without having to watch the entire video.

The majority of the plays happened during the final weeks of the study, during the practical exam period. From the comments made during the focus group sessions, it can be highlighted that the videos were the most important element utilised by the participants when studying for the exams. Some of the comments suggested that watching the videos was more interesting than reading instructions from a sheet. It was further noted that students get bored reading books so having pictures and videos in front is more motivating. Both these statements link back to findings of Mayer and Moreno (2002) who said that using visual and audio channels together create a better learning environment. Baird and Fisher (2005) also noted that by implementing Web 2.0 technologies into the learning process, it would create a more engaging learning environment. Even Thomas Edison, back in 1922, noted that motion picture, not necessarily in the current online form, would revolutionise the educational system and it seems that is had taken almost 100 years for this to be the case (Cuban 1986).

Balasubramanian et al. (2009) identified that having poor quality content that has not been created with good instructional design in mind, is one of the many pitfalls to ICT integration in HEI’s. They also identified that having inappropriate content, which is not customised to suit the need of the audience, will further jeopardise success in this area. Corbally (2005) suggested that getting access to digital content such as videos can be costly and even when this content is purchased it is not always possible to tailor the content for a particular student group. Cannon et al. (2009) also noted the need for the videos to be of high quality, as this shows skills in more detail, an important feature when repetitive viewing would be happening. In order to overcome these pitfalls, the author created a selection of instructor personalised videos
that showed step-by-step procedures on how to carry out some of the more advanced service skills being taught in the restaurant.

Many of the participants of the study enjoyed using the personalised videos as part of their exam preparation. The findings show that the videos were more suitable than other freely available material, as they were specifically designed for the students; using the same equipment as was used in the restaurant. The videos also showed the exact procedure for carrying out individual tasks. The participants also said that an additional benefit of the videos was that they were dedicated to teaching. These findings were also noted by Clarke and Mayer 2002 (as cited in Duffy 2008) who stated that, to improve learning, the videos should focus on the learning outcomes, reduce cognitive load and suit the level of the learner. Interestingly one focus group participant noted that the personalised voiceover by the author to the videos was important when viewing them after class. Mandernach (2009) also identified that instructor personalised multimedia enhances student engagement.

Duffy (2008) identifies that not all videos available online are beneficial to student’s. In addition teachers need to be selective when it comes to using generic content. However the findings of this study show that even though the participants preferred the personalised videos, they did not disregard the educational value of the generic material available on other video sharing websites such as YouTube. It was noted that this material could be of benefit as it shows that tasks can be carried out using different methods. The participants suggested that both the personalised videos and the generic videos be posted on the website with a description from the instructor on how and why they differ. This would allow students to understand that there is more than one way to carry out tasks. The participants also found it useful that the instructors voice was used when explaining the videos. Zhang et al. (2006) noted that being able to listen to an explanation of what was being shown on a video is essential to the learner.
5.3.5 Objective 5: To Identify Possible Areas for Development of the Faculty Created Course Content

Sigala (2002) highlights how ICT has opened up many opportunities in the area of hospitality education. These opportunities can allow instructors to transform their curriculum and practices of instruction by the use of innovative technologies. An Irish Government report on the strategy for HE, Hunt (2011) identified that in the coming years, systems must change to accommodate new technologies that can enhance the learning experience for the students. Sigala and Baum (2003) note that there is increased pressure on hospitality students, by their future employers, to acquire specific skills related to ICT during their time in education if they are to succeed in the industry. Sigala (2002) and Washenberger (2001) suggest that the implementation of course websites is just one of the ways in which this ICT integration can occur. However Balasubramanian et al. (2009) highlights that the integration of ICT cannot simply be a transfer of knowledge, but rather it should be an active process of knowledge creation. This implies that the learning process should be supported by interactivity, participation, communication and construction. These four elements have been taken into account when identifying areas for development. The main areas identified for possible development were:

- Integration of the course website into other areas.
- Adding functionality to increase communication and interactivity.
- Adding additional content.

5.3.5.1 Integration into Other Areas

One of the main findings when it comes to future development of the course website was the possible integration of a course website into other areas of the course. The participants highlighted both the Culinary and the Accommodation Services modules as possible areas that could benefit from a course website. These are highly practical based areas much like the restaurant service module. However before any sort of integration could happen, it is important that the instructors have the know-how and the skills to develop such technology, otherwise the technology will become of little use to both the student and the instructor (Balasubramanian et al. 2009).
5.3.5.2 Increasing Functionality

A number of suggestions were made about increasing the functionality of the website. Facilities for added communication and interactivity were identified as being the most important.

Bailey and Morais (2005) highlighted that students satisfaction is directly linked to interactions between the student and the teacher, however according to McDonnell (2000) this interaction does not necessarily have to take place in a face-to-face manner and could happen online. The participants suggested the addition of a chat facility and a discussion forum to the course website. This would allow peer-to-peer communication as well as interaction with an instructor. The forum would allow students to post questions online and have other students facilitate the answering process. As discussed earlier in this chapter, this opens up the whole area of collaborative learning to the students.

5.3.5.3 Assessment

The participants also suggested the addition of an interactive quiz. A quiz would give a focus to the process of interacting with the website or video. It may also motivate the student more to learn. Duffy (2008) notes that learning through video should not be passive, and should aim to engage the learner. The participants suggested that videos be broken into sections, with students having to complete a series of questions after watching each section before being able to continue. They point out that this would ensure learning was taking place. Zhang et al. (2006) noted that interactivity is key to gaining increased levels of learning. As already mentioned in this chapter this increased level of interactivity could be achieved by the development of a CMS, which would bring with it many other benefits.

5.3.5.4 Adding Additional Content

It has already been discussed in this chapter that videos can be of great benefit to students when learning practical skills. It therefore comes as no surprise that the participants in this study have highlighted this as an area of further development.
Videos offer additional flexibility to both students and instructor (Tessaring and Wannan 2010). The participants made a number of suggestions, these included the addition of videos showing basic tasks and more advanced tasks. Some of the suggestions were met with some criticism from a number of students who felt that this would be too much and that students should listen in class rather than resorting to videos to learn.

Innovation is extremely important in education (Lominé 2002). Students’ learning from their own mistakes or the mistakes of others is an area that was highlighted for possible development. Many authors (Hunt 2011, Gillet et al. 2005, Sigala 2002, Witt 2003, Robinson and Hullinger 2008) highlight the importance of creating students who are critical thinkers, with the skills to identify issues and offer solutions. It was suggested to the student that a video would be taken during lunch service; this would be edited to highlight both positive and negative aspects of the service. This video would then be posted on the course website. The students would critically analyse the video under a number of headings, highlighting the positive and negative aspects of the service. By highlighting their own mistakes and the mistakes of others, this would allow the students to be more involved in the construction of their own learning (Zhang et al. 2006). The students would be learning through discovery rather than just being told where they have gone wrong and how to correct it. Holman (2000) identifies that this type of learning could offer an experiential approach, which can result in more meaningful learning outcomes, as the students are immersed in the experience of learning and engaged in active problem solving.

5.4 Conclusion

This chapter has discussed the finding of this case study and highlighted how they compare with other literature on this topic which was identified in Chapter 2. It has highlighted a number of interesting findings, which will be summarised in the next chapter.
CHAPTER 6 Conclusion

6.1 Introduction

“New technology is common, new thinking is rare”
Sir Peter Blake (online)

The aim of this research project was to carry out an investigation into the use of online content to support learning in a practical training environment. For this study the author designed and implemented a course website containing instructor personalised content which was made available online to the participants. It was hoped that this study would outline both the positive and negative elements of using a course website in practical training while also highlighting how best the course website and its content should be utilised and developed in order to increase student engagement.

The premise of this study found that there are many benefits to using a course website, however these can only be realised though a greater understanding of what students expect from such a resource rather than what the instructor identifies as being important. It was highlighted that design and content are important factors to be considered when looking to engage students with an online course website. It was also found that these two elements need to be underpinned by pedagogical theory in order to overcome any limitation to the engagement process.

The practical training environment at the centre of this study focused on training undergraduate students in the area of restaurant service, one of five practical areas students are exposed to during the first year studying a Bachelor of Business Studoes and International Hotel Management. The college where the course is taught is located in the west of Ireland with approximately 400 students registered a over four year period. There is almost an even split between EU and Non-EU students registered on the course. The course website was introduced to the college during the first semester of the academic year so that any issues with its implementation would be overcome before the study period commenced in the second semester.
This was the first time any online learning tool was implemented on the course. No other online tool such a CMS or virtual learning environments are available to students in the college.

A multi-method research approach was utilised by the author while carrying out this case study. This included the use of both qualitative and quantitative research methods in order to achieve more accurate and valid results.

6.2 Summary of Research Findings

This section will outline a brief summary of the research findings.

6.2.1 Student Engagement

One of the main findings of the study was that the course website has a positive effect on the opinions of the participants towards online learning. Getting students to engage outside of the classroom environment has always been a challenge for educators however the benefits that have been afforded by advances in technology have assisted in engaging the “Generation Y” student. The interactivity that the internet offers appeals to these students who are so in tune with using the internet and other digital devices. The resultant effect is that books don’t offer the same stimulation to fully engage them, however the findings of this study would suggest that utilising Web2.0 technologies could offer this all-important interaction and engagement that students are looking for.

6.2.2 Flexibility

The increased level of flexibility offered by the course website was seen as a major benefit to the participants. The participants enjoyed using the course website outside of the college but interestingly did note that its use in class should be limited. They felt that overuse of the website during classes would result in students being less inclined to use the website outside of class. However they did note that its use in
class did have many benefits. This would suggest that the integration of a course website should be managed effectively in order to maximise its benefits to the end user. Using a blended approach to implementation seems to be the most appropriate method when integrating a course website into the classroom.

6.2.3 Student Self Efficacy

This study found that efficacy levels of the participants were positively affected by using the course website. In a practical environment, the self-confidence and competence level of individuals play a very important role in how they interact in the classroom. The results of this research support the idea that students with increased levels of efficacy beliefs are more likely to participate in a practical environment. This increased participation should eventually lead to a better understanding and learning for the students. This identifies a major benefit of the course website, especially to those students who may not be as confident when it comes to putting themselves forward for participation in class.

6.2.4 Website Content

Having the right content on the course website was a significant finding of this study. The results showed that the participant’s appreciation of the content increased over the period of the study. The study found that videos were the most used content element on the website. This evidence suggests that students prefer to learn from audio and video instruction rather than from reading instructions on a SOP.

A number of the videos on the website were identified as being too long. The participants suggested that breaking the videos into shorter segments would further increase the usage, as they would only have to watch the segments that were of interest to them. It could be inferred from the above finding that today’s “Generation Y” students have shorter attention spans when viewing content online, therefore the shorter video segments would suit them better and increase their engagement.
The relevance of instructor-personalised multimedia is clearly supported by the findings of this study. The participants identified that having personalised videos that were specifically prepared for the tasks they were learning was of huge benefit when it came to preparing for class, recapping what was covered in class or revising for exams. The fact that these videos where dedicated to teaching made them of additional importance. It should also be noted that the participants did not discount the instructional importance of generic videos available on the internet. These results suggest that using both personalised and generic videos could create a greater understanding by the student of how tasks can be completed in different ways.

6.2.5 Broadband Availability

This study has shown that one of the major barriers to facilitating student engagement with the course website was access to a reliable broadband internet connection while at home. Ireland still needs to work on increasing the availability and reliability of this powerful resource especially in rural areas. Interestingly this study further identified that students will discover ways to overcome these barriers when the use of the website has a direct benefit to their overall learning.

6.2.6 Further Development

The participants identified a number of areas for further development. These included the suggestions that it should be integrated into other areas of the course, further develop the current course website to include additional content and functionality that would further engage the students. This could also be offered by introducing a CMS, which could be used across all parts of the course. This would incorporate the current online content used on the course website however at the same time offering increased benefits to both the students and the teacher.

In general it seems that the student would be in favour with the continued use of the website both inside and outside of the classroom.
6.3 Limitations of this Research

It is important that a number of limitations to this research are identified. This study was limited in several ways. Firstly the study took place over a set time period, which was limited to twelve teaching weeks in the second semester. This timeframe gives a restricted view of the usage of the course website in a semester where students are under pressure to prepare for exams. Had the research been carried out over an entire academic year different usage patterns could have emerged. Secondly the study also only examined the usage of a course website in one practical subject. The results may have been more substantial had it been possible to compare usage of the course website from other practical areas. Essentially the study was a snapshot of the usage of a course website with a particular class which limits how the results can be viewed. No clear generalisation can be made about the wider population.

However even with the limitations outlined above it is hoped that findings from this study could provide the basis to the creation and implementation of a course website into other areas of the course in the same institution.

6.4 Recommendations for Further Research

Based on the findings of this case study and the information discussed in the literature review there is significantly more scope for further research in this area. The most obvious research area would be to conduct a similar project over an extended time period. This would allow the evaluation of more information with the possibility of having a greater number of participants over a number of different cohorts. Further research might also explore the creation and implementation of course websites into other areas of the course.

The development and implementation of a CMS would also be an area for further research. This would also allow for greater management of student performance within individual subject areas, identifying areas where students may be struggling. It could also be utilised as a more accurate tool of gauging individual efficacy levels of students, again highlighting where students may require additional support.
Development of the course website would also be of interest in terms of additional research. The author is currently looking at the possibility of students evaluating their own performance through videos of them carrying out skills/service in the restaurant. This would entail substantial investment in digital recording equipment however the participants in this study identified that this would be something they would be interested in and would be of benefit to them. It would also enhance development of critical thinking in students, enabling them to evaluate their own performance as well as that of others.

### 6.5 Concluding Comment

This case study has examined the use of a course website and how it can engage and benefit students. A number of interesting findings have materialised over the course of the study. The majority of students are positively disposed to using an online resource in their study of practical restaurant training. This interaction with the course website has a positive effect on the confidence and competence levels of individuals when it comes to participating in class. The added flexibility that a course website offers is something that students appreciate and value.

It is hoped that the findings and recommendations of this study may provide useful information to other teachers of practical subjects and assist them in preparing and integrating similar course websites in the future.


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Appendix A: Shneiderman’s Eight Golden Rules of Interface Design

1. **Strive for Consistency**
   Have consistency throughout including layouts, fonts, and colour.

2. **Enable frequent users to use shortcuts**
   As the use increases, users will want to be able to quickly navigate to specific areas.

3. **Offer informative feedback**
   Each interaction the user makes should result some element of feedback whether positive or negative.

4. **Design dialogs to yield closure**
   Assist the user by having a step by step process that is in a logical order.

5. **Offer error prevention and simple error handling**
   Prevention of errors are key to a good interface, where they occur there should be a constructive element of feedback for the user showing them the specifics of the error and how to correct it.

6. **Permit easy reverse of actions**
   The user should be allowed to undo a step easily. If the user knows that there is a process of undoing steps, this will aid exploration of the interface.

7. **Support internal locus of control**
   More experienced users like to have more control. Giving users more control to customise the interface supports this point.

8. **Reduce short-term memory load**
   Make the interface as simple as possible. Reduce the need for multiple pages by consolidating them, thus allowing the users to store more information in the short term.
Appendix B: Protocol for Focus Groups and Consent Form

Protocol for Focus Groups

**Project Title:** The effects of using online tools to aid student participating in practical restaurant training.

**Moderator:** Andrew Langford

**Venue:** Shannon College of Hotel Management

**Date:** Monday/Tuesday 23rd and 24th April 2012

**Introduction and Objectives**

**Introduction and Purpose:** 3-4 minutes

Firstly I would like to thank you for taking the time to partake in this discussion and sharing your experiences of using fandbtraining.net. You all know me as you lecturer in the restaurant, however today like you, I am the student. I am currently studying for my masters hence the reasons for this focus group.

**Background**

Before we get going I am going to tell you a little bit about my research area and what you can expect from this meeting. I am studying a Masters in Digital Media Development for Education at the University of Limerick and my research is focusing on the development of online tools to aid the instruction/understanding of practical restaurant training. You have all been exposed and had access to fandbtraining.net over the past 12 weeks so I now want to get your personal feedback on the website. I am going to use what we discuss in this group to support and enhance the information collected in a questionnaire which most of you have already filled out.

The focus group should last about an hour. The format of the discussion will be as follows; I am going to introduce a number of discussion areas relating to using online tools in
education by asking a number of general question. You are then invited to discuss these
questions as a group. I will be taking note and listening throughout the discussion.

There is no right or wrong answer when you are in a discussion. Your point of view on a
topic is just as important as another person’s. By having different opinions this will further
increase the discussion within the group. If you wish to follow up on something that
someone else has said, agree or disagree this is perfectly fine.

Do not feel that you have to respond to me. This is a group discussion and you should look
to me as being part of the discussion group.

To ensure that everyone gets the opportunity to participate, I may need to interrupt from
time to time or call on individual people within the group.

Please do not feel offended if I do this.

This evening’s discussions are being recorded with both an audio devices and a camera.
This is so that I don’t miss anything that is discussed. Both the video and audio will be
treated with the utmost confidentiality and will only be reviewed by my supervisor and
myself.

Appreciation

To show my appreciation for your contribution to this discussion group, I will be including all
of your names in a draw for a €50.00 One4all gift voucher. These also a selection of tea,
coffee and biscuits for you to enjoy, so please take a few moments to help yourself.

Areas for possible Discussion

| General Discussion on the site/using interent | Ease of use       |
| Learning at own pace                          | When it was used most |
| Comfortable with using online learning        | Use it more in class rather than demonstration |
| Usage                                         | Content           |
| Registration process                          | Quality of information |
| Flexibility Access from where – Home/College  | Video             |
| Exam grades                                   | Generic           |
| User Friendly – navigating                    | Instructor personalise |
| Written                                       |                   |
| Videos                                        |                   |
Year 1 FOCUS GROUP

The purpose of today’s focus group is to get your personal feedback on the website (fandbtraining.net), its content, and how it could be developed further. The information and discussions from this focus group will be used to support and enhance the information collected in a questionnaire which most of you have already filled out.

There is no right or wrong answer when you are in a discussion. Your point of view on a topic is just as important as another person’s. By having different opinions this will further increase the discussion within the group. If you wish to follow up on something that someone else has said, agree or disagree this is perfectly fine.

The focus group session will be recorded to allow the researcher to spend time paying attention to what you are saying rather than taking notes. In addition, in order to be able to carry out a full analysis of the data, the session will be transcribed.

The researcher will remove all identifying information about participants from the transcripts in order to preserve participants’ anonymity. Everything discussed in this focus group should be treated as confidential and specific information from the discussions or individuals involved should not be disclosed outside the session.

I agree to participate in the focus group outlined above

Name ___________________________  Date __________
Appendix C: Pre-study Questionnaire and Cover Letter

19th January 2012

Dear Respondent,

I am inviting you to participate in a research project to study the use of an online resource website as a support tool for students studying practical restaurant training. Through your participation, I hope to understand how best to implement such a resource and what benefits it has to the user. The questionnaire should only take you about 10 minutes to complete. This research is part of a Master’s thesis I am completing in Digital Media Development for Education at the University of Limerick.

If you choose to participate, do not write your name on the questionnaire. I do not need to know who you are and no one will know whether you participated in this study. Your responses will not be identified with you personally. All responses will be treated confidentially. Your participation is entirely voluntary.

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me via email on andrewlangford@shannoncollege.com or by telephone on [blank].

Thank you for taking the time to participate.

Kind Regards

Andrew Langford
Research Questionnaire

Part 1 – Demographic

Sex

Male □ Female □

Nationality

EU □ Non-EU □

Class

Alsace □ Beaujolais □ Dezaly □ Epernay □

Part 2 – General Questions

1. Do you have access to a computer outside of the college?
   Yes □ No □

2. If yes, does the computer have an internet connection?
   Yes □ No □

3. Apart from fandbtraining.net have you experience of using a web based learning resource?
   Yes □ No □
Please read the following statements and tick the appropriate response

Part 3 – Using web-based learning

1. I would be interested in using a website to support my practical restaurant training

   □ Strongly Agree □ Agree □ Neutral □ Disagree □ Strongly Disagree

2. I would use a learning support website to prepare for practical restaurant training

   □ Strongly Agree □ Agree □ Neutral □ Disagree □ Strongly Disagree

3. I would use a learning support website to catch up when I miss practical restaurant training

   □ Strongly Agree □ Agree □ Neutral □ Disagree □ Strongly Disagree

4. I would use a learning support website as a replacement for practical restaurant training

   □ Strongly Agree □ Agree □ Neutral □ Disagree □ Strongly Disagree

5. I would use a learning support website to review what was covered in practical restaurant training

   □ Strongly Agree □ Agree □ Neutral □ Disagree □ Strongly Disagree

6. I would use a learning support website as part of my revision for practical restaurant exam

   □ Strongly Agree □ Agree □ Neutral □ Disagree □ Strongly Disagree

7. I have no interest in using a learning support website for practical restaurant training

   □ Strongly Agree □ Agree □ Neutral □ Disagree □ Strongly Disagree
**Part 4 – Reflection on restaurant practical training**

8. I feel anxious before attending practical restaurant class

   Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □  

9. The thought of learning a new practical task in the restaurant makes me nervous

   Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □  

10. I get nervous before demonstrating a practical task in the restaurant

   Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □  

11. I don’t feel anxious before doing a practical demonstration

   Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □  

12. I never feel nervous before practical restaurant class

   Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □  

13. I have the practical training and knowledge I need to do well in practical restaurant class

   Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □  

14. Practical restaurant class is well within the scope of my abilities

   Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □  


15. I am confident that I can do well in practical restaurant class

Strongly Agree ☐  Agree ☐  Neutral ☐  Disagree ☐  Strongly Disagree ☐

16. I am confident that my skills and abilities will help me deal with practical restaurant class

Strongly Agree ☐  Agree ☐  Neutral ☐  Disagree ☐  Strongly Disagree ☐

17. I am confident that I can perform various tasks during practical restaurant class

Strongly Agree ☐  Agree ☐  Neutral ☐  Disagree ☐  Strongly Disagree ☐

Part 5 – Content of learning support website

18. How important is it for you to have the following available on a learning support website

a. Videos of practical tasks

Very Important ☐  Important ☐  Neutral ☐  Not Important ☐  Unnecessary ☐

b. Lecture notes

Very Important ☐  Important ☐  Neutral ☐  Not Important ☐  Unnecessary ☐

c. Standard operating procedures

Very Important ☐  Important ☐  Neutral ☐  Not Important ☐  Unnecessary ☐

d. Additional related learning material not covered in class

Very Important ☐  Important ☐  Neutral ☐  Not Important ☐  Unnecessary ☐

Thank you for participating
Appendix D: Post-study Questionnaire and Cover Letter

April 2012

Dear Respondent,

You have already participated in the first stage of my research project to study the use of an online resource website as a support tool for students studying practical restaurant training. Through your participation, I hope to understand how best to implement such a resource and what benefits it has to the user. The questionnaire should only take you about 10 minutes to complete. This research is part of a Masters thesis I am completing in Digital Media Development for Education at the University of Limerick.

Attached you will find the second stage questionnaire. Do not write your name on the questionnaire. I do not need to know who you are and no one will know whether you participated in this study. Your responses will not be identified with you personally. All responses will be treated confidentially. Your participation is entirely voluntary.

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me via email on andrewlangford@shannoncollege.com or by telephone on ________.

Thank you for taking the time to participate.

Kind Regards

Andrew Langford
Research Questionnaire

Part 1 – Demographic

1. Sex
   - Male □  Female □

2. Nationality
   - EU □  Non-EU □

3. Class
   - Alsace □  Beaujolais □  Dezaly □  Epernay □

Part 2 – General Questions

1. Do you have access to a computer outside of the college?
   - Yes □  No □

2. If yes, does the computer have an internet connection?
   - Yes □  No □

3. Apart from fandbtraining.net have you experience of using a web based learning resource?
   - Yes □  No □
Please read the following statements and tick the appropriate response

Part 3 – Using web-based learning

1. I would be interested in using a website to support my practical restaurant training
   
   Strongly Agree  □ Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □

2. I would use a learning support website to prepare for practical restaurant training
   
   Strongly Agree  □ Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □

3. I would use a learning support website to catch up when I miss practical restaurant training
   
   Strongly Agree  □ Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □

4. I would use a learning support website as a replacement for practical restaurant training
   
   Strongly Agree  □ Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □

5. I would use a learning support website to review what was covered in practical restaurant training
   
   Strongly Agree  □ Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □

6. I would use a learning support website as part of my revision for practical restaurant exam
   
   Strongly Agree  □ Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □

7. I have no interest in using a learning support website for practical restaurant training
   
   Strongly Agree  □ Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □
### Part 4 – Reflection on restaurant practical training

1. I feel anxious before attending practical restaurant class

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2. The thought of learning a new practical task in the restaurant makes me nervous

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3. I get nervous before demonstrating a practical task in the restaurant

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4. I don’t feel anxious before doing a practical demonstration

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5. I never feel nervous before practical restaurant class

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6. I have the practical training and knowledge I need to do well in practical restaurant class

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7. Practical restaurant class is well within the scope of my abilities

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8. I am confident that I can do well in practical restaurant class

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

9. I am confident that my skills and abilities will help me deal with practical restaurant class

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

10. I am confident that I can perform various tasks during practical restaurant class

Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree ☐

Part 5 – Content of learning support website

1. How important is it for you to have the following available on a learning support website

a. Lecture notes

Very Important ☐ Important ☐ Neutral ☐ Not Important ☐ Unnecessary ☐

b. Videos of practical tasks

Very Important ☐ Important ☐ Neutral ☐ Not Important ☐ Unnecessary ☐

c. Standard operating procedures

Very Important ☐ Important ☐ Neutral ☐ Not Important ☐ Unnecessary ☐

d. Additional related learning material not covered in class

Very Important ☐ Important ☐ Neutral ☐ Not Important ☐ Unnecessary ☐
Part 6 – Evaluation of learning support website

1. When did you register for the learning support website

Before Week 3-4  □  During Week 3-4  □  Before Week 5  □  During Week 5  □  Did not Register  □

2. The learning support website is easy to access

Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □

3. The learning support website is easy to use and navigate around

Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □

4. I would prefer if the learning supports website had been used more in practical restaurant class

Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □

5. I feel motivated learning skills using the learning support website

Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □

6. I feel the learning support website assisted in my preparation for my service exam

Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □

7. I would use the learning support website when I am on placement

Strongly Agree  □  Agree  □  Neutral  □  Disagree  □  Strongly Disagree  □

Thank you for participating
Appendix E: Permission from Registrar

Email to Registrar

From: Andrew Langford
Sent: 13 January 2012 12:21
To: Kate O'Connell
Subject: Request to carry out research
Importance: High

Dear Kate,

I am writing to request permission to carry out research with Year 1 students in order to complete my MA in Digital Media Development for Education.

My research is based on the use of an online resource (website) to students studying practical restaurant training. The research will be carried over the 13 week second semester. I am hoping that all student will take part in the research study.

Summary of proposed research
I will be measuring students attitudes to using the website early in the semester using a questionnaire and again at the end of the semester. I will carry out two focus groups at the end of the semester in the hope of getting additional feedback on the website from the students. This will give me the opportunity expand on the results of the questionnaires.

The website requires students to login to gain access to any information on the site. This login information will be tracked over the next 13 weeks in order to gain a clear picture of usage patterns. I will also be tracking the most popular pages on the site in order to understand what information is being accessed at different times during the semester. This information will be cross referenced to the student questionnaires.

All students will have access to the website however I will be actively using the website with 2 class groups. This will allow me to compare usage of the site when its actively used in classes against when its suggested to be used.

Do I need to ask the students’ permission to do carry out this research. Please let me know if you require any further information.

I look forward to your reply.

Kind Regards
Andrew

Reply from Registrar

From: Kate O'Connell
Sent: 16 January 2012 14:57
To: Andrew Langford
Subject: RE: Request to carry out research

Hi Andrew,

Yes you have permission to carry out this research. You will only need students permission if you are taping them or using their names. If you are using the groups as “a control experiment group” then you don’t but they need to be informed that they are part of the research programme.

The results should be interesting.
Thank you Kate,

I will get students permission for the focus groups that I am carrying out at the end of the research period. All the classes except Chablis will be part of the research in some shape – I will speak to the entire class on Thursday about the research.
Appendix E: Sarantakos’s Guidelines for Creating Coverletter

A cover letter to a research questionnaire should include some or all of the following:

- Identification of the researcher
- Identification of the sponsoring institution
- Indication of how the participants were selected
- Identification of the purpose of the research
- Identification of the benefits for participating
- Identification of the level and type of participant involvement
- Notation of risk to the participants
- Guarantee of confidentiality to the participants
- Assurances that the participants can withdraw at any time
- Provision of names of person to contact if questions arise
Appendix F: Transcript of EU Focus Group

**Host** – Tell me what you thought about the course website

**EU 2** – I thought it was really helpful when we were getting ready for the exams, the practical exams. It was really really helpful just to go back and have a look on how to set the trollies for the flambé dishes and pretty much how to make the flambé dishes as well because you only showed it once and maybe we can practice it once and that’s it. That really helped me as I found that really difficult.

**EU 3** – I agree with her – it was very helpful just prior to doing the service exam and your task. To go on and just to be able to watch videos of you and you talking about it and SOPs. It’s a simple site and not complicated and one thing leads you to the other. You know like for the wine service, the red wine and white wine it’s all there and you don’t have to go finding it and spending loads of time when you can be studying so that’s good

**EU 4** – I used it as well for checking my grades for the Friday exam and I found that helpful

**EU 5** – Yea me to

**Host** – Did anyone just use it for just checking their grades?

All – NO

**EU 2** – The cappuccino video was very pretty cool.

**EU 6** – I also thought the news feed was really good. There was always something to look at (EU 2 Which One) Like the F&B2 projects and about all the news such as the international – world skills competition

**EU 2** – Barista competition

**EU 6** – Really helpful and easy to use

**Host** – EU 3 mentioned ease of use, so how did you find the website in terms of using it. Was it easy to find information or did you find it difficult

**EU 5** – I found it easy, once you are set up and you have your password and everything you are all ready to go and all the information is there in front of you simple to find like.

**EU 3** – the way that if you just, wine service or all that kind of stuff on the top if you click on that like by its self it brings you to a whole new page, but if you click on it, it also drops down and brings you to the specific part. That’s really good cos its gives you two different options. Unless you click on it you don’t really know that the information is there which can be bad but I suppose that’s what you need to learn.

**Host** - EU 5 talked about the login process – was that user friendly or did you find that annoying?

**EU 6** – I thought it was user friendly as it aims the website at the students directly and not other random people. It makes it user friendly to us as it stops other.

**EU 2** – I found it easy enough, you just choose you username and put in your email and that’s it.

**EU 3** – It was easy to logon to, as some sites can be really hard. When you subscribe to them and register it is hard to get into the actual part where you have registered but this site was easy as you just had to check your email.
**Host** – Do you think it would put any one off using it as a student or do you think it’s normal to register for something like that?

**EU 1** – Most things you have to register for so it wasn’t really a problem

**EU 2** – Especially for students in the college but it might put others off.

**EU 5** – Even if it was open to everyone, though now it is only sort of towards the students in F&B 1, I think everyone would use it, cos anyone who is studying this subject would use it.

**EU 2** – Would that not make it slower?

**EU 5** – No, It’s just like using a normal website

**EU 3** – Facebook isn’t slower because loads of people are using it

**EU 6** – it’s just like every website – when you use it, every website has its own way of doing things every place had different SOPs so this site is really only for us.

**EU 5** – If you forgot your password at some point – so I went through the process where you click the “forgot password” link where you login and it sent me a new password straight away to my email which is really easy as well. Its wasn’t complicated or anything.

**EU 2** – Another good thing you have was the contact us – it was quite fast to get an answer from you.

**Host** – Did anyone else use the contact us tab on the side

**Most** – No

**Host** – It was used very little, in terms of contacting. When did you find that you utilised the site – was it prior to coming to class, after coming to class or was it that you just logged in the last week and revised with it.

**EU 5** – I set up my account at the start in week 1 and 2 when you told us about the site, but am, I only started to use it coming up to exams and stuff, but I don’t think I ever looked at it prior to class, I always looked at tis after class. I don’t think I looked at it even when you told us that we are going to be doing flambé next week; I never looked at it before hand it was always afterwards when I was revisiting.

**EU 3** – I heard that you had a website at the start of the year and I thought that people were messing and then people said that they actually had check it out so I checked it out then, but I only registered after Christmas purely for exams and to look at other stuff. when we doing Irish coffees and you were going to ask us questions about it then next day, prior to making them all together I might have looked at it but not really before class.

**EU 4** – It was good for revision

**EU 2** – At the beginning at there was no registration was there – (Host - No) I put it in my bookmark as a favourite and since then I checked it once a week, just to see if there are any good things to read, like the articles on coffees, competitions. But there hadn’t been anything recently. Revision I used it before and after class.

**Host** – From the point of view to someone that would not be so confident, do you think it would be a useful tool to prepare them for class.

**All** – Yea

**EU 3** – Its shows everything step by step so you don’t just have to read about it.
EU 2 – For some people that don’t want to ask questions (in class) like come and speak to you afterwards or take up their own time, it’s a good way to follow up.

EU 3 – In terms of before our service exam and our task. I had one wine service only once so I just learned it from the videos so that was very very helpful

EU 5 – for someone who is not confident about what they are doing, if they have never done wine service or made and Irish coffee or made a flambé for like the exam, it would give them more confidence cos they can look over the step by step process and figure out what they are doing before they go into the exam

EU 1 – I found it much easier like being able to see what you do in the videos as opposed to just reading it off written instructions, Anything like that makes it much easier to visualise. When you are doing it your self

EU 5 – And not even in exam situations, you can also use it to practice for the work environment as well. That is the kind of stuff you are doing out in industry.

EU 3 – it’s good also as it’s at your own disposal. It’s your own choice. If you want to use it or not, it’s up to you. Is not like you are using it in class, well you do some times, it’s not like you have to do it, it’s your own choice, and when I have to make a choice to do something I prefer it much better than someone telling me what I have to do.

Host – Do you see this as a flexible option to learning?

EU 5 – I would say so yes.

EU 2 – As a replacement??

Host – In addition to what is already there

EU 3 – It’s very good

EU 2 – Actually I can say without it I would probably always coming over to you asking you how you made the crepe suzette and write it down – very popular

EU 3 – It’s really fantastic as if we didn’t have that site we would always be coming over to you. and that takes up a lot of time, whereas if you are just at home, if you had a spare hour, you can just bring out your laptop and watch a video for 20 minutes or so and you can go over it in your head, it’s not like your running around the place all the time so that was quite good.

Host – Do you find you use it more at home?

All – at home

Host – did you ever use it in the college?

EU 3 – Yea I did – in the computer room just to go on – I remember when you were going Irish coffees the next day and I just went on to have a look at the background and all that. The history and all that so that was kind of interesting and helpful.

EU 1 – so it adds some flexibility and you don’t have to be in the college to look at something you can look at it whenever you want.

EU 5 – Once you have access to a computer and internet at home, or anywhere it’s great

Host – Were there any issues with the speed of the internet with watching videos?

EU 1 – the step by step setup page for flambés in the accommodation, the house that I was in was particularly bad internet and that stuff struggles to load some days (EU
6 – that’s the ones that show you how to set up the trolley)– the videos were OK it was really just the step by step bits that were slow to load
EU 6 – I think that these bits were as important. The videos just showed you the process of making the flambé were as they actually show you the step by step procedure of setting up the trolley and in the end if you were confused of what goes where you have just move your mouse over the trolley and its shows you exactly where everything is and what goes there. I think that is just a convenient as the video
Host – Did it help you to learn at your own pace if something was covered too quickly in class or maybe if you did not understand something.
EU 1 – Yes definitely
EU 3 – Maybe when you did not have time to cover all of it or if you skimmed thorough a topic, whereas we can go more in-depth in your site. So it’s better for us.
EU 2– Even when you covered it in detail in class it was good to be able to go back before the end of week assessment on a Friday. I could not find some of the information on the website. I found it difficult to find the information on wine about the seven steps – were they there??
Host – Yes – this comes back to EU 3’s point about clicking on a menu or just hovering over it. If you click on the menu you will see the page that is connected to that menu. But all the information that was on the website was also available in the service text book. Do you think it could be used more in class?
EU 5 – Like when you are showing us how to do the tasks and when someone is still unclear about what is going on, sometimes you might not have the time to go back and do the task all over again, because some of them can be time consuming, but if you did have it on the site and people found it unclear you could show the task on the website and projector and talk them through it again quickly rather than collecting all the ingredients for the task and taking up a lot of time that could be quite helpful as well
EU 2– but definitely don’t replace the videos on the website from what you did in class. Because to see it live is much better obviously.
EU 3 – if you use it more in class and if you force people to I supposed use it in the evening people would not use it as much as if it was their own resource at home. They would see it as something they had to do rather than something they want to do themselves
Host – Would you see the course website as part of the educational course of restaurant service or do you see is as a social learning element, so if I was to use Facebook to teach– would you use it that much. – So really what I am asking is if it was used in class more would you use it as much
All – not as much no –
EU 3 – when it’s not compulsory it’s more attractive to use
EU 2– The “what’s new” area of the site was great to see what is going on. The new information was great
EU 3 – There was nothing like that in secondary school and there was no sites for other subjects in this course so it. If there were other sites for every subject in this course it might be that the grade would improve and stuff.

EU 6 – when people are studying, they find it difficult to look at a book and they are always looking for easier ways of studying and the site is probably the most convenient way for people to get out of studying, its simply clicking a video and you just watch it and you can take notes from that rather than just looking at words on a sheet or a book.

EU 5 – I think anyone would be more inclined to study through that than look at a book, in my opinion any way. Personally I would much prefer to look at a website than a book

EU 6 – I think the same

EU 4 – and for practical demonstrations it obviously much better than reading a sheet.

Host – Overall do you think the content reflected the course or was there areas that could be improved?

EU 3 – I think it was good in terms of F&B. I think it could have been a little bit more interactive if you had maybe exams or question on there. Or you needed to watch one part before you see the next part. Maybe have a quiz after watching a video would be good. Something like that would be good. You would be doing that yourself anyway but if that was another service that was on the site it would be just another benefit for us.

Host – What did you think of the quality of the information that was on there.

EU 3 – it was exactly the information that you were giving us in class– there was nothing different which was good.

EU 4 – it was good – there was one part of the wine service that I got confused on – whether to open it in the bucket or not but otherwise it was good.

EU 6 – Some of the videos were not too current. They looked a little dated.

Host – In terms of the videos do you think the fact that the videos are of the actually training environment here rather than generic videos from YouTube does that makes it better?

All – yea

EU 6 – We know this place

EU 3 – We know you and you specifically designed them for us

EU 4 – and it’s the same equipment that we would be using

EU 5 – And we know that if we learn exactly what we are doing in the video we have the right way.

EU 3 – If you tell us we are wrong we can say that’s how you show us on the video!

Host – Would using generic videos decrease your interest in using the site

EU 2 – the personalised ones kind of cover what you show us here but the generic ones could be different step by step wise. Everyone has their own way of doing things and that not bad as it shows that things can be done different ways.
EU 3 – you know the way your videos are personalised for us – we know that if we learn it off we can’t go wrong – if we watch any video say from a bar it might be different and not the same standard. At least we know what is on there is how we are supposed to do it in this restaurant – so being personalised to this restaurant its good, but if you are thinking of expanding the site further looking at other F&B training courses it might be a problem as they don’t have you as their lecturer in terms of your personalised videos.

EU 5 – At the start of the year I was looking at YouTube searching for something to do with F&B, I think it was flambé or something like that, I had not registered for your site at this time, I went to search for the clip on YouTube and nothing very useful came up for what I was searching for at the time and then once I signed up to your site I realised that all the videos were there, and in comparison that they were much much better, there was nothing of that much use on YouTube, well they were of use but not as much detail as your videos.

EU 3– I suppose in studying your subject of F&B, everything that we need is on your website, so we don’t have to go searching on loads of different sites, but if you are on YouTube you might have to go to different sites to find it. So it becomes a one stop shop for what you need.

EU 1 – Everything that you need it there, you don’t have to jump between websites to find the right video – it’s all just there in front of you.

EU 6 – Something that might need to be added on the site would be some videos on polishing and stuff because a lot of times some people are not really doing it right and sometime we had to start all over again. It just shows that some people don’t know how to polish properly. That might be a good addition, crockery, cutlery, glasses even flambé pans.

Host – So develop videos that relate to much more basic tasks

EU 6 – Yes even very simple elements

EU 3 – Don’t just assume that we know because they are basic. – give everything that we need to know and not just the major thing

EU 5 There are people out there that have never working a hotel in their life and so what some of us think of being a very basic task might be challenging to other people cos they have never done it, so if you have everything like that on the web site you can’t go wrong really.

Host - How do you think I could increase the usage of students on there? If I was to say that 15 students did not register – how could I capture them?

EU 2– Mention it again and again in class especially in the practical classes. Because you didn’t mention it that much in class, we didn’t get sick hearing about it. Mention it again not only before tasks but also before exams. Say that if you want to prepare for exams better or find out some more interesting information or stress that it’s easier to study for exams from the website that from the book.

Host - Are any of you from Alsace – in your class I didn’t refer to the site that much. Did you notice?

EU 6 – I don’t think that you showed us any videos on the projector in class
Host – whereas the rest of the classes would have seen videos from the course website presented in class – do you think that from just a point of view that if I had used it more in your class, would students have used it more??

EU 6 – I don’t think so because if you show maybe just once or twice would be fine as we would see an example of what is on there as if you were to keep showing us over and over again we would probably get sick of it. We’d just get sick of hearing about the site and everything. If we don’t see that many videos we would be more inclined to go on and see what videos are available on the site.

EU 3 – do you know the way you talked about what is going to get people to go on it more, if you were to put yourself into student situation, you would need to entice them to go on to the site, you know they way on twitter you offer free meals, if you gave them something that is going to make them want to go on the site and make it more interactive and make them think that they are getting something more than just having to do study in the evening,

Host – And what do you think that could be.

EU 3 – I don’t know, maybe a free meal or a discount or something, of if you did offer it with something form around bunratty or Shannon, maybe a discount card. This could give them value for their money. Pretty much advertise on the site.

EU 5 – end of the day you don’t need to offer them discounts as it is their chance to study, so you should not have to give them free stuff to do it, but I think if you are going to get them to interact more with the site when you are doing the Irish coffee, you say know your Irish coffee for tomorrow, and you leave it at that, and the if in the CA it was like that and they didn’t learn it and they didn’t know the information the next day then they would be making things harder for themselves. This might encourage them to go on the site and look up the background and research on particular tasks.

EU 3 – you can’t punish someone with minus marks for not using the site

EU 5 – I didn’t say that

EU 3 – That’s defo not ok

EU 2 – again it pretty much their choice to go on there or not so I don’t know, if you stress the importance of it enough and someone doesn’t really care, they are not going to use it. If they don’t want to benefit themselves and help out themselves I don’t think any promotions will help. It’s an educational website, it’s not for fun either, and you don’t have to be blackmailed to go on to it.

EU 3 – something to entice them but not black mail them

EU 6 - Like a competition quiz... does this quiz before this time and who ever get the highest gets a free meal.

EU 5 – otherwise some people will just go for a free meal.

EU 3 – do something that is not just bringing them in for a free meal, bus something that is bringing them into learn, Learning objective but also that they is a flip side to it as well. There is something more.
Host - Do you think a discussion/forum area on the website would increase people to go on there – if they could ask a question if you didn’t understand something there would be an open forum where students could answer you as well as me?

EU 6 – Is there not something like that on there any way. I have seen that on there a forum thing on the site already – (Comment) and there is only 3 comments on there since the September, so I am not sure if it is something that suits.

EU 3 – I would not use that

EU 5 – it would be helpful to have there obviously. Like say for instance if someone is stuck on a certain thing, if a student put on the forum exactly what they are looking for someone else could help them out and answer the question. I'd say it’s helpful to have their alright.

Host – We have touched on quizzes earlier and you all seem to agree that quizzes would be a good way to go

EU 2– Interesting – What did you learn after that video
EU 3 – fun – fill in the words or something like that.
EU 6 – It would make it more interesting
EU 4 – it would help us to realise if we have actually learned anything from the video
EU 6 – even if it makes us watch it over and over again to get the questions right its good
EU 2– if you get one or 2 wrong it makes you go back and watch the video again –

Host– Do you also think by putting the weekly continuous elements of F&B on their using MCQ and actually doing your assessments online. Would that be something that would be interesting or would it makes any difference?

EU 1 – I don’t think it would make any difference.
EU 4 – Paper one is fine but it would introduce us a lot more to the website
EU 3 – it would give you a lot more work

Host – Do you think it could be developed into other practical elements of the course?
All - yes
EU 3 – you could have separate pages for different subjects – that would be good but then you need lectures that are totally committed to updating it all the time. Which might be an issue?
EU 2– Accommodation doesn’t have that many things that that could add up to it but it has a few that would be handy to look back at.

Host – So putting say online learning into some shape or form a on online forum for each individual practical area, not a dedicated site for each would be good.
EU 6 – it would be handy in the kitchen as well.
EU 4 – Even for economics – all the laws that are updating it might be useful
EU 2– what would you do in the kitchen – there are so many things
EU 6 – forum where u could ask questions and stuff like that.
EU 3 – a news update of what is going on in the industry in Ireland would be useful – news about the industry as a whole.
EU 2 – you could put some feedback about restaurants in Limerick and the local area – we could submit them to you and you could put them on the site. It might give people and idea of where to eat – where the best coffee etc. is.
EU 4 – you know that the students have recommended it so that good
Host – Do you think that I should keep the login?
EU 6– it depends on how confidential you what it to be. If you want to keep it only with in the college then keep the login.
EU 2– you are benefiting more people having the website from different options
EU 5 – if you are going to keep it in the college and keep the login it’s not going to get any bigger than it is now. But if you took away the password then it might get more usage but it will take away the personal element of it being for the college.
EU 4 – it nice that it’s only for the college.
EU 5 – if you did take away the password it might take away from our education at this college. We use it specifically for what we are doing here
EU 2– that doesn’t really stop anyone from the outside registering does it – (Host – No)
EU 3 – I suppose it depend on what your hopes are for the site, if you hope to grow it and let it grow and let it grow and put it in for different markets and places then it’s completely different
EU 2– Other lectures that are doing the same thing as you are doing might use it for their student.
Host – What other areas could be added to the course website
EU 2– Cleaning the barista machine
EU 5 – Do you know when we were doing the pouring of the beamish and stuff, you went onto another video that shows that – maybe if you had them online as well. That links into what we are doing as well, rather than going to a different area,
EU 3 – when we were doing cocktail classes you mentioned about doing cocktail courses in Dublin. Maybe you could add a link to that on the site. Maybe videos of you doing cocktails, it would be kind of different and cool and I think that people might go on and look for different ways of impressing their friends at parties!
Host – So more info around the bar area
EU 1 – when we missed the bar class for the industry trip I went online to see if there was anything on there about it but there was not.
EU 6 – It’s not something we do every day so you would like to see it.
EU 1 – You would like to be able to do that sort of stuff
EU 6 – that’s what I am saying, we want to know
EU 3 – Menu knowledge – pictures of ingredients are you explaining what they are and what they taste like. It’s a big element,
Host– Is online learning something that you are all comfortable using
EU 3 Yea
EU 5 – it’s kind of the way things are going. Everyone uses the internet
EU 6 – it’s kind of what is happening at the moment, technology is taking over, and people just laze around with a laptop
EU 5 – I hate going to the library, I don’t like sitting down with a book for hours and starting and reading a book, whereas on the internet it does not feel as kind of boring, the internet is better, just clicking around its fun, whereas sitting at a book you get bored eventually, so when you have pictures and videos in front of you and you would happily sit there.

EU 3 – I hate reading the newspaper as they are too big – but if you look at it online you just click on just what you want, and you can go onto it and there is no having to read about stuff that you don't want to or having to flick through it, its specifically what you want so it’s good. Its easy access. Everything that you want is on one page for that website – it’s not like it’s a book where you have to flick to a certain page or go back to the index this is just laid out across the top and you select what you want.

Host - Do you think it would be beneficial to have students in the videos and not the lecturer?

EU 3 – Yes that would be interesting – you could update it every year and it might make students go on there if they knew the person

EU 6 – maybe a video of the lecturer and then videos of students doing the tasks and looking at the differences

EU 3 – the difference of the lecturer, it would make it interactive and maybe student friends would go on and have a look and

EU 1 – it would put you under more pressure to do well

EU 5 – at the end of the day whether its student or you it’s the exact same thing that you are showing us any way. It’s not benefiting us really in terms of showing more information ion the task and you are getting more interactive (EU 3 – with students that are using the site during the year)

EU 2 – Would it be the same standard

EU 6 – you can learn from mistakes in the student videos –

EU 5 – you don’t really want mistakes in videos

EU 3 – but you can say that it’s a mistake and get the students to find the mistakes. After seeing the mistakes it might lead on to a video of you doing one properly.

Host – I did try something different with one class where I videoed the students in the restaurant working and then edited 1 hour of service to 5 minutes. This was then evaluated at the beginning of each day. Is that something that would be interesting?

EU 4 – that was good

EU 1 – yea, when you see yourself and others making mistakes you can stop yourself doing it them.

EU 4 – one person corrected someone else, on the something and then they did the same mistake in the video – so it was good but it would have to be specific to that class

EU 3 – did you edit out what was right and take what was wrong? –

Host – No it was just a sample of what when on during service – students thing right and wrong

EU 2 – so we would notice things not being done correctly.

Host – so if that was developed would it be good –
EU 3 – yes a forum to point out what is happening in the video
EU 2 – add a questionnaire as well with tick the box
EU 6 – Seeing yourself one time making a mistake would make you not do it again and again.
EU 5 – if you did the videos like that and told the class that it would be online they would all go on to see how there did. And to see themselves.
EU 3 – they would be looking at the mistakes and trying not to do that. And then you could put up a video on the first day. And then add a form where people can rate if they think someone has done well that would be good. They could then implement the mistakes or the changes the mistakes the next day. They could then compare how they have improved.
EU 2 – If someone videoed the first day and the last day it would be good to see the difference.
EU 5 – it would be good to see how much they have improved. If you show them a video of them on the last day in week 5 from the first day in week 1 they would probably laugh at themselves.
Host – That’s pretty much it – has anyone anything to add.
Recording Ended
Appendix G: Transcript of Non-EU Focus Group

**Host** – How comfortable are you with using the internet?
**All** – Very comfortable

**Host** – So it’s part of your everyday life
**All** – Yes

**Host** – So using it for education– do you see that as being different as using it for social reasons?

**Non-EU 3** – obviously less time to the education.

**Non-EU 6** – before the exam we use it a lot, like the website for watching the videos about how to do something for the flambé and how to make coffees.

**Non-EU 8** – one thing that is different is that you can comment on the social networks but not on your website. I never see anyone comment on that

**Host** – do you think it would be better if you could comment?

**Non-EU 8** – yes

**Non-EU 2** – I think so. Particularly about the password, sometimes some people don’t have an ID on F&B training.net and the thing is they use someone’s ID and the same time we can’t open our ID. So if there is no password then anyone can access it. Like Google, there is no password for it. So anyone that is not a part of Shannon can access it with an ID

**Non-EU 1** – While using social networking basically you are doing something mechanical; you don’t use your mind too much you just do it like an everyday thing, but one you are using the internet for educational purposes you are actually using your mine and you are reading stuff and you try to understand something and try to use it not like when you are on the internet when you just look at newsfeeds and you chat to someone and then you close it. But when you look at the internet for educational purposes you are learning something new every time. You are not learning anything from social networking – that’s what I am saying – it’s just wasting time, basically just doing something when you don’t have anything to do.

**Host** – Good Point. Non-EU 3 mentioned that you spend less time on education website. Why?

**Non-EU 1** – it’s just nature.

**Non-EU 8** – It’s not what you prefer to read and watch.

**Host** – so you would prefer to be reading what your friends are doing)

**Non-EU 8** – Yea

**Non-EU 4** – It takes long time to do some research, I spend more time, and if I have a project or presentation to do I have spent more time than on social network.

**Host** – So when it involves exams and assessments you’ll use it more

**Non-EU 2** – The problem with the laptop is the first thing that opens is Facebook and after that you spend too much time on it.

**Host** – Maybe I should set up my site as a default home page! So how easy was it to use F&Btraining.net?

**Non-EU 1** – very easy and very useful

**Non-EU 2** – very useful
Non-EU 1—sometimes when you go to Google and find a normal site and you see some interesting site for information, let’s say you are searching on wine, and you open up that page and its says you have to sign up before you can use it, you will immediately go back and look for something else because you don’t want to waste your time filling up a form, so it’s a similar thing you know. At least you want to see your details and information about the course you can sign up for that but the general information, like the videos for flambés and that sort of thing, if you consider to let people that are not signed up to look at that, and then if they find that interesting they can sign on – to see the other information as well –
Non-EU 3 – If you do that the internet is going to be really slow down if everyone can access it.
Non-EU 1—what I am talking about is if you link the site to your friend and tell them you did a flambé in college, and they ask what is a flambé, many of us didn’t know what a flambé was, so if you want to just show it to your friend you can just link it and they can just look at what you did in college.
Non-EU 4 – but if too many people are on the website as Non-EU 3 said it will slow it down.
Non-EU 3 – the speed of the site will slow down. The site is specifically for the college so….
Non-EU 1– we are not advertising the site or anything, it will still reaming in a small group, just you and your friends. We are not just talking about millions; we are talking about a few friends
Non-EU 4 – people can search this site from Google? Sometimes in the accommodation the internet is really slow and sometime the site is really slow.
Non-EU 1– you can’t blame the course website for that. That’s just a problem with internet in the accommodation. It’s like when Facebook is slow you can’t blame Facebook for that.
Non-EU 3 – is the purpose of that internet site for our college or for everyone in the world.
Non-EU 8 – it’s just for our college
Host – at the moment it just for you in the college, it says on the first page that it’s exclusive for the students of the institution. One of my next questions is discussing the registration process
Do you think I should continue having a logon or do you think I should just scrap it and only have a logon on when you need to access college document’s and SOP’s.
Non-EU 1– for things like that I think you should have a sign up thing but for general videos it should not be required. It could be used to promote the college
Non-EU 2 – the passwords that were given we had to copy and paste it they were very complicated– in case if we lost the email and we forgot to change our password it would cause problems, it’s very complicated for us.
Non-EU 1– can we change our passwords –
All – yes
Non-EU 4 – I have changed my password one time
Host – there was also a facility to retrieve passwords if you lose them. Did you find the registration process easy?
Non-EU 5 – yes. You just need to remember your student ID.
Host – Do you think I should remove registration totally?
All – NO
Host – When did you most use the website?
Non-EU 7 – before new classes starts I used it to prepare something for example I am look at the video of flambé before going to class
Non-EU 4 – I used it for the history of Irish coffee but actually I forgot the information so when you asked in class I could not remember it
Non-EU 1 – I went on the site after one of the lectures when you talked about it. I didn’t read anything that time I just opened all the tabs and had a look at it. And then after the second week when the results came out I used it to check the results.
Host – Non-EU 7 said that she used it before class to prepare anyone else do that?
Non-EU 1– Yes and also after class if I don’t understand something.
Non-EU 2 – yes – before service practical classes
Non-EU 4 – before flambé
Host – So you used it before practical class to give yourself and idea of what would happen in class?
Few – Yes
Host – Did any of you use it when you missed a class?
NON-EU 2 – I used it one time when I had to go to doctor and I found it very helpful. Can we have a chat option to chat to others when we are on there? We can see who else is on there. Maybe we could see who else is on line and have a chat about a project or something.
Non-EU 5 – that’s like Facebook
Host – It’s something that I will come back to in a while. Did you find it useful for revision before your practical exams?
All – yes
Non-EU 2 – videos were most help.
Host – do you think that is was of benefit to you in your exam revision?
All yes.
Non-EU 3 – Your website was the only thing that I used for my practical exam
Non-EU 8 – I was very impressed about the list you have on there on how to pronounce wine. It’s very good. It kind of covered all of the varieties.
Non-EU 2 – the video of the history of Irish coffee was great. It had all the information.
Non-EU 4 – it would be useful to download the videos
Host – you would like to be able to download it?
Non-EU 5– can you not just put them on studentglobal to let us download them?
Host – the problem about just putting them on studentglobal is that they take up too much space and when you access studentglobal from you accommodation it would freeze.
Non-EU 8 – maybe you should put studentglobal info on your website.
Non-EU 5 – your site was better
Non-EU 6 – I had to get up early to watch the video as the internet was not good when other people were on it
Non-EU 1 – if you ask your friends do they know how to make an Irish coffee you can just recall the steps. That person might think that he know everything. He might skip a step but by watching the videos you can make your own notes
Non-EU 2 – can you give a video of the actual making of a coffee in front of the guests? Like talking the guests and all. It would show us what to say.
Non-EU 1 – that would be spoon feeding too much.
Non-EU 4 – particularly for the flambé. So we know how it gets burnt.

Recording Device Crashed. Recording for next 12 minutes is missing. Below are the notes that were taken during the time of the crash

Topic - Access to the site
Bad point - that when you are in the college you can’t have sound because there is no head sets
Non-EU 4 – used it just before the exams
Non-EU 3 – college internet is faster so it was easier to use in the college.
Non-EU 2 – accommodation internet too slow
Topic - USE MORE IN CLASS
Non-EU 6 – I should talk more about the site
Non-EU 4 – mention the importance of the site more
Non-EU 2 – send people to use the site
Non-EU 1 – Too lazy
Non-EU 7 – use in class more
Non-EU 5 – when time is limited used in class
Non-EU 8 – real demo takes a lot of time
Non-EU 3 – better of view flambé in real life
Non-EU 1 – most will use it if people are talking about it – word of mouth – show it off more at the start of the year.

Topic – Learning at your own pace
Non-EU 2 – It’s easier to learn from audio and video
Non-EU 1 – 50% concentration – background reading – online is much better – why pay attention in class when it’s online
Non-EU 2 – Deposit phones in a basket – convenient way to learn
Non-EU 2 – recap the steps and see things over and over again
Non-EU 4 – sometimes it was hard to find the information that you were looking from.
When you are teaching the wine – 7 important points – I would not find any points – no information there

Recording Returns
Non-EU 1– somewhere on your site it mentioned that you should look for something on studentglobal. Can all the information not be on the website? It’s annoying opening studentglobal.
Non-EU 3 – apart from the exam people are also interested in cocktail – you can put more videos of cocktails on there.
Non-EU 1– Cocktails is something that everyone is interested in, so even if it’s not videos maybe just pictures and steps on how to make them. Or how it should look like at least.
Host – In terms of content on the website, what did you think of the quality
Non-EU 2 – the quality was perfect, I would have not problem with the quality of the information. It was perfect
Host – in terms of the written information on there, Non-EU 8 you spoke about the wine
Non-EU 8 – yes, very useful – the list was great
Host –Was the Information in the videos is sufficient?
Non-EU 2 – no it was enough
Host – What other areas would you like to see developed?
Non-EU 5 – cocktails and Guinness
Non-EU 2 – menu knowledge – not videos but written information
Host – how do you think that menu knowledge could be developed for the site?
Non-EU 3 – for menu knowledge you just need to work hard and you will know more
Non-EU 1– it hard to just read menu knowledge – you need to get out more and eat out more – because we come from different countries and the food we serve is different it’s more difficult for us. Menu knowledge will developed over time once we go out and are exposed to the restaurant.
Non-EU 2 – The definition of some words and the pronunciation of some words.
Non-EU 1 – that depends on each person vocab
Non-EU 2 – some France words are hard to pronounce and that makes it hard for wine service.
Non-EU 6 – have some short introduction of different items
Non-EU 5 – I think it’s better to give some examples of menu descriptions, I think it’s not a problem for the EU students but it is a problem for the Non-EU students. It’s hard to describe the menu for the guests.
Non-EU 8 – especially for Class x as we don’t know what the food because we have not been in the kitchen.
Non-EU 4 – maybe add a picture with a description beside it. Because I get confused at what food looks like.
Non-EU 1– there needs to be effort from the students too. Personally I think that I didn’t take menu knowledge too seriously that’s what we are struggling in the end. Trying the cram it all in.
Host – do you not link the food that what you cook in the kitchen is what you will eat and service.
Non-EU 6 – The problem is that I always cook the dessert part so I don’t know what the main course is.
Non-EU 2 – we have no idea until the food is on the plate how it will look
Non-EU 1 – if you do something then you know it better
Host – Do you think that generic videos from YouTube would be as beneficial as the videos that are on the course website?
Non-EU 1 – you won’t find videos like that on YouTube that are dedicated to teaching.
Non-EU 2 – The course website is only for study so when are looking at it it’s serious. YouTube is just social. Sometimes you open the sites like YouTube you are listening to music but when you use the course website you are serious and know that you are studying
Non-EU 4 – what is on your site is your standard of doing the task.
Non-EU 8 – the general videos on you tube don’t follow your SOP’s
Non-EU 2n – videos on YouTube do think different way but on the site we know it’s the proper way
Host – do you think if I posted other videos from YouTube beside my videos that would help?
Non-EU 1 – I think that if you approve it and post it on the course website them it would be beneficial.
Non-EU 2 – even if it’s different to show you that there is a difference would be good
Non-EU 1 – as you said that when you go on placements nothing is going to be done the same way so we have to adapt so just to have a look on that.
Non-EU 3 – there is no need to put the video on there just links.
Non-EU 5 – maybe explain the difference between the videos so what you think about that video
Non-EU 1 – link interesting articles on wine or service or topics relating to restaurant service – interesting links or posts or news feeds.
Non-EU 8 – sometimes when you use other links it makes you lose your concentration – you need to learn
Host – do you think that the videos are made here in the restaurant with the equipment that you are going to use makes it better?
Non-EU 4 – Definitely
Non-EU 6 – year
Non-EU 5 – of course
Host – So if you were studying in another university and you were using the videos from the course website do you think they would be as beneficial or do you think that they would be less important.
Non-EU 1 – they can be used as a reference.
Host – Do you think you would learn as much from a video as from anyone else?
Non-EU 5 – if you see us making a problem when we make the flambé then you can point that out
Non-EU 4 – the way you talk and method of the making is important
Host – Do you think that if it was used more in class that you would use it less outside of class
Non-EU 2 – yes
Non-EU 1– yes I think so. But it would get boring and monotonous seeing it all the time
Host - I think we mentioned a few things already – Non-EU 2 mentioned a chat option. What would you think of a forum area where you could ask questions?
Non-EU 2 – Yes – I think that’s a good idea, because when we are on the site we are fresh and we know what we want to ask but by the time we get to class we have forgotten the question. If there is some question you can just post them there –
Non-EU 5 – I don’t think the chat section is useful because sometime when you are asking a question you don’t want others to see it. Maybe you can email it.
Non-EU 1– I think the forum is good. If someone has a question they can ask it and the lecturer can answer or others. And if it’s important it can be used the following day in class. And then when we are on placement we can share some of our experience, you can have a blog or something like that. Then you can share with the first year.
Non-EU 3 – But when there are too many questions there are too much work.
Host – What sort of other things do you think we could use to develop the site? What could make it more interactive making it more interesting???
Non-EU 3– Advertising – buy new equipment and stuff.
Non-EU 2 – Information bulletin
Non-EU 1– news letter
Host – Do you think having quizzes on there or revision assessment on there would be good?
All – yes
Non-EU 1 – and if there were automatically marked you could have the answers as well so that you could learn.
Non-EU 6 – make a course website Facebook account.
Non-EU 2 – the quiz would reinforce the learning
Host – How did you think we could make all the students use it – Removing the login?
Non-EU 5 – no
Non-EU 2 – keep the login but only for the student results area and also have it already there so we don’t have to do it.
Host – Do you think it would be beneficial to use it in other practical areas?
Non-EU 2 – it would be good for the kitchen or accommodation
Host – What did you dislike?
Non-EU 2 – nothing
Non-EU 4 – make sure information is kept up to date.
Host – Do you think by watching the videos before class made things easier?
All – Yes of course
Non-EU 2 – you knew what was going to happened. It made class a little easier – but did it help your ability to carry out the task in the restaurant.
Non-EU 5 – yes but we need more practice in the restaurant
Non-EU 6 – make an area that lists all the videos so they are easier to find.
Non-EU 8 – Make videos smaller especially when long.
Non-EU 4 – make more videos of crumbing down and smaller tasks such as servicing and clearing.
Host – Do you think videoing people in class would be good?? And get you to evaluate each other’s performance
Non-EU 7 – waste of time
Non-EU 4 – yes that is good
Non-EU 1 – it might be good but I think people will not remember what they did wrong. – It might be good to see how service went and when you are coming back to the restaurant in a month or two you can look back
Non-EU 8 – A cameral will make us feel nervous.
Host – Non-EU 8 and Non-EU 3 would have experienced seeing themselves on video and working out what was right and wrong. Do you think that would be good?
Non-EU 3 – it was good
Non-EU 5 – yes that would be good
All – yes
Host – Do you thing I need to make videos of how to complete the smaller tasks like slicing butter and polish.
Non-EU 1– that’s too much
Non-EU 8 – that not good
Non-EU 1– people need to learn from you and pay attention in class and just practice more rather than making videos of it. 20 years ago when there were no videos people still managed to do their service exams how did they do it? They listened in class. This is like spoon feeling. It’s too much
Host – Any other comments?
Recording Ended