UNIVERSITY OF JYVÄSKYLÄ

IS BLENDED BEST FOR THE NET GENERATION?
A review of the changing landscape of foreign language learning in higher education

A Pro Gradu Thesis in English

by

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This study reviews and comments on examples of blended learning as an instructional method in foreign language learning in higher education. Blended learning is a mixture of face-to-face and online learning, usually interlinked and integrated. The purpose was to seek responses and reactions to this method from the current generation of university students, the so-called Net Generation, a term coined by Tapscott (1998) to describe the different type of student that universities in the western world must now educate. These students are seen as being an altogether new breed with new learning styles and expectations engendered by growing up with advanced information and communication technologies (ICTs). Through a review of theoretical and pedagogical literature and studies on adult learning; second language acquisition (SLA) and language learning; net-based and technology-enhanced learning; computer-assisted language learning (CALL); and the Net Generation; three selected articles, as well as the author's own experience on blended learning in foreign language learning are examined and discussed. Attention is also paid to the feasibility of two recent pedagogical and conceptual approaches: communities of practice, and affinity spaces within the blended learning environment. The study concludes that blended learning is feasible in foreign language learning for current university students, although there is a need for better researched course design as well as a deeper and empirically-based awareness and knowledge of the students' learning preferences and skills.

Keywords: blended learning, foreign language learning, higher education, the Net Generation, communities of practice, affinity spaces.

TABLE OF CONTENTS

LIST OF TABLES, FIGURES AND ABBREVIATIONS

BL – Blended learning
BLE – Blended learning environment
BLL – Blended language learning
CALL – Computer-assisted language learning
CMC – Computer-mediated communication
CSCL – Computer-supported collaborative learning
CoP – Community of practice
ELF – English as a lingua franca
f2f – face-to-face
FL – Foreign language
FLL – Foreign language learning
ICTs – Information and communication technologies
L1 – First language, primary language and/or mother tongue
L2 – Second, foreign or additional language
LMS – Learning management system
NBL- Net-based learning or network-based learning
NBLL – Net(work)-based language learning
SDL – Self-directed learning
SLA – Second language acquisition
TL – Transformative learning
VLE – Virtual Learning Environment

INTRODUCTION

As universities and other higher education institutes worldwide have adjusted to the changing array of available technologies and demands of the workplace, so too, have the methods of teaching and learning in higher education. Although traditional methods of learning such as lecturing and face-to-face (f2f) contact teaching dominate, non-traditional methods are gaining ground apparently in reaction to the demands of our changing society, and also in a spirit of exploration. The primary method has been the addition and integration of Information and Communication Technologies (ICTs) to traditional classroom teaching, which include the use of the internet and forms of multimedia such as Virtual Learning Environments (VLEs) also known as course or learning management systems. The application of ICTs has therefore become almost the norm and the forms in which they appear are diversifying at a rapid rate. However, it would appear that sometimes in the onslaught of technological advances, teachers might lose sight of whom they are actually teaching. Long gone are the days of the tabula rasa, when students were seen as passively ingesting what the instructor had already digested, as a mother bird does for her newborns. Instead the variety and permanence of technology in our day-to-day lives also demands that as teachers we step into our students' shoes and consider the daily resources that they use and the use of technology that they would like to see in their classrooms on- and offline.

The approach of this thesis is to review and discuss studies of one of the popular forms through which learning takes place: blended or hybrid learning and its use within the context of foreign language courses in higher education, with a view to what the current generation of students desire, the so-called 'Net Generation' (Tapscott 1998) or 'Millenials' (Howe & Strauss 2000, 2003). The purpose is twofold: 1) to provide a critical look at what current research says about blended learning in general with emphasis on its usage in foreign language learning (FLL) and to examine it in the light of current

social learning theories in adult education, and if at all possible 2) to discuss and conclude, with some form of hindsight, what factors need to be kept in mind when designing or teaching such courses. There might not exist such a thing as best practice of ICTs in foreign language learning, yet even a review of the current issues being tackled, and its critical examination in the light of adult education and social theory of learning, will surely give the present and next generation of language teachers much food for thought.

Since the mid-1980s a fair amount of research has been carried out to test the success and failure of online-, web-based or e-learning in ICTs in general (e.g. Felix 2001, Richardson & Swan 2003), not only as a new tool in the arsenal of teaching and learning, but also to test the learning outcomes, experiences, and pros and cons. Moreover, fresh perspectives on learning from a social theoretical point of view have also trickled over into formal education in addition to the socio-constructivist approach (de Laat et al 2006). Lave and Wenger's (1991) concept of 'communities of practice' has been placed as a viable framework through which to understand, enable and design different types of networks online or offline. For example, Cousin and Deepwell (2005) and Pöysä (2007) suggest that more than any other element, network-based learning needs to take into account what sort of community is being formed artificially and how it needs to be set up with certain principles in mind. Scardamalia and Bereiter (1994) suggested a similar idea in their concept of knowledge-building communities. Blended learning is a thin slice of the emerging inquiry into what happens to learning in such environments, and one of the focuses of this paper is to enquire how foreign language (FL) teachers might best utilize it from the viewpoint of communities of practice and an alternative 'affinity spaces' (Gee 2004) point of view. The personal motivation of FL teachers should not be to just use blended learning environments (BLEs) for the sake of being up-to-date or even because 'everyone else is doing it', but rather with an eye to the future of our students. For example, judging by the teaching goals and aims set by the Language Centre of the University of Jyväskylä, it would appear that the job of language teachers

is to prepare university students not only to learn and maintain at least two or more foreign languages (as suggested by the Council of Europe), but also to promote the use of skills that will ensure they are readily employed, i.e. their employability skills. BLEs, in general, promise the exercise of basic IT (information technology) literacy skills; promotion of group-working, collaborative skills both online and f2f in a foreign language (in the scope of this study); and higher-order critical thinking skills, as these types of courses tend to be problem-based in nature. In reviewing the types of BLEs used in both non-language and language courses, where possible these elements will also be sought and critically discussed in the studies under review.

It appears that blended learning environments have become the buzzword in web-based teaching and learning in many fields of higher education. Pedagogically-oriented studies, as well as, theory-oriented studies are slowly proliferating on how teachers are using blended learning, and how students are reacting to it. The overall reaction has been positive, but the literature suggests that satisfactory use of BLEs in other fields, such as foreign language learning, is not so clear-cut, and neither is it uniform. There seems little dispute that when it comes to mastering a foreign language whether from scratch, such as in a beginners course, or at an advanced level in English-medium Masters' programmes – learners still prefer some element of the traditional aspects of a classroom, i.e. the presence of a live, immediate instructor and peers with whom to practise and work with (Felix 2001, Pöysä 2007). An increased interest in BLEs in foreign language learning (FLL) could also be signalled by the EUROCALL 2007 conference. The theme was 'Mastering multimedia: teaching languages through technology' with one of the conferences sub-themes being blended learning.

The literature on blended learning traces several issues such as: student experiences and views on blended learning (Akkoyunlu & Yilmaz Soylu 2006; Felix 2001; Motteram 2006); the challenges of changing traditional lectures into blended learning (Dalsgaard & Godsk 2007); and adult learners' preferences in course design (Ausburn 2004) just to

name a few. It is however a small area of research, and the results of this study will not be conclusive with such a small, but growing, body of evidence.

This study also adopts a recent characterization of a so-called new breed of university students. The names of the generation that has almost grown up with a keyboard in their cribs are varied, but evocative of how their world differs from those of their parents and often their teachers: Generation Y, Generation Next, Millenials, the Net Gen(eration), digital natives (Howe & Strauss 2000, Oblinger & Oblinger 2005, Prensky 2001). The bases for these characterizations have however been criticised for their over-simplification and generalisation by Bennett, Maton and Kervin (2008), and this will be investigated more in Chapter Two, when the concept of the Net Generation is probed.

The structure of the thesis will be the following. First, we will take a look at current learning theories in second language acquisition (SLA), and in adult education or learning. This will naturally set the stage for later comparison as to whether these theories mirror the reality of how blended learning is being used at tertiary level. Secondly, blended learning itself will be placed within its wider context of technology-enhanced learning, with some examples of what other net-based applications are available such as blogs, wikis, and social networking sites. Many of these latest applications are part of Web 2.0 features, which are often termed the second generation of internet-based services. However when the focus narrows to net-based *language* learning (NBLL), there will be references to studies carried out in this field, as well as computer-assisted language learning (CALL), a more general and more commonly known umbrella term for the use of ICTs in foreign language learning. Nevertheless, for the purposes of this study, the term 'net-based language learning' (NBLL) will be used when necessary, instead of CALL, as NBL specifies a use of so-called 'integrative CALL' (Warschauer 2000) or 'integrated CALL' (Bax 2000), a more appropriate category for blended learning. Briefly defined, NBL involves learning via the internet (e.g. using

ready prepared websites or -pages) and other forms of multimedia, such as web-based platforms (e.g. WebCT, Optima or Moodle) also known as learning management systems (LMS). NBL as a term, is not limited in meaning to the use of simulations, games, or closed drills and quizzes, known respectively as 'restricted CALL' and 'open CALL' (Bax 2000). Learning management systems (LMS) are used to varying degrees in NBL, and are often an integral part of blended learning. I would also wish to bring LMS into the discussion due to its feasible link with forming learning communities or spaces on- and offline. Thirdly, we examine the different forms in which blended learning appears. There are no set definitions of BLEs, although there have been attempts to define them (Clark & Mayer 2003). Some of the discrepancies which appear in the definition are, for instance, the unprescribed numbers of hours that a course facilitator can assign, within the restrictions of a course, to f2f meetings or work done online. In fact, one challenge in reviewing literature on blended learning in any field, is that there is no uniformity in course design or there is no agreement on how many hours of on- and offline work best serve the course and learners' purposes. Additionally, in many studies the content and nature of the offline and online work can differ dramatically. However, for the purpose of this study, a blended learning environment will be understood to mean integration of an online learning environment with a traditional face-to-face one. In Chapter Four there will be an in-depth review of the research on blended learning in FLL alone: what are the current issues that teachers and researchers are examining, and what material for support or change this might give the budding or beleaguered BLE facilitator. One small note that must be made is that 'web-based' and 'net-based' will be used interchangeably throughout the thesis to refer to the same type of learning and teaching: done via the internet or on a web-based platform.

In the Discussion, the fruits of other research will be brought together under the microscope of learning theories and the definition of the Net Generation. Although one might be tempted to ask what is indeed best practice in blended learning, Ausburn (2004) questions whether we are asking the right question. She suggests that whatever

differences there might be that affect the outcomes of BLEs, "The presence of such differences emphasizes the need for research that asks not which techniques are 'better', but rather *for whom* various techniques are most effective." (Ausburn 2004: 335). This will bring us face-to-face with the underlying pedagogy of blended learning and whether it is satisfying the needs of its learners, and providing them with the tools they will need. Are students at higher education receiving their higher education in ways that support their learning preferences and expectations?

2 THEORETICAL AND CONCEPTUAL CONSIDERATIONS

The potential pedagogical strength of any form of learning should be set against a framework of theory and practice. The focus of this study is on whether blended learning is a suitable method for the current generation to learn foreign languages at university-level. Therefore the most relevant theories influencing understanding of **net-based learning,** and **language learning** in adults need to be examined as well as theories and concepts of net-based learning combined with foreign language learning. The third cog in the machinery of theories for this paper is that of **adult learning** theories. However the focus is on the **participants** in this particular context of learning (blended); therefore definitions of the Net Generation and purported explanations of their learning profiles are also examined. Each area has of course interaction with the other two principal areas often sharing common theoretical backgrounds, but for the purposes of this chapter and for the sake of clarity, they will be demarcated. These areas are viewed through the lens of the **context** and the participants involved in the learning situation. Hence these three interlocked cogs would look as represented in Figure 1 with the role of the participants and the context in close proximity to the bidirectional influence and feasibility of current theories and understanding within its particular context.

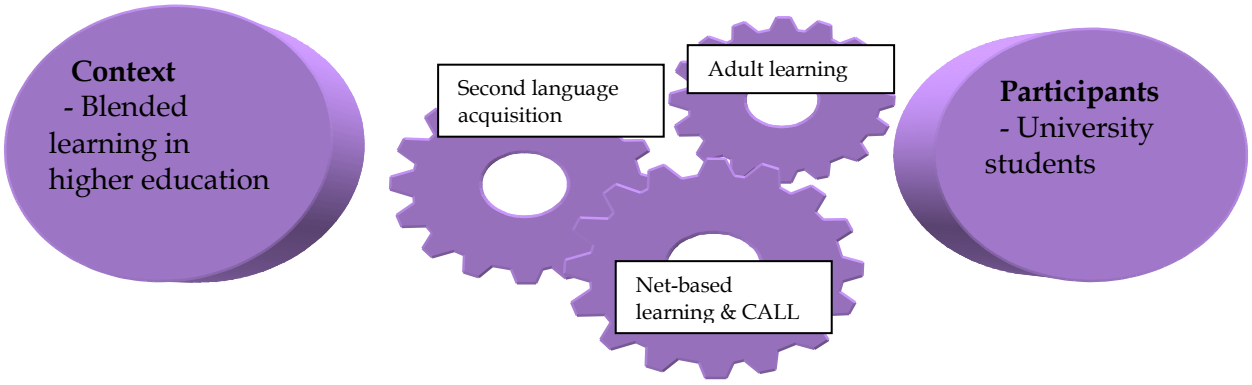

Figure 1. The three cogs of blended learning in net–based language learning (NBLL) in higher education in the background of context and participants

In this chapter, first, the foundational and then most pertinent theories of adult learning will be explored, followed by current foreign language learning theories and perspectives. In addition the most relevant net-based theories will be briefly referred to in preparation for a more in-depth look at the actual practice of technology-enhanced learning and blended learning in Chapter 3. In the case of the latter, perspectives that are cited in the literature on computer-assisted language learning (CALL), a broader area than net-based language learning, will receive special attention in Chapter 4. Side by side it is possible to see if and how the examples of blended learning found in research reflect these various perspectives, and see what the pedagogical basis, if any, has influenced such matters as course design, layout, and execution. And last, but not least the characteristics of the present generation of university students must be defined and clarified. For if practice and theory do not answer and accurately describe their needs and uses then all that is taught is in danger of defeating its purpose of educating and preparing the next generation in the best manner possible using the resources available technologically and otherwise.

2.1 Central notions of learning: constructivism, socioconstructivism and situated learning

Due to its centrality in many theories and notions, it might be wisest at this point to succinctly define constructivism and socioconstructivism as some of the key theoretical and philosophical perspectives in this study. In Rovai (2004:80) and others' estimation, constructivism is not just one theory, but more a philosophy of learning. Like a tree it has sprouted many branches; and although several contemporary perspectives and practice can be traced back to John Dewey and Jean Piaget (cognitive constructivism), a huge branch that has continued to grow very much on its own can be traced to Lev Vygotsky and his contemporaries (social constructivism, better known as

socioconstructivism). A staunch constructivist believes that as an individual interacts with their environment their knowledge is built – meaning is cognitively made. The learner is thus active in constructing and processing information (Woolfolk 2004:323-324.) Vygotsky was the catalyst for a shift towards spotlighting how learning is influenced, indeed transformed, by the effects of social interaction, language, and culture within the constructivist tradition. Fosnot (1996:20) eloquently states that Vygotsky's interest lay "not only in the role of inner speech on the learning of concepts but also on the role of the adult and the learners' peers as they conversed, questioned, explained, and negotiated meaning". The emphasis is on the role of dialogue and the roles of the actors as they construct meaning together. A third and more specific learning approach that stems from a neo-Vygotskian notion of socioculturalism, thus a smaller, but significant 'branch', is situated learning. This categorises forms of informal and usually incidental learning that are in contrast to learning abstract knowledge as characterised by formal education in schools. Proponents of this branch of learning believe that learning is actually unintentional and embedded within authentic activity, context and culture (cf. Brown, Collins and Duguid 1989; Lave 1988). Furthermore, social interaction and collaboration are vital elements of this apprenticeship type of learning, meaning that the learning takes place within a community of similarly interested people. A deeper comprehension will be built upon this simplified introduction as one sees the many ways in which these two approaches are applied in practice and intent.

2.2 Current theories and principles of (adult) learning

There has long been disagreement as to whether a person's learning styles, strategies and preferences change over the course of their lifetime, and whether there is sufficient evidence that adults learn differently in comparison to children. However, the belief that

adults might possess a greater repertoire of cognitive and social skills than younger learners is not easily disputed. Until the mid-twentieth century psychology and educational psychology had given much insight into understanding adult learning. However, it appears that the research done then was behaviourist in nature, and often carried out with children, with the results then applied to adults, too; or the research conditions under which adults were tested were the same as for children. The desire to investigate the possible differences between adult and child learning provided the necessary background for various theories and concepts of adult education to evolve. (Merriam 2000:1-4.)

The two central foundational pillars of adult learning theory which launched adult education as a field in its own right were **andragogy** as originally defined by M. Knowles (1968), and **self-directed learning** (SDL). There is also a third - **transformative**, or transformational, **learning** which is also pivotal in contemporary comprehension and ideology of adult learning. (Merriam 2000:4-11.)

Andragogy is not as much a theory as an attitude and awareness towards adult learners, and was a step in differentiating child learners (pedagogy) from adults (andragogy). Knowles (1989:112) concluded that it is "a model of assumptions about learning or a conceptual framework that serves as a basis for an emergent theory" and as such is not seen as being theory, but more a practice. Andragogy was an attempt to define the adult learner, and brought out assumptions which still impact the practice of adult education today. Knowles suggested, for instance, that an adult learner does not come 'empty-handed' into a learning situation, but is more than capable of drawing on earlier resources to contribute as an active learner working with the teacher. Andragogy has however had its fair share of criticism. Pratt (1993:21) stated that it has not actually helped clarify the process of learning in adults, but has indeed established the belief that adults are learners in their own right with some differing needs. Another point of

contention is that many of Knowles' assumptions do not apply to all adult learners and may in fact be applied to children as well. An instance of this: although adults have various and more profound life experiences than children, there is no guarantee that those experiences will positively support the learning situation. However the contribution of andragogy to adult education is clear. Houle (1996:30) acknowledges this by stating that "Andragogy remains as the most learner-centered of all patterns of adult education programming". Thus it has taken the dominion of the learning out of the teacher's hands, making the teacher acquiesce to the notion that they "should involve learners in as many aspects of their education as possible and in the creation of a climate in which they can most fruitfully learn" (Houle 1996:30). Houle's statement links well with an important element of net-based learning where the teacher's role has morphed from being the 'sage on the stage' to the 'guide by the side'. In net-based environments learners are theoretically allowed substantial freedom, with the teacher providing the framework and the learners creating their own inner-worlds and making their own decisions. The other forms of conceptualized adult learning emphasise a similar bent: the adult learner is more than capable of being in charge of their own learning, but will need guidance and often different approaches on the part of the instructor. Self-directed learning is one of these.

Knowles (1975) was instrumental in setting up the notion of self-directed learning (SDL), but it was Tough (1967, 1971), who continued with the work begun by Houle (1961), and processed it into a clear form of study. It includes the idea of learning being a widespread and everyday part of an adult's life; systematic, but taking place outside the walls of a classroom or without the presence of a teacher. Depending on its perspective, SDL may have, for instance, humanistic philosophy as its goal (e.g. Knowles; Tough; Brockett & Hiemstra 1991), the goal being to develop the learner's ability to be self-directed. Another goal in SDL could be the enablement of transformational learning (e.g. Brookfield 1986; Mezirow 1985). The crucial element here is of critical reflection by the learner, meaning that an "understanding of the historical,

cultural, and biographical reasons for one's needs, wants, and interests…is a prerequisite for autonomy in self-directed learning" (Mezirow 1985:27). A similarity with the first perspective is that the learner must be guided in becoming more proficient in directing their own learning. The third goal of SDL contains a social and political agenda with "the promotion of emancipatory learning and social action" (Merriam 2000: 9). In this context SDL's goal is not so much for the purpose of an individual's learning, but for the learning to be taken and used for social and political action to impact a wider circle.

From these various angles, self-directed learning has emerged with various models which have helped put this theory of learning into practice. Just as andragogy has been criticized for focusing on the individual learner, so has SDL. However both of these have become staple parts of adult education and in practice a good launching pad for more recent theories or applications, such as transformational learning, not to mention informal and incidental learning, and context-based learning.

Transformative learning (TL) is often considered to form part of the bedrock of adult education along with andragogy and SDL. It too has its merits and has contributed much with overlaps in self-directed learning as well as andragogy, and has contributed more facets to the process of learning as well as propositions of how learning occurs. TL has branched out into many different concepts with the same starting point. This view of learning is often constructivist in approach with the belief that knowledge is gained through a learner's interpretations and re-interpretations based on earlier knowledge, and in light of new experiences (Mezirow 1996). It is this revised meaning that gives rise to what Mezirow calls a "perspective transformation" leading to a "more inclusive, discriminating, permeable, and integrative perspective" (Mezirow 1990:14). Other significant contributions of TL include: the proposition that thoughts and feelings are also part of the complex learning process; that relationships and the opportunity for

rational or relational discourse are important, built on trust; and that the process of TL is based in context, not apart from one. To sum up, TL has explicated the process of how we make meaning as adults, i.e. "It is not what we know but *how* we know that is important" (Merriam 2000:22, emphasis added).

2.2.1 Models and concepts of learning in context-based learning

Notions and concepts such as transformative learning, critical reflection, situated learning, communities of practice, and experiential learning are related to the area of informal and incidental learning, which in turn melds with the idea of **context-based learning** as defined by Catherine Hansman (2000). This type of learning means that "learning in context is paying attention to the interaction and intersection among people, tools, and context within a learning situation." (Hansman 2000:44). Thus from this perspective, learning is understood to happen with others, under the influence of one's surroundings, culture and history and not apart from it. It is from this largely socioconstructivist body of theories and perspectives that many interpretations and approaches have been adopted with the growth of web-based learning, in particular the idea of learning best or most naturally through a form of learning communities or 'communities of practice' (Lave & Wenger 1991), or through some form of common 'space' (Gee 2004).

The ingredients of community, reflection, and situated learning all reveal the undoubted influence of Vygotsky's argument that whatever humans do happens within a cultural context with several levels of values, interactions, structured relationships, knowledge, skills, beliefs and symbol systems present and functioning (Wertsch, del Rio, and Alvarez 1995). This is the heart of socioconstructivism, which is also at work in situated

learning and hence in the idea of situated cognition, and in fact in many current applications of adult- and other types of learning.

In theories based on the notion of situated cognition, learning is unequivocally seen as being social. Learners are seen as forming a community where their interactions, the tools used in those situations, the activity they are engaged in, and the social and cultural context where this is taking place are instrumental to forging learning and its processes. Therefore from a situated and socio-cultural point of view, a community or culture of learning fosters learning as people become active and deeply involved in this community by interacting with it, and learning to comprehend and engage in its history, beliefs as well as its cultural rules and values (Lave & Wenger 1991). The premise is that one learns from more experienced members of a community and learns in practice with them, possibly through a form of apprenticeship. Some of the ideas that encapsulate learning with more experienced members of a learning community are 'scaffolding' provided at a learner's 'Zone of Proximal Development' (Vygotsky) and 'communities of practice' (Lave & Wenger 1991, Wenger 1998). Both are not only concepts, but also actual strategies to enable learning to take place in a situated context.

Scaffolding originates with Vygotksy's concept of the 'zone of proximal development' (ZPD). This represents the "distance between what children can do by themselves and the next learning that they can be helped to achieve with competent assistance." (Raymond 2000:176). Scaffolding is an instructional strategy that enables the learner to receive individualised support based on their ZPD. The learner is provided, with the help of someone more knowledgeable, a scaffold or several, to accomplish set tasks which are slightly above their present level of ability and knowledge. They work through that task with the help of the more capable person through their ZPD. This is a strategy that can be and is just as easily applied in on- and offline environments and with post-secondary learners as it is at school.

Wenger (1998) elucidates that a community of practice is made up of three constituent parts each describing the dimensions of the relationships within a community of practice: *mutual engagement*; *joint enterprise*; and *shared repertoire*. Mutual engagement of the members brings them together as a social entity, encouraging them to work together and to know one another. Cousin and Deepwell (2005:60) describe joint enterprise as the "levels of ownership and the functionality of the group for itself". This dimension is affected by the density of the relations of mutual engagement and is a result of "a collective process of negotiations that reflects the full complexity of mutual engagement" (Wenger 1998:77). Wenger (1998:83) categorises shared repertoire as being the community's "routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions or concepts that the community has adopted in the course of its existence". Each dimension is therefore linked to the other, associating practice and its tools and relationships with community, and thus forming a community of practice. To reiterate, a community of practice is usually self-organised, sharing a common purpose, and holds the expectation of learning and knowing what the other knows (Lave & Wenger 1991, Wenger 1998). There are many critics of the application of community of practice in knowledge management and knowledge communities. Perhaps the main criticism aimed against it has been that many scholars have found it "to be flawed in certain ways and perhaps overly optimistic about how people gain membership and expertise in contemporary learning communities and sustain their involvement in the same communities over time." (Duff 2006: 317).

Another criticism is made of communities in general by Hodgson and Reynolds (2005), who criticise the staunch support of learning communities in higher education settings, suggesting that the formation of these communities are a reaction to fears that society has become too individual and prey to possible alienation and social fragmentation (Hodgson & Reynolds 2005:14). An alternative notion of community is needed rather than the simplistic ones presented. For example, instead of thinking in terms of one

clearly delineated community, the proposal of the allowance of multiple communities makes sense (Hodgson & Reynolds 2005:17).

Wenger, McDermott and Snyder (2002) have attempted to answer these various criticisms by developing the ideas of communities of practice (CoP) further and suggesting what elements should be taken into account in the design and maintenance of CoPs. Out of this re-assessment have come seven proposed principles to design CoPs which hold some promise for the further development of this principle in learning communities. They are summarised in Table 1. One of the central principles of design in CoP is an awareness of what makes a community 'alive', thriving, and flexible according to the movement and mood of its own participants of the practice.

Table 1 Description of the seven principles of cultivating and designing communities of practice (CoPs) (Wenger et al 2002)

Principles of designing CoPs	**Description and explanation**
Design for evolution	All communities are dynamic and should evolve in reaction to changes within and outside it. The design of a community is to encourage it to develop
Open a dialogue between inside and outside perspectives	An insider's perspective is always needed to lead, but input from an outsider can enrich and invigorate a community's dynamics
Invite different levels of participation	Some members will often be more active than others. The design should enable peripheral members to take part and for core members to have opportunities to lead, and for places to be fluid, instead of fixed
Develop both public and private community spaces	Community members must be enabled to meet face-to-face as a group as well as be encouraged to foster one-on-one relationships both in public and in private spaces. This interaction should allow a strengthening of the CoP in both spaces

Focus on value	The value is determined by the members, and this is also likely to change as the CoP evolves, allowing inside and outside catalysts for change, as well as movement between members
Combine familiarity and excitement	Every CoP needs a sense of familiarity in which to build up relationships under stable conditions. However a community is in a sense organic and therefore in need of new input or challenges so that it will not become stagnant or die
Create a rhythm for the community	The challenge in a CoP is to support the community in finding its own pulse by organising a regular pattern of meeting points for all and for individuals

However there are those who are still not completely satisfied with what is perceived as a danger of labelling people into a group which might not be an accurate description, or even worse might unnecessarily cause distinctions on the grounds of status, age, social class and even race.

An alternative description of learning communities is 'affinity spaces' as coined by James P. Gee (2004) who has done much work into the use of video and computer games in helping children learn real life skills in school using informal and social means of learning that they are already familiar with. Gee's (2004) concern is that today's young learners, who will be tomorrow's possessors of the 'new capitalism', will be alienated by the very educational system that should be equipping them for this brave new world. Although the notion of communities of practice is not entirely dismissed, its usefulness as a term in education to describe a class or group of students is criticised (Gee 2004:77). An instance of this are issues that can arise concerning membership and inclusion as well as exclusion – who decides for example, who is a member of that CoP, and what are the factors that decide who shares knowledge and with whom? In fact who decides the very definition of community? (Gee 2004:77-78.) Instead it is reasoned that learning and formation of membership should be in affinity spaces where there is

no sense of physical or temporal limitations, and the community exists in the form of a 'space' which could be physical, but is most likely virtual, or even a mixture (Gee 2004:79). Gee (2004:73) defines an affinity space as "a place or set of places where people can affiliate with others based primarily on shared activities, interests, goals, not shared race, class, culture, ethnicity, or gender. They have an affinity for a common interest or endeavour." Naturally one could argue that Wenger's representation of communities of practice is very similar to Gee's, and that both views concentrate on a socially and culturally-situated context of learning, that can take on a life of its own and need not be formally constructed or maintained. However Gee's support of the idea of 'spaces' allows a greater and more fluid concept of membership, movement and even of place in comparison to a community of practice. If one examines a space and sees who is interacting within it, one could pose the question as to whether a community is formed within that space or not. However the answer might vary depending on what is happening, and on the members' own understanding of their identity in that space. In fact even if no community appears to exist in Wengerian terms, it does not prevent those in the space from sharing information and indeed learning from one another (Gee 2004: 78).

In order to understand some of the basic premises of affinity spaces Gee (2004:80-83) uses, it is important to briefly explain how he defines space in terms of *content*, *generators*, and *portals*. A space is arranged around *content*, this is what the space is 'about'. A *generator* gives the space some content. Gee's (2004:80) illustration of this term explains that the cookbooks and shared recipes in a cooking club are defined as generators. They provide the content for that space. A *portal* as its name implies is the way into a space; several portals can exist. It can be "anything that gives access to the content and to the ways of interacting with that content, by oneself or with other people" (Gee 2004:81). (Gee 2004:80-83.) In addition, Gee (2004:85-87) has listed the elements of an affinity space based on an online game. The portal alluded to here is a

fan-produced website based on the online game which is the actual space. There are eleven elements that define this as an affinity space:

1. Common endeavour, not race, class, gender, or disability, is primary
2. Newbies and masters and everyone else share common space ('newbies' meaning newcomers to a space)
3. Some portals are strong generators
4. Content organization is transformed by interactional organization
5. Both intensive and extensive knowledge are encouraged
6. Both individual and distributed knowledge are encouraged
7. Dispersed knowledge is encouraged
8. Tacit knowledge is encouraged and honoured
9. There are many different forms and routes to participation
10. There are lots of different routes to status
11. Leadership is porous and leaders are resources. (Gee 2004: 85-87.)

Many of these features are symbiotic and embody the same spirit. There is a sense of conscious acceptance that everyone has something to contribute, and that no-one should be discriminated against on any grounds (e.g. Nos. 2 & 1), or be seen as having more power or status than the others (No.11). No. 3 means that a portal, for example, the fan-produced website, can actually generate a lot of content, as people may "generate new signs and relationships among signs" (Gee 2004:85). The fourth element supports the idea of egalitarian ownership of the space: the content of a space can actually change as a result of the actions and interactions of its members. Knowledge with its different uses and degrees of specialisation (intensive: specialised, extensive: less specialised and broader) is allowed free rein to be shared and to develop (No.5). Nos. 6-8 also emphasise different areas of knowledge distribution and sharing, as well as an articulation of the value of tacit knowledge, which might often be overlooked in a conventional learning space. The final three elements centre on the issues of position, role and status within a portal; anyone may choose how much they wish to be involved and easily switch their

'position' from peripheral to central (No.9); a portal and a space allow their players to achieve status through what they can do for that portal and space, and not only by playing the game well. For example, by writing guides to help other players, or arranging forum gatherings.

The next significant examination is the area of second language acquisition in general and especially as an adult learner i.e. over the age of puberty. In this field as in learning, there is no perfect answer, but when combined, the whole picture of learning a foreign language as an adult is given an authentic complexity.

2.3 Theories of second language acquisition (SLA)

In a similar fashion to general educational theories of learning, knowledge and theories or hypotheses of foreign language learning have been affected and influenced by perspectives in linguistics, psychology, and social theories. All contribute something to understanding what might be happening when a person learns a second or foreign language, and none can be singled out as being the only 'right' one. Therefore with the medium of blended learning in mind and learners who are in higher education, the focus will be on what various theories and hypotheses might have to say about learning with these two elements in mind. It must however be stated at this point that SLA as a field of research does not attend to informal and unintentional learning in the same way as other fields that study learning. It has usually been more concerned with a more specific view of acquisition and learning, and does not examine in the same way as adult education, informal learning and its connections between learning and other cognitive processes. Despite this limitation, SLA research has something to say on how adults learn, and what discernable differences there might be, and whether many

secondary language (L2) hypotheses are equally applicable to learners well past the age of puberty.

SLA has also widened its repertoire from structuralist and cognitive perspectives in the last few decades towards what Block (2003) terms a 'social turn in SLA' after critical challenges set forth by such papers as written by Firth and Wagner (1997) and others during that period (Block 2003, Larsen-Freeman 2007, Merrill & Swain 2007). Thus a particular perspective of interest in this study is also on an approach that might be termed poststructuralist, as well as a passing glance at chaos/complexity theory brought about by Larsen-Freeman (1997, 2007). These views will be concisely examined after exploring opinions on L2 learning in post-pubertal learners. Finally one minor point that must be mentioned is that the term L2 is used to refer to and encompass terms such as foreign, second, other or even additional language, making no clear distinction between them (Block 2003, Rampton 1997).

2.3.1 Can adults still learn language as well as children? Different theoretical perspectives

Is the timing of L2 acquisition critical, and is it truly more difficult after puberty? The Critical Period Hypothesis (Lenneberg 1967) proposes that younger learners acquire a second language almost effortlessly after mere exposure, whereas older post-pubertal L2 learning requires "conscious and labored effort" (Lenneberg 1967:176). From a cognitive-developmental point of view, Krashen (1975) concurs with Lenneberg's basic claim, agreeing that such change is in fact in line with early constructivist Piagetian formal operations. This final stage of Piaget's proposed stages of cognitive development claims that from the age of twelve onwards, human beings have the cognitive capability of conceptualising abstract notions using logic and creating hypotheses to understand

what can no longer be understood through observation. This would mean the person who is at this stage of formal operations would be now able and indeed enabled to create a rule-by-rule approach to learning a foreign language because of their neurological maturity. (Singleton 2003:10.) However some studies have apparently revealed that not many adults achieve this stage (Woolfolk 2004) and without the benefit of higher education it is even more unlikely.

Singleton (2003) however does not agree with the belief that the extra effort required by adult learners is attributable to the ending of a critical period for language alone. The Universal Grammar (UG) assertion that post-pubertal second language learners can no longer access UG principles and parameters also seems to hold little validation and is not conclusive (Ibid.) Singleton goes onto state that it is widely accepted that

> those learners whose exposure to the L2 begins early in life (and whose exposure to the language is substantial) for the most part eventually attain higher levels of proficiency than those whose exposure begins in adolescence or adulthood. (Singleton 2003:3)

It has been Chomsky and others who have held fast to the idea of innate knowledge – the belief that children must be born with an understanding of what all languages have in common and consequently a language acquisition device (LAD). When considering adults, the question is whether this innate ability is still available beyond early childhood.

The idea of innate knowledge has not been totally refuted, even though Chomsky (1981) radically reconceptualised Universal Grammar. Now it is hypothesized as a set of principles which are properties of all languages in the world. Some of these principles have parameters – points where there is a narrow choice of settings depending on which language is in question. (Saville-Troike 2006:47-49.)

Other schools of thought have also proffered their beliefs and research on differences between how children and adults might learn L2. One area is that of brain imaging, comparing for example the brain of someone who has had early acquisition of L2 to someone who has acquired it later. However the results of such testing have been declared inconclusive (Marinova-Todd et al 2000: 17-18 as cited by Singleton 2003). Although children and adults have clear differences in their brains and in their cognitive systems, Marinova-Todd et al. (2000) are not convinced that magnetic resonance imaging or other brain-mapping methods are reliable. There is also the question of how to correctly interpret the results at this stage of this early science. (Singleton 2003: 17).

There are also other aspects of research into adult SLA that branch out beyond the fierce critiquing of the critical period hypothesis, and spotlight factors such as motivation, education, cross-linguistic factors not to mention general cognitive factors. For example, Marinova-Todd et al (2000), in reference to Ioup et al's (1994) subjects, have suggested that those older beginners who achieved high levels of proficiency, even native-like proficiency, possessed the common factor of extremely high motivation. Thus there is at present an investigation into other factors that might explain why some adults might learn L2 better at a later stage of life, than a child exposed to L2 before the onset of puberty (Singleton 2003: 16.)

To summarise this encompassing glance at second language learning in adults/higher education, the current conclusion would seem to be that learning L2 as an adult is not exactly the same as acquisition is for a child, but there are many possible overlaps. One query was also whether there are any discernable differences between adult and child. The evidence is in fact indeterminate according to Saville-Troike (2006), but this is also due to the different criteria various studies have used to determine what successful learning is. However there are indubitable advantages that younger persons have over their seniors when learning a language according to the critical period hypothesis, as

well as other points of view. For example, younger learners have brain plasticity - when the brain retains the capacity to take on the new functions that are required by language learning - whereas older learners' brains through physiological changes begin at some stage to lose it. However although it is indisputable that younger learners might ultimately achieve higher levels of L2 proficiency, there is compelling evidence that adolescents and adults learn faster in the initial stages. Adults also have the benefit of a greater learning capacity. Another counterpoint is that pre-pubertal learners have the advantage of not being analytical at that stage, and thus learn the structures of an L2 without questioning it too deeply. (Saville-Troike 2006:82-84.) It is also asserted that younger learners might thrive better in informal and naturalistic L2 settings situations, while older learners might do so in formal instructional settings with more structure. Another point of contrast is that children usually have fewer inhibitions than older learners when learning languages. However, older learners are able to make successful use of their analytical skills, and also possess pragmatic skills to possibly compensate for what they might now lack in guileless courage or risk-taking. Another advantage of youth which Saville-Troike (2006) summarises is that with less life experiences and a weaker feeling of identity, young learners consequently often exhibit a weaker group identity and are therefore more flexible and open to picking up a language and culture possibly alien to their own L1. When older, L2 learners can use their expansive knowledge of L1 to make comparisons, transferences and deductions (albeit sometimes falsely) from L1 to L2. At school, younger learners are more likely to be given simplified input tailored to their age and level of language acquisition. This considerably eases the second language acquisition. Another advantage that an older learner will exhibit is more knowledge of the real world. This enables them to carry out tasks of far greater complexity, even when their linguistic resources are fiercely limited. (Saville-Troike 2006:82-84.)

A thought to carry over to the next chapters is whether the instances of net-based language learning (NBLL) in higher education provide any of these conditions, and if one can put to use the strengths and limitations of adults according to SLA research. Most important though is whether learners feel that the context of learning (BL) is helping rather than hindering the learning and practise of the L2. This overall interest in learners' experiences is also evidence of a considerable opening up of the SLA field which is explored through a particular example and also through confirmation of this focal shift.

2.3.2 The chaos/complexity theory and social turn of language learning

Towards the end of the 1990s, Firth and Wagner's call to broaden the SLA borders and perspectives in their seminal paper (Firth & Wagner 1997) created a stir within established "mainstream" SLA circles releasing ripples of reaction, some of them particularly intriguing in light of this study. Swain and Deters (2007) interpret Firth and Wagner as arguing that

> …mainstream SLA theory skewed our view of language users and learners, seeing them only as nonnative speakers, struggling to reach the (assumed) goal of being like a native speaker (NS) of the target language. Other social identities of individuals […] engaged in using and learning an L2 were ignored. (Swain & Deter 2007:820)

Block (2007) claims that it was not Firth and Wagner's stance alone that caused a turn in the tide of a cognitive and psycholinguistic focus, but that their desire to expand into more social and contextual approaches "was symptomatic of a general move to expand the conceptual and epistemological bases of SLA" (Block 2007:872). However their paper was clearly a reflection of a shift away from this mentalistic approach of linguistics. A decade later the cognitivist approach is still to examine "how linguistic structures are

manifest in learners' performance and how learners' performance becomes increasingly accurate, complex, and fluent" (Larsen-Freeman 2007:781).

Larsen-Freeman was also one of those who branched out with her tentative exploration of the parallelism of SLA and chaos/complexity theory, itself originally from the field of physical sciences. An extremely brief exposition would be that chaos/complexity science is itself an interest "in how disorder gives way to order, of how complexity arises in nature" (Larsen-Freeman 1997:141). Larsen-Freeman's own interest was fuelled by a concern that SLA research was too narrow, and she feared "the reductionist assumption that by studying influences on the process in a piecemeal fashion, and then aggregating the findings, we would be able to explain the whole." (Larsen-Freeman 2007a:35).

In her own paper, in 1997, Larsen-Freeman presented her reasons why she believed SLA might benefit from adopting the chaos/complexity theory framework as a step away from the more systemic view of structuralism in SLA. Her initial interest commenced with the belief that language use and language acquisition are in reality dynamic, complex and non-linear, not as clearly structured as hitherto believed (Larsen-Freeman 1997). Using the framework of chaos/complex theory in order to gain a better understanding of how language works, as a chaotic system of its own, seemed and still seems reasonable (Larsen-Freeman 1997, 2007a, 2007b). Some of the features of complex non-linear systems studied in this theory that resonated with SLA, were its dynamism; complexity; sensitivity to feedback; and non-linearity among other points (Larsen-Freeman 1997).

There is no scope in this study to delve into these elements more profoundly, but by pondering one of these elements such as the dynamic nature of complex, non-linear

systems, Larsen-Freeman's argument seems plausible. To give an example: within the physical sciences, chaos theory examines the behaviour of complex, often changeable systems, such as the weather. First, there is the understanding that it is a dynamic process that is under investigation, not a stable, isolated and fully predictable state. In analysing the system, one recognises that the behaviour of the system itself arises from the interaction of its many existing components – it is thus always in a process of reaction and action to the other components present within the system, thus also contributing to the idea of randomness and unpredictability. (Larsen-Freeman 1997:142-143.) Language itself Larsen-Freeman argues is similar; it is 'organic' - subject to change and growth. When seen from "a synchronic, but also from a diachronic perspective, [language acquisition/use] is undeniably dynamic" (Larsen-Freeman 1997:147). These diachronic changes are moreover usually nonlinear and non-uniform (Larsen-Freeman 1997:147). Indeed, in more socially-oriented SLA, there is a curiosity to know "how language resources are deployed in social situations and how participation changes" (Larsen-Freeman 2007b:781). By picturing the components of language and its users being influenced by factors around it and also being active agents due to its complex and dynamic nature, the possible application of chaos/complexity theory becomes more tangible.

Larsen-Freeman's turning away from a more linear and predictable view of language learning suggests a change that might be described by Block (2003) as a social turn in language acquisition. This refers to a general trend post-Firth and Wagner (1997) that – very simply put - perceives the "need to conceptualize language learning as a social process – in addition to the traditional view that it [language learning] is a cognitive process" (Block 2007:867). At the time of her paper in 1997, Larsen-Freeman could not have foreseen the 'divide' that would ensue after Firth and Wagner's statement (1997). She suggests in her more recent work (Larsen-Freeman 2007b), that the resulting dichotomies in the cognitive-social debate could also be resolved by viewing language

learning and use through the chaos/complexity lens (Larsen-Freeman 2007b:782). Block (2003:3) interpreted this divide as being on one hand, between a primarily psycholinguistic approach, and on the other, one that is jointly psycholinguistic and social.

Thus there seems evidence in the field of SLA itself, of which Larsen-Freeman's foray is just one example, of a receptivity to conceptually versatile, and more socially-oriented studies of language. Swain and Deters (2007) state that there is clear evidence of this social turn. Over the last decade, four major influences which they list increasingly prioritise "sociocultural and contextual factors in addition to the importance of individual agency and the multiple identities involved in the process of learning and using an L2: sociocultural theory of mind, situated learning, poststructural theories and dialogism." (Swain & Deters 2007:821). The author of this thesis is herself clearly influenced by many of these same factors in her desire to examine how language users react within a certain context, and if the context has any affect on the use and acquisition of the L2.

2.4 Net-based learning

In net-based learning, and consequently in blended learning (BL), there is an array of theoretical perspectives and a mixture of conceptual applications. For example, there is evidence of a strong leaning towards perspectives of social learning, and especially collaborative learning, influenced by theories and principles from the field of knowledge management. Thus concepts such as Lave and Wenger's communities of practice have recently entered the picture, although their application is not yet widely spread and has come under some criticism even while others are lauding it as a feasible concept (cf. for example, Deepwell & Cousin 2005; Duff 2006; Guldberg & Pilkington 2006; Pöysä 2007).

Before such socially-based and collaborative frameworks became established or devised, Crook (1994) described computer-based educational activities as three metaphors:

i. computer-as-tutor (tutorial)
ii. computer-as-pupil (construction)
iii. computer-as-tool (toolbox).

Each one can be seen to contribute to an understanding of the role of the computer through the influence of successive theoretical foci: structuralist (i), cognitive/constructivist (ii), and socioconstructivist (iii). Papert (1980) and his associates were instrumental in reversing the metaphor the 'computer-as-tutor'. The most significant change in approach was that the computer was used now by the learners to serve their purposes and interests rather than the learners being led by the computer. Thus the computer was now a tool and a resource in itself. An example of this would be multimedia programmes where there might be video clips, sound, graphics as well as text. (Kern & Warschauer 2000:5-13.) This principle of the computer and now the internet, or web, has continued on in other applications of net-usage.

In addition to these, there is also clear evidence that the principles of socioconstructivism are being applied as well in this field. Dalsgaard and Godsk (2007) chose to use such an approach due to its recognition of learners as individuals who should actively and socially construct knowledge, while at the same time be self-governing in their work towards their goals.

Regarding the application of adult learning theories, the execution of net-based learning (NBL) in higher education appears to follow many of the principles and approaches of adult education. This applies to distance education where courses are often fully online, as well as partially online or integrated courses such as blended learning. According to research on net-based course types and goals, learners are encouraged to be as self-

directed and autonomous as possible, reflective and critical, and go beyond surface to deep learning processes; to learn in collaboration with others on- and possibly offline. Often these courses are learner-centred with the learners having some say in their choice of formulating their problem and possibly with whom they will work within the context of the course syllabus. Problem-based learning is particularly popular in NBL as mentioned by Felix (2002), and this is confirmed by its widespread use (cf. e.g. Dalsgaard & Godsk 2007, Donnelly 2006, Lee 2004) as it allows learners the possibility to learn in a social and cultural context through reflective criticism, decision-making and collaboration. The problems set are almost like a carrot, or in Vygotskian terms, a 'tool of mediation' which encourage the participants in a community of practice, for example, to become engaged in a mutual task, where they draw on each other's resources through joint enterprise, and their creation and use of a shared repertoire.

However, as with blended learning, there can be some disparity between meanings of terms. According to their review of the most oft-cited pedagogical orientations and methods of NBL in higher education, De Laat et al (2006) reveal that collaborative learning seems to be almost as popular as problem-based learning, even though both often go hand in hand and presuppose the inclusion of the other. However the term collaborative learning is predominantly used to depict "a setting in which all students are working in groups on a shared task or problem, in which they are expected to have equal contributions and participation." (de Laat et al 2006:103) and it is perhaps wisest to accept that definition as this seems to be the most common understanding of the term.

Computer-supported collaborative learning (CSCL) is also a term that often comes up in connection with collaborative web-based learning, and as its name suggests, addresses collaborative methods of e-learning and the idea of distributed cognition (Taalas 2005:15). One of its focuses is therefore on designing environments that enable

collaboratively constructed knowledge as well as the distribution of knowledge and sources, where the computer might be the central medium through which that happens or used in a part of the learning process. The thought behind it is that learning happens in interaction with others, through cognitive processes being distributed across the members of a social group rather than individual cognitive processes happening within the one person's head (Salomon 1993). Accumulated knowledge and any expertise are meant to be systematically shared and distributed. In practice in an online environment this would mean that learners interact together in reaction, for example, to a post on an online forum. Their learning is directed by "expressing their questions, pursuing lines of inquiry together, teaching each other and seeing how others are learning" (Stahl et al 2006:410). CSCL is not easily implemented yet, but the approaches it strives to represent are becoming a part of e- or web-based learning as well (Ibid 2006).

Research also points out in accordance with many propositions of adult education that in order for students to do well in net- or web-based environments, they need to be independent learners, intrinsically motivated, able to monitor their learning, as well as have self-regulation and time-management skills (Cherniavsky et al 2006). All of these involve metacognitive skills that often need to be taught or should be taught and encouraged prior to a learner taking their first web-based course, especially if it takes place entirely on the web. This brings us to a vital aspect of learning online or a combination of on- and offline – how can one design tasks that enable all of these to happen? They cannot occur by themselves as spontaneously as conversation between two good friends. They must be built and a structure provided in which the learning preferences and styles might more easily flourish. Therefore an overall concern in technology-enhanced learning is that of task design. Learning with no teacher or peers physically present all the time means that certain features of the learning environment must be more explicit and well planned than in a f2f classroom situation. In the latter, learners can and often do ask for immediate clarification, and a teacher knows that there are often those who rarely seem to understand instructions given only once. It is also

easier for the teacher to carry out any necessary changes by consulting with the learners in real time, but online this might turn out to be more awkward though not impossible.

There have also been investigations of net-based language learning (NBLL) and teaching, based on a sociocultural emphasis, which "reveal that learners' social and economic values, language proficiency, and electronic literacy contribute to the application of networked settings and the development of language." (Lee 2004: 85). Thus from a sociocultural perpective, language is used by individuals as a cognitive tool for socialization, and social interaction itself is used as a tool for cognitive growth. Citing Kinginger (2001), Lee (2004) summarises the idea of social interaction neatly, stating that it "is more than the action of one person delivering information to another; rather, it shapes and constructs learning through collaborative effort and scaffolding in expert and novice interaction" (Lee 2004: 84). Moreover, if a sociocultural aspect is followed in NBLL then this requires that the L2 learning environment, recognising that language is "a mediator of meaning and a means of participation" (Taalas 2005:16), must allow different types of learning and of course teaching practices "where form is a minor part of the message and where activities are multimodal and networked." (Ibid.)

2.5 The Net Generation – learners of the 21st century

When using some form of technology, whether low-level technologies like a CD-player and an overhead projector, or higher-level ones such as the more complex learning environment of a multimodal LMS, the focus should always be on the target audience – is learning achieved – and on whose terms? As the pressure to 'modernise' often comes from the higher echelons of an organization, it would appear at first that teachers are encouraged to make use of the latest gadgets regardless as to whether their students want to use them, or will benefit from using them. The motives behind the adoption of

more technology and subsequently less teaching staff might unfortunately often be to economise – to produce less teaching hours and more online work (cf. Dalsgaard & Godsk 2007, Felix 2001) and at the same time take in more students via online courses. However it is important to remember as Taalas (2005:66) states that "the wealth of available learning resources does not carry value as such, it is [a] pedagogical challenge to integrate these resources in various learning settings in a meaningful way." The challenge is indeed to not only know how to use the array of technological resources, but more importantly to know its potential users. What does research reveal about the 'Millenials' in our classrooms or those who are coming after them? It is important to note at this stage that much of the research done on Millenials has been carried out in the United States and not in a European context. There has also been the suggestion that this type of student might not yet exist in the same manner and magnitude within the States itself and certainly not outside it (Bennett et al 2008). The latter view will be examined in more detail later on in this section.

Nevertheless it seems fairly likely that in a similar fashion to the cross-over of American educational, social and popular culture trends to European shores, some of the characteristics of the American Net Generation will be seen in the near future in European universities. In fact there are already some signs of these traits in those who were born in the mid-1980s. Moreover the first ripples are being seen in the younger generations who are presently in Finnish primary and secondary schools, but again this is not a national phenomenon.

It is indisputable that the current generation in higher education and in upper secondary education have a different view of technology and its inseparable inclusion in their lives compared to the older generations and the faculty that teach them (Clayton-Pedersen & O'Neill 2005). They also have grown up and are growing up into a world which according to Gee (2004) is the 'new capitalism'. This is in contrast to the 'old

capitalism', meaning the values, structures and morals that the Baby Boomers have themselves been raised in. According to the social, historical, political and economical climate of that time (1954 -1964 according to Howe & Strauss 2000), knowledge and control were and still are distributed in a top-down system. Knowledge and control are in this view possessed by those in a higher position, with a middle management conveying and mediating knowledge, information and control between the top and bottom levels of a workplace to the workers. The point is that schools tend to mimic this order and control of information as well. (Gee 2004:95.) Further details of the 'old capitalism' are not relevant to this study, but some of the features of this definition, provide an illuminating backdrop for the high-tech and global world that today's children are living in – the 'new capitalism'.

Gee (2004) proposes that the new capitalism demands three types of 'design' that will enable people to manage successfully in this changing society. One of them has been mentioned earlier – 'affinity spaces' . The other two are 'identities' and 'networks'. (Gee 2004:97-99.)

Affinity spaces are defined as places where people, often separated by distance, interact virtually, physically or both, because of a common cause or content, and possibly through shared practices. Similar culture, gender, ethnicity or relationships originally formed on a face-to-face basis are not the primary reason for the interaction, but may play a part in sharing the space. There might be a lack of a personal bond, but there is a "shared affinity for a common goal, endeavor, or interest" (Gee 2004:98). To understand 'identities', we must place it in the context of products, services, and possibly even experiences being 'designed' so that they will "create or take advantage of a specific identity connected to specific sorts of consumers and one and the same individual might constitute several sorts of customers" (Gee 2004:97). Businesses therefore endeavour to create and sustain a 'relationship' with the consumer of such designed identities so that

they can always sell their 'identity' the latest model or service. 'Networking' is already a well understood term, but in explaining its meaning in the new capitalism, Gee (2004:99) adds an altogether more mobile and almost frantic tone to it. Although networking does mean creating links between people and organizations, it also means "creating links between people and various sorts of tools and technologies" (Gee 2004:99). We can already see in the development of social spaces like 'Facebook' that the tools and technology become in themselves 'nodes in the network' across which knowledge is now stored and simultaneously distributed. Gee (2004:99) further implies that "the more nodes to which one is connected the more information one receives and the faster one can adapt and change. Networks harness the power of *unfamiliarity*." This means that by networking with those who are unfamiliar one is more likely to encounter a greater distribution of knowledge, than if one networks only with those in one's own circles. Indeed networking in this sense seems to be a part of today's world both virtually and physically – more and more one is encouraged to cast one's net wider to see what 'fish' one might catch and how one's own limited knowledge might be expanded.

Many of Gee's notions describe well the idea behind situated learning for the Net Generation. Learning and interaction go beyond time, space, and culture, yet happen through diverse means of interaction, which are now enabled by technology. Howe and Strauss (2000, as cited in Oblinger & Oblinger 2005:2.4) have attempted to describe the traits of this mobile and flexible new generation as being likely to:

- welcome new technologies and be curious about their potential rather than view them as a threat
- be high academic achievers in terms of quality of work as well as performance
- actively seek out group activity
- be multi-racial and multi-ethnic; at least in the United States where "one in five has at least one immigrant parent"

- accept and even identify with their parents' values rather than reject them; and often enjoy a close relationship with them
- be unashamed of being and striving to be intelligent
- find themselves involved in various extracurricular activities, such as high profile internships or extensive community service to ensure a better place in graduate school or on the labour market.

If these are the students now in higher education the question naturally is whether their needs are being taken into account, or if the pressure of using the latest new pedagogical trend is being taken up without careful thought as to whether its use is being appropriately exploited. Based on inquiry into what and who the 'Net Gen' are, one telling cry from the mouths of students themselves has been for the environment of higher learning to present what online environments cannot – a chance for live, instant and stimuli-rich interaction and communication, with one's teachers and fellow students. Nevertheless, students are comfortable and used to making use of technology to carry out activities that are more fluid and less-time consuming. Many Net Geners claim, that today's university students are not interested in technology for its own sake, but for what it can do - its usability potential (Roberts 2005, McNeely 2005).

There is however healthy criticism of this seemingly audacious claim that a new breed of student has arrived. Bennett, Maton and Kervin (2008) set forth convincing arguments that expose the potential weaknesses in the overarching claims made by proponents of the 'digital divide' and a 'disengaged' student body (Prensky 2005). The first point of contention is the belied existence of 'digital natives'; and the second that the whole foundation of education must quickly adapt to meet the needs of this über generation. Bennett et al's (2008:2) overall argument is that neither of these points have been empirically supported, critically examined or researched through informed theory.

The first disputed case of whether there truly is a new generation with such sophisticated ICTs knowledge and skills has been tested against other research. In their survey of 4374 students in 13 American institutions, Kvavik et al (2004) found that although a high percentage (93.4%) owned their own personal computer, only 11.9% actually owned a handheld computer also known as a PDA. Furthermore, the main uses were equally (99.5%) for word processing, emailing, and surfing the net for fun. Bennett et al (2008) also found two studies carried out in Australia (Kennedy et al 2008, Oliver & Goerke 2007) that echoed the same as Kvavik et al's (2004) survey. Students had similar access to and use of ICTs, but a modest percentage used what was termed as emerging technologies, i.e. blogging (21%), podcasting (21.5%) or using social networking technologies (24%) (Kennedy et al 2008, Oliver & Goerke 2007). Kennedy et al (2008) and Kvavik et al (2004) also revealed there were significant differences in factors such as study discipline, ethnic or racial background, socio-economical profile and gender. There is therefore evidence that not all young people born between the years 1980-1994 can be defined as digital natives as proponents of the Net Generation would suggest.

The second point is interesting and valid in its own right as it presents the opinion that the idea behind educational systems' need to change, is actually a case of 'moral panic' as defined by Cohen (1972). Bennett et al (2008:6-7) are convincing in their argument that the apparent disaffection, disappointment and alienation of the Net Gen cannot be empirically proven, and that instead we should be looking at the lack of critical use of ICTs that students display. Bennett et al (2008) and the other authors' work which they cite, add a much needed and critical stanch to the argument of this study. These views will also be considered as questions of ICTs' use, design and learner preferences are examined in the following chapters.

Based on the above-mentioned theories of three different fields of learning and understanding culminated in this expansive chapter, one could summarise that any successful learning situation in higher education might include the following elements:

a. **Autonomy** – the learners would be allowed a part in the decision-making process ranging from course content to methods and applications of the material in recognition of their previous life- and educational experiences. They are capable of directing their own learning.
b. **Self-directedness** – the learners would be encouraged to learn for life, and with an awareness of their own learning strategies and styles (metacognitive awareness). Additionally with such an accumulation of educational and life experiences, an adult learner should be capable of directing their own learning. It is recognized that learning does not only take place in the classroom and with the teacher, but also during our daily lives in unplanned and often unconscious processes.
c. **Relevance** – it should be clear to the learners why they are enrolled in this learning process, and how the situation will help them to achieve their own personal, academic, or professional goals (mentioned as being important to mature students in transformative learning/Self-directed learning).
d. **Sense of and formation of community** – whether the learning situation takes place in a classroom and/or online, adult learners need the feeling of social contact and support from the course tutor as well as from their peers. In order to become a part of a community of practice and a community of inquiry, a relationship and discourse with others is needed, as well as a flexible environment where various communities can be formed and encouraged to dynamically develop and become self-sustainable.
e. **Flexible and suitable use of learning resources** – regardless of whether the lectures are all presented in PowerPoint, and all notes and lectures are uploadable as mp3 files from the instructor's wiki, the adult learner needs to feel

comfortable with the technology, and know that the instructor is using it to further pedagogical goals.

As the spotlight is turned on education at the tertiary level, many of the proposed principles of adult learning can be seen to be present in current teaching approaches in varying degrees. Much of the latest research and development of adult education concepts would appear to go against traditional teacher-centred, lecture-based learning as evidenced by the emphasis on the adult learner as an autonomous, independent and critically reflective participant in a community of learners. This comes more clearly to the foreground after examining the most widely supported theories.

In this chapter as the many theories, approaches and principles of three areas and one sub-area of education have been displayed, it is evident that there is a strong leaning towards similar and overlapping aspects of constructivism, with its additional elements of social and cultural emphases. This includes the by-products of social constructivism: situated learning and sociocultural theory. Although the theories of adult learning might not use the exact same terms as the more prominent theories of learning, there are often the same emphases: learning with and from others; inside and outside the classroom; with and without a teacher; that a person is a social, cognitive and affective, and even spiritual being who learns best when all these sides are taken into account and given room to develop through and during the process of learning. In my opinion, the change of learning environment to an electronic one is no longer as foreboding an issue as it was in the early 1990s, especially when one sees how much learning can occur regardless of the tools used and the environment in which it takes place. The approach taken by SLA research is too dissimilar from the other areas examined to really bind it well with their own concentration on how learning itself takes place. However, there is some help provided by socio-cultural theory and its emphasis on 'how' language is acquired. This might qualify it as a valid theory through which to explain how learning happens in on- and offline environments as blended learning's challenge is how

learning of language and content is aided or hindered through both mediums of f2f and computer-mediated communication. Blended learning, with its mixture of on- and offline environments giving time and allowance for f2f discussion, and enabling full use of ICTs might indeed be one possible solution.

In the following chapter, the back-drop to blended learning – technology-enhanced learning will first be examined, and eventually blended learning itself. As an overview of studies on blended learning will reveal, it is indeed a flexible mode of learning. This is in fact one of its strengths and many of those who use it often claim that it is the ideal medium for combining informal and incidental learning, as well as context-based learning with a strong socioconstructivist, and often purely constructivist basis. However, the aim of this research is not to compare, but to reveal what are the current underpinnings of blended learning research, and in that way ponder whether they are an approach suited to the current generation of students as defined by Howe & Strauss (2000) and in light of Bennett et al's views (2008).

3 TECHNOLOGY-ENHANCED LEARNING ENVIRONMENTS

Before embarking on a more in-depth exploration of new learning environments in language learning, the current array of technology-enhanced environments, applications and methods will be introduced to provide some background to the study's focus. In particular those forms used overall in higher education, including some used in language learning, will be presented here. Therefore one of the common virtual learning environments used in this area - learning management systems (LMS) will be more precisely delineated, and then a review of blended learning as defined in various fields in higher education will be examined especially with regard to learner perceptions of BLEs. In this chapter one of the central questions of this study is posed: What are the environments students are now living and learning in, and are teachers taking advantage of the Net Generation's ability to parallel process; enabling their desire to experience and by so doing learn themselves; and are teachers also encouraging interaction and learning with other students and not only individually (Oblinger & Oblinger 2005)?

3.1 Features of technology-enhanced learning in general

The definition of any form of online learning is of necessity vague as it covers many uses, but it does distinguish itself from other uses of the computer in learning. Further defining it as net-based implies that it is not computer software or CD-ROMs alone that are being used in the learning situation, but websites on the internet, or web-based learning environments or platforms. As mentioned earlier, this type of learning can come under several other names: web-based, e-, online, as well as networked learning.

Focusing on the use in higher education alone, the types of courses offered at almost any institute can range from the traditional – with some mainly administrative use (email and web searches) made of online technology, where most content is delivered and shared in writing or orally - to being fully online, when the course's content is completely or almost all delivered online with few, if any, f2f meetings between the instructor and students. This section examines all other types of net-based learning between those two polar extremes, commencing with the example of distance learning – where it all began.

Open and distance education were possibly the first methods that proved that learning alone, in isolation, and then later via computer software and then the internet could be done. Distance education by using ICTs as its medium could promise a more varied delivery of course material and even better access to a larger body of learners. The majority of distance and open education users have however often come from a certain background or been in some ways living under different circumstances from the average university student. For example, a distance student tends to be older (over 25-years-old), have a family, live somewhere other than where the university is located, and be in fulltime employment, thus making their study often part-time and drawn out over a longer period of time. It has been to accommodate such needs that online education first developed – the delivery and exchange of content via an electronic medium taking over that of postal correspondence. (Larreamendy-Jones & Leinhardt 2006.) Indeed online distance learning created in some senses "a new medium and a message of educational innovation" (Larreamendy-Jones & Leinhardt 2006:571), which has created a merging of traditional campus-based teaching and learning and distance education into everyday practices. Blending learning would have been inconceivable without this fusion. Larreamendy-Jones and Leinhardt (2006), after reviewing the history of distance education and its evolution into online education, make an excellent point that

> Just as technology in and of itself does not guarantee educational improvement, instructional quality is not necessarily breached by technological constraints. Educational quality certainly involves sensible use of media potential, but, most important, it also requires student engagement, a vision of what students need and should learn, and deep understanding of the subject matter on the part of the teacher. (Larreamendy-Jones and Leinhardt 2006:582)

This theme will continue to reassert itself as the juxtaposition of university students and pedagogical uses of technology is compared: students seem to still yearn for the quality of the learning experience itself to be upheld, not the quality of the tools used to bring it about (cf. McNeely 2005).

3.1.1 Examples of the latest features of net-based learning

Wikis are one of the latest additions of web-based software to be used in online learning. They are similar in function to LMS', but use simpler authoring tools and provide more autonomy for the designer and the users of the page. When you create a wiki you begin with a 'blank' webpage and due to its 'open architecture', and even with no or little knowledge of programming languages, you can have a website accessible to the public or just a few, soon up and running. One subtle difference and contrast between LMS' and wikis is the issue of cost and control. The license to use LMS software is often, but not always, bought and maintained by the institute that uses it, and opening a new workspace requires contacting the administrating team of the software. In comparison, wikis enable anyone to create their page directly on a website independently of any institute or administrator. Its attraction also lies in its open editing, meaning that other users may also change and edit the wiki. This software brings to mind Freire's championing of emancipatory learning, where learning would be in the hands of the common people and moldable by them and not only by a

privileged few. Users do not need to possess any technical savvy, but can easily contribute content as is already done on Wikipedia, a wiki itself.

Another addition to new learning spaces and environments is websites like ning.com which provide a web-based platform to create your own online **social utility website**, and in providing such a site it also enables and eases networking across social and geographical boundaries. Although *Facebook*, *MySpace* and *YouTube* are highly popular and perhaps best known among these types of social networking websites, ning.com was among the fore-runners in this type of environment and appears to have more forums with an educational goal in mind than *Facebook*, for instance. This of course can easily change and might already be doing so at the time of writing.

Another innovation is the use of **blogs** to promote educational learning goals. One example of this is edublog.org, a forum not only for educators themselves, but also for their students. The pedagogical use of a blog can be to allow authentic use of the language for communication, and/or collaborative activities with other students, or an even wider community. It could also be used as a type of course diary where students could evaluate and discuss course-initiated themes, as well as naturally present course feedback – in other words an online language learning diary that can be public or private.

The use of **podcasts** is another popular online application that could be and is being used for foreign language practise as well as other learning situations. Podcasting is defined as "the process of capturing an audio event, song, speech, or mix of sounds and then posting that digital sound object to a Web site or blog in a data structure called an RSS 2.0 envelope (or 'feed')." (University of Missouri White Paper, Meng 2005:1). It is considered to be a viable method of information distribution and use, as it is relatively

easy and inexpensive to create, upload and download. According to the White Paper, several uses of podcasting that can be used in higher education learning are

- to record and distribute news that can be broadcast over a whole university campus and for the general public
- lectures can be recorded directly onto students' MP3 players, or downloaded directly by students from the instructor's website
- teacher's notes or discussion notes can be recorded for later reference
- in a foreign language pronunciation or communication skills module, students could upload their recorded tasks for the instructor to listen to on their MP3 player. (Meng 2005:5.)

Despite the fact that these new tools and applications might be termed 'new technologies' by older teaching staff and older generations, Oblinger and Oblinger (2005) make an acute observation when they surmise that to the average young American college student "…blogs and wikis, are not thought of as technology…The activity enabled is more important to the Net Gen than the technology behind it." (Oblinger & Oblinger 2005:2.10)

3.2 Features of learning management systems (LMS')

Learning management systems (LMS') have been chosen as the focus, for in most of the studies reviewed, these are the most widely utilised forms in which computer-mediated communication (CMC) takes place. LMS' are generally known as web-based platforms, or virtual learning environments (VLEs). The online environment is positioned at a particular site on the web usually maintained by the software company that created it, and bought by various organizations or educational institutions for their own use. LMS' are also called course management systems which is an accurate description of how they

are usually used: to organize and manage the content and execution of individual courses, as well as to provide a means of assessment and feedback. Based on the author's own personal knowledge, the University of Jyväskylä has made wide use of LMS' such as Optima, Moodle and WebCT. There is unfortunately no empirical information known to the author of how widely these are used in Finland. However a report carried out by G. Morgan (2003) for the University of Wisconsin Systems (ECAR Key Findings May 2003), suggests that within the United States, use of these types of web-based learning systems are quite wide, and well-documented. It has become for many teachers a standard tool in a web-enhanced course.

An LMS will typically be situated on a closed website that is open only to students that have been selected by the course instructor. The environment is usually molded by the instructor within of course the limitations of the LMS itself. There is usually a main page and then an anchor positioned to the side of the opening page. The anchor is most often where features such as Discussion folders or forums are placed; course material and information either in the form of simple text-based pages, PowerPoint slides or links to other sites; audio and/or video clips; a course calendar; individual student or group folders. The instructor may allow or severely restrict what students may do and create within its parameters. Although the design and capability of LMS' are improving there is often a limit to what can be done, and this is why some colleagues are turning to wikis as their course websites rather than LMS'. In terms of course administration and organization there are however also many advantages in using this as one of the modes of blended learning.

3.3 Features and types of blended learning environments (BLEs)

The features of the broader systems and technology in which blended learning takes place have been explained, so as to place each subsequent and selected article into some

place on the continuum of what blended learning might mean. Blended learning seems to have gained enough credit to warrant conferences based on that alone, for example, the now annual University of Hertsfordshire Blended Learning Conference. At a first glance of the available literature on blended learning, it would appear that many blended learning courses are put together with little support from colleagues, tech support or those with knowledge of sound web-design. Instructors might be confident of how they plan and execute f2f sessions, but the net-based portion and its contents vary, or may often appear to serve the same medium as a book would.

A report commissioned by the Sloan Consortium (Allen et al 2007) on the use of blended learning in the United States classifies tertiary level courses according to the degree of use of online activities. For the purposes of their own report, the categorizations are rather broad beginning with courses placed into the slots of 'traditional', 'web facilitated', 'blended/hybrid' to 'online'. Their attempt to more narrowly define what is blended by the percentage of online time or rather proportion of content delivered online, is a useful one and much needed. This means that a traditional course would have 0% of e-learning, web-facilitated 1-29%, blended/hybrid 30-79%, and finally online 80+% (Allen et al 2007:5). For this study this definition of a blended course including 30-79% of a course's total content delivery is the one used to rule out studies or references to other types of web-based instruction that did not appear to possess this proportion or omitted such details.

A blended course might be composed of any number of elements, but the most common set-up is a mix of f2f sessions and online sessions. The former are tasks done synchronously i.e. f2f discussions and/or instructor-led sessions in class. These types of sessions at the beginning of a course's span often serve as induction sessions to familiarize students with the LMS or other technical tools being used, and to encourage initial socialization and community formation (e.g. Delfino & Persico 2007, Motteram

2006). However synchronous tasks might also be done online with participants meeting in a discussion space at a pre-ordained time to interact in real-time (e.g. Cox et al 2004). Additional face-to-face meetings, such as lectures, might be arranged formally as part of the course's content-teaching (e.g. Delfino & Persico 2007, Ginns & Ellis 2007); or f2f interaction might be encouraged to take place in students' own time in the form of informal meetings and discussions outside class (e.g. Motteram 2006). Asynchronous tasks are usually made up of online forum discussions either on set topics or set around a problem or question, which be solved individually or collaboratively (e.g. Donnelly 2006, Cox et al 2004). The difference naturally of these types of tasks is the freedom of the participants to act and interact when they can. These types of tasks can however include a more traditional element such as uploading assignments, and finding course information and lecture notes from the LMS, if one is used, as well as following hyperlinks to online material for any course reading. It is however widely accepted that blended learning does not mean the simultaneous use of ICTs in class. Such use within the classroom is understood to be technology-enhanced or web-facilitated learning and is becoming a common, and in fact, natural element of today's classrooms, at least where the instructor makes use of ICTs, and in some sessions where the students are simultaneously at their own pc stations or with their own laptops.

Forms of BLEs can also differ according to the *lead mode* chosen, meaning that either the f2f sessions or the net-based ones are the central vehicle through which the course content is shared, distributed and deepened (Kerres 2001 as cited by Neumeier 2005). This is a vital element of the design and implementation of a BLE as the lead mode will act as a type of main learning path which the student follows. Content should be organized, distributed, and negotiated in the lead mode, thereby encouraging the students to naturally work or interact most within the chosen mode. (Kerres 2001:277). When creating her own BLE for an English course, Neumeier (2005) evaluated the learning aims, students and teachers, as well as the infrastructural resources available before deciding on her lead mode. Other variations of BLEs can occur in other ways

such as the *order of the two modes* e.g. in a course where net-based learning is the lead mode, every third session might be f2f and the majority of the sessions online. There is thus no uniform structure to BLEs that are used, but that is one of its advantages – one can plan it according to the skills, familiarity, interests and needs of its users and designers.

3.3.1 Why blended learning? Reasons and explanations

Broadly speaking, BLEs have been often adopted with an experimental approach in order to tackle different issues of higher education and in response to advances in technological innovations and the changing student profile. The different uses of blended learning appear to be:

- as a key to keeping distance and on-campus students involved, motivated and supported (e.g. Hughes 2007, Romano et al 2005)
- to support deep and meaningful learning (e.g. Garrison & Kanuka 2004, Motteram 2006)
- to enable the formation and maintenance of communities of practice and learning (e.g. Motteram 2006, Rovai & Jordan 2004)
- to reduce classroom time and indirectly downsize teaching staff (e.g. Dalsgaard & Godsk 2007)

BLEs are also in keeping with current constructivist and sociocultural approaches focusing on higher order thinking skills; learning in collaborative settings and in communities; the negotiation of meaning through interactive discourse; and a critical construction of knowledge based not on what is fact, but also on the more intangible features of social and cultural mores. Therefore BLEs are often designed with these

approaches in mind, but as one can see in the latter example (Dalsgaard & Godsk 2007), economic issues in higher education have also crept in.

However the primary question is whether this mode of learning is what today's students want and if it will optimize the learning process and experience. It therefore follows that any studies that have investigated the 'fit' between blended learning and today's university students, are of great help. It should be pointed out that some of articles selected below have not focused solely on the student experience of blended learning, and mention of this is almost done in passing, nevertheless some picture can be formed. This lack of interest in students' experiences of ICTs in research is strangely at odds with the so-called student-centred shift that we are meant to be following currently in education. Instead much of current research into ICTs appears to have focused on the use and effectiveness of new learning environments rather than what the recipients of these technologies have thought. This thesis is in its own way an attempt to begin to redress this imbalance.

3.3.2 Students' reactions to blended learning in higher education

Overall reactions to BLEs by students seem to be often determined by their life situation, their familiarity with ICTs, rather than only by the matter or content being learnt. Although BLEs might have initially been a method of presenting distance students with more learning options, especially as ways of motivating them to finish their course or/and degree, they seem to have become firmly established as ways to reduce classroom hours, facilitate and accommodate to varying adult learning processes and allow all students more freedom and flexibility in time, place and pace.

In Motteram's (2006) case study of an in-service teachers' course on technology and language teaching (as part of a Masters degree programme), the study was conducted over a period of a couple of years allowing for course structure to be modified, and for experiences and reactions to be compared over that time period. The participants were on the whole very positive about their blended learning experience, and when asked, 78% stated their preference for a "mixed diet", although the composition of this mixed diet varied (Motteram 2006:28). There were apparently few negative reactions, and those that were, were balanced out by the overwhelmingly affirmative reactions. Participants in this study enjoyed such features as being able to organize and process the topic and tasks in their own time; they also felt that they learnt new skills (generic and online), and in keeping with the course theme (technology and learning), also gained better understanding of the function and purpose of online work (Motteram 2006:24). Motteram interpreted these and similar remarks by participants as signs of deep learning having taken place, a significant goal in higher and adult education. The conclusion of his research was that blended learning can help promote the deeper learning processes deemed desirable at this level of education, but there are also other factors that need to be taken into account. For example, the backgrounds of the students and their day-to-day lives can have a huge impact on whether they are able to carry out the tasks assigned in the time available. Another noteworthy point was that even if the level of activity in the online discussion forums seemed low, it was likely that other means, such as f2f discussion, were being put to use. (Motteram 2006:29.)

In another study, the link between sense of community and blended learning was specifically examined (Rovai & Jordan 2004), with a comparison also made between traditional and completely online courses. Rovai and Jordan's (2004) motivation was the belief that universities are shifting from being instruction- and learning-based, to valuing and acknowledging the importance of community among learners, and the need of capacitating learners to become critical thinkers with good self-autonomy skills (Rovai & Jordan 2004:1-2). The choice to use blended learning was dictated by the belief

that as an instructional method it "offers students both flexibility and convenience, [which are] important characteristics for working adults who decide to pursue postsecondary degrees." (Rovai & Jordan 2004:3). Thus the choice of blended learning lay in its flexible course design and its promise of giving the students the best of both worlds: online distance learning and f2f contact. As mentioned, blended learning and the sense of community generated by it was studied in parallel with fully online and fully traditional courses. The answer to their particular research question was as predicted, that in comparison to the completely online course, stronger feelings of community were evidently present in the blended environment. It was felt that the reasons for this were due to the limitations and frustrations created by online courses and also by traditional courses. However there were clear advantages of the online mode for some types of students, which then contributed to their experience of the course as a whole entity. An example would be that introverted students who might not have otherwise got their voice heard in f2f situations could interact more easily via discussion forums in their own time and peace, and thus feel that they were active participants in the course dialogue, and thus part of the learning community. Another noteworthy aspect in favour of the BLE was that online learning did not suit those learners who are in need of more visible support and interaction from peers and instructors, in other words, less independent and self-regulated. The BLE provided the motivation and support to encourage them to learn and interact, but at the same time gave them the freedom to do other tasks when they could. In conclusion, student experiences of the BLE were all positive. (Rovai & Jordan 2004:9.)

Three questions were asked of students in a Turkish university regarding a blended learning course they attended: 1) What were their views about BLEs; 2) what were their views about BLEs in regard to their level of achievement; and lastly 3) what were their views in light of their frequency of participation to the online forum (Akkoyunlu & Yilmaz Soylu 2006:4). This is perhaps the only paper in this review that actually directly gathered and examined students' views about BLEs. The structure of this hybrid course

was created with the goal of maintaining a balance between both modes of learning. In other words, it was established early on during the course design phase, how many times and in which environments certain tasks should be carried out such as discussions. F2f sessions took place regularly every fortnight, and online work was organized and implemented through a simple web-based environment created especially for the project with upload and download functions for certain materials, and then a discussion area. The students were given questionnaires and also open-ended questions throughout their course in order to record their reactions not only to the instruction method itself, but also capture the reactions to the different implementation processes. Akkoyunlu and Yilmaz Soylu (2006) were optimistic that a BLE would bring together the best of both modes of learning, f2f and online, by offering solutions to the weaknesses of either mode and appealing to different learning preferences. For example, students would be able to more easily discuss and ask questions depending on which environment they felt more secure in, according to their learning preferences, and yet still have the chance to feel that they were part of the developing course dialogue.

The results of this small and short-term study (64 students during one university semester) cannot be generalized due to the limits of its scope, however they do seem to echo many similar points of view. To explicate further – the f2f sessions and interactions with the instructor and fellow students were paramount to the students' satisfaction. Students felt that there they could build up on what they had not understood online. Akkoyunlu and Yilmaz Soylu (2006) interpret this response as meaning that students are more familiar with learning in contact sessions and therefore felt more comfortable with that as their 'anchor' to learning in the web-based learning space as well (Akkoyunlu & Ylimaz Soylu 2006:6).

Some of the positive remarks that the students presented on BLEs was: the responsibility that was given to the learner; the facilitation of learning research skills; the

access to course materials; the chance to ask questions online in the discussion forum whenever the student wanted; and the importance of the f2f sessions to discuss and negotiate. Negative remarks tended to be made by those learners who needed more regular social contact to retain focus and motivation, and were not comfortable with working via the computer. It is true though as Akkoyunlu and Yilmaz Soylu themselves remark that it is those students who understand the purpose and possibilities provided by working in a web-based environment that benefit the most from it (Akkoyunlu & Yilmaz Soylu 2006:8). In this particular study it was concluded that the most positive views of BLE were expressed by students who did well in the course overall and participated frequently in the online discussion forum. It is however undoubtedly because those students were already comfortable with the format that explains why they were so active. It was also noted that the need for interaction and communication was greatly needed by all. If this did not happen online for some reason, and was not facilitated often enough in f2f sessions, those students already wavering possibly felt even more daunted by the new learning environment.

The course design elements most appreciated by adult learners, were the key foci of Ausburn's (2004) study. This meant students over 26-years-old and classified as 'non-traditional'. Her expectation was that if certain preferred adult learning elements are present in a BLE then it is likely to prove suitable for such learners. The BLE was one of the most commonly structured type of BLE courses, with f2f sessions dotted across the course timeline i.e. the pattern of the two modes was: f2f, online, f2f, online and so on until the end of the course. The course design also included autonomous study, and collaborative work done via an LMS, the web-based platform of Blackboard. In addition to taking adult learning preferences into account, Ausburn (2004) also required that all participants take a self-test assessing their learning strategies: ATLAS (Assessing the Learning Strategies of Adults) developed by Conti (2003). This test divided learners into Navigators (41.8%), Problem solvers (34.3%) and Engagers (23.9%) and this was taken into consideration when analyzing what the participants assessed positively or not in

the blended course. The top five elements of preferred course design were: freedom of choice in individualization or customization in learning; a variety of assignments and learning activities; the facilitation of self-directed learning; the enablement and encouragement of active communication and interaction among the students; and finally, the provision of good '2way' communication between the students and their instructor (Ausburn 2004:331). Ausburn does not however presume to give a 'one-fits-all' solution, but cautiously concludes that the choice of course design, and thus techniques and instructional mode, should always stem from who the target learners are - How well will it answer their needs and preferences? There were significant differences in how the learners in her study responded to the BLE and these differences seemed to be governed by learning strategies, previous experience with technology and self-directed learning, and even by gender (Ausburn 2004:335).

In summary it would appear that generally speaking the BLE has been received with open arms by its users, although the designers and instructors of these various types of BLE are aware that there are a myriad of factors to take into account, such as learner styles, age, gender, and previous ICTs-experience to name a few. How does this answer the initial question of its suitability as one possible form of learning for the Millenials and other learners? A confident response would be that

> Blending learning provides a unique opportunity to bridge generations, providing the face-to-face contact requested by Baby Boomers, the independence preferred by Gen-Xers, and the interaction and sense of community desired by Net Geners. (Hartman, Moskal & Dziuban 2005:6.10)

Therefore there is hope that this mixed learning might not only allow the Next Great Generation (Howe & Strauss 2000) to learn in a manner natural for them, but also allow more mature students an easier introduction to a campus of 'bricks and clicks'.

One final observation on blended learning is its validity as an instructional model in a category of its own. Although it is and has been described as a combination and mix of

f2f and web-based learning, the studies we have read above reveal that it works best when both 'parts' of the learning environment are integrated and work together as a seamless whole – that the BLE is fully integrated. As to whether we have got there yet, is another question altogether.

In the next chapter, the use of blended learning in the foreign language learning classroom is more closely examined through studies done specifically on BLEs and foreign language learning. In addition the author's own experience and example of use of blended learning will be commented on to give a Finnish higher education perspective on foreign language learning in BLEs.

4 CALL AND BLENDED LEARNING

Although there are not a substantial amount of articles published on blended learning in foreign language learning (FLL), its popularity seems to be gaining based on in its increased inclusion in international conferences, such as EUROCALL and other conferences that cover matters of educational technology. However it must be stated at this point that learning languages and learning subject matter through BLEs cannot be regarded as being completely parallel learning situations. Learning a foreign language means priming, using and developing tools of communication, which at tertiary levels of education, are often used to share or gain subject knowledge. The requirements made on the learner are different and consequently the parallel use of an online environment and traditional f2f situation might also have a distinct and subtle impact on the L2 use and practice. It is probably hard to contest the notion that learning languages should include and demand a more dynamic socio-cultural approach, and at this stage one can presume that a blended environment might give the best of both worlds: one can design situations "where language is used as a mediator of meaning and a means of participation...where form is a minor part of the message and where activities are multimodal and networked" (Taalas 2005:16). Blended learning offers such a promise, the means of learning and practice becoming almost invisible and the learning community itself a living and evolving hive of activity. This chapter follows a similar pattern to the previous one - before dissecting BLEs in foreign language learning (FLL) and making the most relevant parts known, a brief overview of the history and theoretical basis of Computer Assisted Language Learning (CALL) is required to again set the stage for understanding how blended or hybrid learning fits in, and is in fact a response to the wider development of new language learning technologies, as well as to new attitudes in education at the tertiary level. Then three very different studies of BLEs in FLL are examined for their content and their contribution to the question of learner

suitability. These are put in contrast to the author's own informal study of BL carried out from 2002-2006 on one of her own courses.

4.1 Computer-assisted language learning (CALL) – expanding the perimeters of the L2 classroom

Computer-assisted language learning has emerged as a growing branch of research and learning with a history of its own. Although its development has grown symbiotically with net-based distance learning, it has also strived to accommodate to the unique demands of learning and developing in a foreign language in new learning environments. The story of computers and language learning begins already in the 1950s when computers were the large mainframe type that would fill a whole room. These mainframe computers were only available at research facilities on university campuses, and thus not easily available for use in language learning. (Beatty 2003: 16-17.) The intermingling of languages and computers occurred through research on machine translation programmes (using computers to translate from documents from one human language to another), which would, according to Beatty (2003:17) have a direct influence on CALL. It was through such early instances that it was noted that mechanical translation would encounter problems with "sarcasm, puns, innuendo, idiomatic expressions and rhetorical devices" (Beatty 2003:17). Towards the end of the 1950s the Programmed Logic/Learning for Automated Teaching Operations (PLATO) system was developed. The significance of PLATO in comparison to other computers used in L2 learning, was that PLATO was specifically designed to learn languages, compounding all the best possible CALL attributes available at the time. It was used to teach Russian using the grammar translation method, and as Beatty (2003:18) notes is still in much use today.

As educational methods were at that period very much behaviourist thus language learning programmes reflected the same approach and were basically linear in the same manner as books; tasks and exercises were presented in a manner that "did not take advantage of the special features of the computer" (Beatty 2003:19). In fact programmed instruction and mastery learning are two concrete examples of behaviourist pedagogy (Beatty 2003:77). A slow, but significant foreshadowing of today's interactive online games was the development of simulations with a clear linear, constructivist approach. Simulations were (and still are) based on the learner going through different situations with varying degrees of realism, such as the central character in *Á la rencontre de Phillippe*. Through various tasks the learner takes part in the narrative, which might involve, for instance, helping Phillippe find a flat. (Beatty 2003:31.) In these simulations the learners can use what they already know to cope with the diverse language tasks, thus bringing in earlier knowledge constructs. The learners are also encouraged to learn through non-threatening trial-and-error and by exploring different routes. Eventually by the end of several sessions, a learner would ideally see the consequences of their linguistic choices and input. (Beatty 2003:19-20.) Such applications brought to the fore more choice in reaction and range of language contexts.

> The importance of simulations, with different avenues of exploration, is that they create challenges for learners to explore multiple links (over successive sessions) and see the consequences of different actions and inputs. (Beatty 2003:19-20)

When thinking of online learning environments and also of online games, the same principles still apply. Games, for example, allow comparable options and solutions to be made by the learners themselves allowing a freedom to act using one's own knowledge and judgement, but also by building on what one learns during the gaming situation (cf. Gee 2004). One additional advantage of simulations has been their opportunity to learn without losing face, one learns through frequent trial and error, and even possibly with others in a collaborative manner if the simulations are done in groups. Simulations, as Beatty (2003:20) points out, do have their disadvantages as well, such as lulling learners into a false sense of security and not providing that extra frisson of stress that makes one

more likely to remember and learn. One important feature in simulations is their level of 'fidelity'. 'High fidelity' in a simulation would mean that there is a very close parallel to reality and realism, requiring less imagination on the part of the participant (Merrill et al 1996:93 as cited by Beatty 2004:21). The effectiveness of this method in language learning still has its pros and cons, and is mirrored in multimedia CALL today. PLATO laid out the path for other educational software developers to follow once its own use was replaced by better systems and hardware. (Beatty 2003:22.)

During the era of the 1970s and 1980s the rate of advancement in technology began to speed up. The range of computer hardware expanded from large mainframe computers to mini-computers (now known as 'servers') to microcomputers (current desktop or personal computers, and including portable or laptop models). Mainframe computers were still used in CALL research during this period, but one shift of focus was onto methods of high-volume storage, in other words, videodisc technology. The strengths and new versatility of videodisc in comparison to videotape were and still are "rapid access to multiple points or 'chapters' on a disk", "better pause, or freeze frame" as well as features that allow one to freeze a frame at a time (Beatty 2003:23). CD-ROMs were the next step in storage sophistication and at this point in time, DVDs provide even more possibilities in terms of storage capacity and quality in image and sound. (Beatty 2003:23.) The videodisc was revolutionary in its offer of audio-visual elements of language learning which meant more social and cultural clues in context, as well as a higher degree of authenticity (Beatty 2003:24).

The next stage of evolution took place in 1983 when the Athena Language Learning Project (ALLP) was introduced. It did not rely on mainframe computers or videodisc technology, but on Universal Interactive eXecutive (UNIX) workstations which were all connected to each other and also to "textual and visual databases through a local area network". (Beatty 2003:26.) The ALLP system has certain advantages which are listed by

Murray et al (1991:101 as cited by Beatty 2003:27): 1) encyclopaedic information can be recalled much faster due to the speed of UNIX; 2) many models of authentic and culturally-situated language are now available and displayed by many speakers; and 3) an element of interactivity "usually associated with more primitive drill-and-practice routines" is present. Many software programmes in their list are rarely purely behaviourist or constructivist, but will often combine both in order to accommodate learners at different levels of cognitive development (Beatty 2003:27). A concrete example of this would be an exercise where a task is presented, and the learner has a choice of routes to take according to their ability. For example, learners who are or feel less proficient ordering a pizza with various toppings in the online situation, can first browse and practise discrete language items, such as vocabulary, phrases and possibly pronunciation, before engaging in the task itself. A more proficient learner might instead browse for new vocabulary items to add some more colour and challenge to the task, thereby increasing the level of demand. A few of the projects that developed out of ALLP and which are mentioned by Beatty (2003) – *No Recuerdos* and *À la rencontre de Philippe* – are examples of forerunners to some contemporary language learning simulations and adventure games. They include realistic situations, where one responds to certain main characters by clicking on a visual response. (Beatty 2003:27.) There is also a sense of adventure and real life use of skills and language awareness in the "relatively unstructured opportunities to explore the resources and to solve problems" and "the need to negotiate meaning from disparate sources of information". This development of more flexible parameters in CALL software might well reveal the nascent influence of more socially and culturally constructed approaches in learning.

Another development of the 1980s was the availability of desktop models with applications for use in the classroom. This change meant that for the first time teachers could themselves attempt to create their own basic CALL applications for their own needs. Simultaneously computers began to move into lower levels of education as well

(hitherto most use of computers had been at tertiary level) and this meant the rise of commercial software programmes. (Beatty 2003:33.)

Finally this recap of history must mention the significant arrival of the Apple Computer's Macintosh in the mid-1980s. It was alongside this new graphical user interface (GUI) and use of visual icons representing common commands, that an innovative materials authoring programme, *HyperCard* was developed by Apple Computer. HyperCard, which has since evolved into other more flexible and feature-laden versions, was extraordinary in the way it worked. Its ability was to create a set of easily cross-referenced virtual index cards, containing amongst other things, a choice of text, images, video and audio features as well as animations that could be programmed into these cards. (Beatty 2003: 33-34.) As Beatty (2003) explains "it was among the first applications to take advantage of the theoretical hypertext and hypermedia capabilities of computers and allowed teachers and learners to create their own CALL applications" (Beatty 2003:34). This was indeed a significant step forward for computer-based education in general and CALL. Hypertext is believed to have been influenced by a constructivist model of learning and schema theory, however there are again aspects of a behaviourist approach present:

> …while the behaviourist model might use hypertext's special features only to link text with explanations, tests and answers, the constructivist model might consider the same features and use them to encourage learners to collaborate over the structure and the sequence of their own learning. (Beatty 2003:38.)

Schema theory needs to be briefly explained at this point, before going on to the further evolution of CALL, as schema theory has been a central part of design in CALL (Beatty 2003:38). The main premises of this theory propose that "the knowledge we carry around in our heads is organized into interrelated patterns. These are constructed from all our previous experiences and they enable us to make predictions about future experience" (Nunan 1993:71). It is because schema theory appears to reflect the organisation of hypertext, hypermedia and multimedia, that it is seen as having a great

influence on how CALL could be designed (Beatty 2003: 94). It also marked a change from largely behaviourist learning models such as programmed instruction and mastery learning to the ideas of collaboration and negotiation of meaning in constructivism. The main difference between these two and how they are present in CALL is that behaviourism supports learning by rote, step by step, memorization through repetitive drills and techniques of mimicry with a small reward of some kind being given at the end of a successfully completed task, such as being allowed to proceed to the next level. (Beatty 2003:85-94.) Constructivism in CALL, as is explained in more detail further on, attempts to take into account the fact that learners come into the situation with their own schemata, but are encouraged through the learning to build new ones and also expand on the old (Beatty 2003: 94).

By the 1990s the variety offered in a CALL multimedia environment had greatly increased including a sense of what kind of guidelines could be followed in developing such environments. Murray et al (1991) supply some guidelines for what useful narrative-driven multimedia learning environments could entail. A few examples of these that might be reflected in CALL materials are explained as follows: allowing a "multiplicity of plot events" meaning that the learner should be allowed many choices to direct the unfolding of the narrative. This supports the idea of the learners being an active part of the narrative and not just passively following a pre-set learning route. "Multimedia for presentation" is especially relevant – as different forms of output are offered, e.g. radio, newspaper or telephone. This encourages interaction with authentic material in the L2, and again might be a way to motivate and encourage. A step away from the behaviourist models is "intrinsic rather than extrinsic rewards" – the aims of learning the language and completing the tasks are actually one and the same, thus encouraging the learners to work through them. One other suggestion in Murray et al's (1991) list that is surprising, but sounds welcome is "whimsical surprises". To refresh and entertain learners such diversions do not only make the learning a little less mechanical, but might also be a way of leading the learners into new avenues of

exploration they might not have otherwise considered. (Murray et al 1991:97-118 as cited by Beatty 2003:34-35.)

The next stage in the 1990s naturally included the rapid development from a primarily text-based internet to the one we know today, the World Wide Web, which makes full use of multimedia applications that go beyond working alone and in one 'space', thus as already mentioned the idea of learning with others gained ground also through the software available.

Today, net-based language learning works well with most of the current tenets of foreign language learning as it is most often collaborative and communicative, in other words, as mentioned in Chapter Two, a computer-supported collaborative learning (CSCL) approach. Nevertheless as Beatty (2003:36) affirms there is still a preponderance of behaviourist models in CALL due to the simple fact that computers themselves work better along those lines. Though there may be some truth to this claim, there are signs of an effort to get away from this model and choose one that favours more socially-situated forms of learning. The most common online tool as described in Chapter Three, used to facilitate more collaborative approaches is the use of learning management systems such as Optima, WebCT and others. It is now taken for granted that just as our first language was not learnt in isolation or in a completely artificial environment, other languages are picked up or at least should be practised in a similar manner – in social, cultural, historical and situated contexts, in communication and interaction with others, and in authentic contexts. Thus a large number of online courses are executed with the use of collaborative software encouraging largely problem-solving or problem-based, and inquiry-based activities in groups or pairs.

This accords well with Felix's (2002) statement that there are currently three parallel and often intertwined approaches in CALL that reflect the same influences begun earlier:

constructivist; problem-solving and collaborative learning. Felix citing Hannafin (1997) says that "All have a feature strongly in common: a move away from static transmission models for knowledge and skill acquisition that are based on traditional cognitive learning approaches which emphasise learning as an incremental mathematically-facilitated process." (Felix 2002:6). The last two approaches she mentions can be seen to be part of modern constructivist theory. Moreover as already discussed in sub-chapter 2.4 very often all three occur within a course of net-based learning (de Laat et al 2006).

It is probable that the constructivist approach in net-based learning is nowadays also strongly influenced by the predominance of cognitive constructivist principles in the field of knowledge management, and the reliance on cognitive aspects of planning and forming communities whether online or off-. Language is thus viewed as a mentally constructed system and the learner "builds an internal representation and interpretation of knowledge by internalizing and transforming new information" (Chun & Plass 2000: 160). Moreover such an approach encourages learners to build up their own information and create their own relationships at the same time as they interact directly with the information that must be learnt or interacted with online through a learning management system (LMS), or directly through a website. From this angle the learner is "an active processor of information and constructor of new knowledge' (Ibid.). The L2 learner is taught to develop their own communicative and learning strategies, and as meaning is located in the learner's mind this happens through activation of existing knowledge (Kern & Warschauer 2000). Constructivist approaches of CALL in general tend to pass agency to the learners: the learners are expected to resume responsibility for what they are learning and how they are learning it. The computer and software are just the tools of mediation with which to further their learning goals.

The prevalence of constructivist perspectives is indisputable, but there is also evidence of a more socioconstructivist angle as well in CALL. From this vantage point, the

computer is now a perfect tool for interactive human communication where the context, culture and social interaction are included in the design of the environment and its participants. These are, in theory, successfully exploited to acquire the L2. The advent of computer-mediated communication (CMC) and globally linked hypertext (the World Wide Web) have both lent themselves well to this aspect of net-based learning with the formation of collaborative learning communities, where interaction is easily facilitated. (Kern & Warschauer 2000.) This is, for example, also one of the proposed strengths of blended learning, the opportunity to interact communicatively f2f and also through email or in an online chat-room or forum. Online games, simulations, and second generation web applications such as wikis are all evidence of this move to taking advantage of socio-cultural aspects of learning.

However, change is afoot, and with the increase of more socially-supportive environments online and off, it would appear that CALL must also shift with the stream of ICTs change or be left behind. Indeed, as the internet enters its period of Web 2.0, it is clear that in order to motivate and challenge the current generation of students at tertiary level, applications and methods that are already in use and relevant to students' informal and incidental learning, should or could be used in language learning. A few of these, such as simulations and podcasts were introduced in the previous chapter and mentioned above. A recommendation was already made in the New (Language) Learning Environments' final report (2003) concerning both students and teachers that

> We will need to practise principles of situated learning – in other words engaging learners in the kinds of authentic tasks and problem-solving activities that they will actually encounter in the future…Students will need to develop a whole new range of foreign language literacies, which involve emerging forms of communication, reading, and writing using online technologies. (Räsänen & Meus 2003:13).

It is therefore clear that within foreign language learning as in education in general, the shift towards situated learning is very much needed, and this must be reflected, too, in any learning environment whether on- or offline or in a blended mode.

4.2 Review of research of blended learning environments in foreign language learning

Publications and empirical data on blended learning in foreign language learning and teaching are at the moment far and few between, but study and critical examination of any new format must begin somewhere. Even though it is acknowledged that the scarcity of research articles is one of the vulnerabilities of this study, its purpose is not to prove, but to discuss and share what is known thereby provoking developmental and informed discussion. For the sake of clarity and fewer abbreviations, henceforth BLL (blended language learning) will be used when referring to foreign language learning courses set in a blended learning environment.

The themes that the selected three articles deal with are: comparison of the effectiveness of distance and BLL environments (Harker & Koutsantoni 2005); proposition of design parameters for BLL courses (Neumeier 2005); and an investigation into why students drop out of a BLL course (Stracke 2007). All of the articles are based on research done on courses in European universities. Two of the studies examine BLL of English at an intermediate to advanced level (Harker & Koutsantoni 2005, Neumeier 2005), and the other at beginner and intermediate level French and Spanish (Stracke 2007). The general issues that the authors of the articles examine will be raised, in addition to any information that would give further insight into learners' reactions and views of BLL.

All three authors were aware of embarking on a mode of instruction that had not been used or much examined in CALL, but which was not a completely strange phenomenon, based on their knowledge of previous literature and research done in other fields, including pioneering CALL studies. Each author has also made an effort to create a theoretical background to their research question and there were many

similarities in approach and in pedagogical assumptions, such as the importance of students' autonomous skills in the online or CALL segments, and the need to arrange activities that took full advantage of both mediums.

Starting with the slightly older articles, Harker & Koutsantoni (2005), and Neumeier (2005), the theoretical and pedagogical approaches in these studies overlapped, yet the issues differed in salient respects. Nevertheless the underlying themes asked the same question of whether BLL is effective as a pedagogical tool and how it can be organised to enhance learning.

Harker and Koutsantoni (2005) delved into matters of student retention, levels of achievement and course satisfaction in a distance learning course and a blended learning one, comparing them to each another (for similar issues cf. Akkoyunlu & Yilmaz Soylu 2006, Hughes 2007). Their findings were that more students completed the BL version of the course; achievement levels were actually the same in both groups; and that the majority of the students in both groups were satisfied with the web-based EAP (English for Academic Purposes) programme. However as regards students' apparent satisfaction and improved retention in the BLE course, a significant observation was made: "Personal contacts or interactions in the classroom between tutors and students or between students themselves might have contributed to sustaining the blended learning students' motivation" (Harker & Koutsantoni 2005:210) and therefore encouraging them to stay on and complete the course. The only negative aspects that students mentioned were to do with familiarity with and adeptness at typing, or experiencing problems due to a lack of computer use. Overall the students seemed to enjoy the change from the traditional tools of education (pen and paper), but did appreciate the combination of old and new methods (handouts given and using a computer). Their final observations were however compelling as they recognised that it was not the method itself that gained higher achievement levels in BL participants, but

the fact that the students attended classes more regularly and were evidently committed to their learning regardless of the choice of modes. (Harker & Koutsantoni 2005:210.) In this example then, the mode of instruction made no difference and hence no claims on the attractiveness or non-attractiveness of BLL to students can be made at this point.

Neumeier's (2005) research question was design-oriented, but provided not only practical and credible parameters for designing a BLL environment, but several substantial remarks on how learners (and teachers) should be taken into account within the design of such an environment. Her main quest was to provide a proposition of which combination of modes (CALL and f2f) might furnish the best basis for language learning including teaching, depending on the context of use. Chapelle's (2001) SLA-based criteria for CALL qualities have played a large part in determining the parameters that Neumeier (2005) has selected, as she focuses on aspects such as 'learner fit' and 'authenticity' (Neumeier 2005:168, citing Chapelle 2001:55), which are indeed part of the current repertoire that ICTs course designers and adult educators utilise. When defining BL itself, Neumeier elaborates that

> The focus in the definition […] is not on choosing 'the right' or 'the best', 'the innovative' as opposed to 'the traditional' media for presenting learning content; it is rather on creating a learning environment that works as a whole […] by taking the learners' and teachers' dispositions, their aptitudes and their attitudes into account and considering the relationship of the protagonists in the learning process." (Neumeier 2005:165)

Each subsequent parameter pays homage to these criteria which is indeed commendable, if slightly idealistic in terms of ease of application. There are six parameters which are explained in connection to designing a feasible BLL: *mode; model of integration; distribution of learning content and objectives and assignment of purpose; language teaching methods; involvement of learning subjects;* and *location*. Almost all of them except for *the distribution of learning content and objectives and assignment of purpose* seem relevant

to the focus of this current study. The significance of each (except the latter one mentioned) will be summarised in the following paragraphs.

Neumeier (2005:167) makes a salient point when she suggests that in order to better lead and orient students through a BLL course, the *lead mode* (CALL or f2f) must be determined from the onset. This would be done after considering the students' and naturally teachers' own capabilities and needs. If students are unfamiliar with working in an LMS, for example, it would be folly to choose the CALL system as the lead mode, although of course this does happen in distance learning. Therefore knowing one's learners through pre-course questionnaires and/or observation would be helpful (Neumeier 2005:168). Some researchers have also emphasised mapping out students' learning styles and strategies beforehand (e.g. Ausburn 2004), but other studies have claimed that learners' learning styles and strategies might not always be solid indicators of success or failure in ICTs learning environments (cf. Felix 2001). Concern is raised by Neumeier (2005:168-169) about elements such as 'learner fit', meaning students' willingness and capabilities to manage with both modes in addition to the sub-modes either might contain. Most students, for instance, are comfortable with f2f practice of a foreign language, but engaging in an online asynchronous discussion where all your possible language flaws and 'silly' mistakes are on permanent display for all to see, might require a firm understanding of what risks your students are willing to take in a new environment and its sub-modes. (This of course might in actuality be a cultural issue with some nationalities being less intimidated by the permanence of one's learning mistakes, and thus losing face. However that is not the focus of this study.) Deciding on the mode is also determined by other practical considerations such as students' skills of working with tools, not to mention the vital presence of organisational infrastructure and support, as well as IT support and training for the students (and staff).

Model of integration, another parameter suggested by Neumeier (2005), is the pattern or sequencing of modes that one chooses for the course. It can be as simple as arranging f2f and online sessions in regular succession of the other, or varying the pattern of sub-modes of the same mode within a session or two. A particularly useful concept that Neumeier raises is that of 'transactional distance' (Moore & Kearsley 1996). In other words, "the physical distance that leads to a communication gap, a psychological space of potential misunderstandings between the behaviour of instructors and those of the learners" (Moore & Kearsley 1996:200). The problem of this perceived distance can be heightened by modes or sequencing of modes and sub-modes that might cause students to feel isolated and alone in their learning from the teacher and/or their fellow learners. (Neumeier 2005:170.)

An accurate observation is made by Neumeier (2005) when the subject and parameter of *language teaching methods* is raised. She asserts that "CALL is often associated with strongly guided methods that produce a rather rigid structure" (Neumeier 2005:172). Therefore in the design of a BLL environment a balance should be struck by allowing as many communicative activities as possible in the f2f portion of the course. (Neumeier 2005:172.) This naturally means that these sessions would not necessarily differ much from a traditional f2f session, except that there might be more possibilities of continuing discussions that might have started online, or be based on work done in the CALL segment(s), not to mention the emphasis on the importance of the f2f being used for tasks and functions difficult or less pleasurable to do online.

Location is another parameter that has expanded its meaning within the BLL context. Learning may now take place at home, in the classroom, as a matter of fact anywhere, as computers and hand-held computers, such as PDAs (Personal Digital Assistants), have themselves become or might become ubiquitous. A noteworthy point is however made by Neumeier that human beings are creatures of habit, and that we are unlikely to easily

or quickly change our learning locations. We are in fact unconsciously tied to a 'learning culture' of which locations are a "social and individual artefact" (Neumeier 2005:175). Learners need therefore to be offered learning environments that they are familiar with, or that will not at least prove too large a step away from what they might be comfortable with and used to.

The last parameter that is worth investigating is *involvement of learning subjects (students, tutors and teachers)*. Neumeier (2005) propounds three aspects that would help in the BLL design: interactional patterns; variety of teacher and learner roles; and level of learner autonomy. The three most oft used forms of communication in learning f2f happen individually, in pairs and in groups. As Neumeier quite rightly states whatever form of communication is used in learning will have an impact on the interactional patterns. In a BLE the communication is more varied and in some sense richer, because as described earlier, communication can now take place asynchronously and synchronously as computer-mediated communication, in writing and with some software applications, audibly as well. Ideally the design should allow the almost seamless blend of these forms f2f and online. (Neumeier 2005:173.) A welcome aspect of BL is that the roles of teacher and student are or can be more fluid as new modes create a broader 'learning space' within which to define yourself as a student and active participant of the environment. For some learners (and teachers) it might take some time to assume new responsibilities, and new roles. Indeed some students might be more ready to accept the possible blur of role demarcation more easily than others. This idea of some students being ready to take on a new role of responsibility is I believe in keeping with Gee's (2004) idea of 'the new capitalism' – the ability to flexibly take on new roles can mean more of a chance to make your mark in an increasingly competitive world.

One cannot help but agree with Neumeier's (2005:174) cautious remark that a change and fluidity of roles on the student's part will require greater autonomous skills,

including clear instructions and guidance of what kinds of demands are now being made of them within these new 'interactional patterns' (Neumeier 2005:174). The final consideration of the students is as referred to above, their degree of learner autonomy. In such mixed learning environments students must be more self-sufficient and self-directed, and to be able to switch back and forth between being more receptive or passive in some modes and/or sub-modes, and then active in others. Therefore the students' capabilities of these features must be taken into account when planning the BLE. (Neumeier 2005:174.) All of the parameters cited above provide a reasonable basis for the design stages of a BLL course, and especially that of a generation that is caught between being very comfortable with both environments, but in Finland, also still at the stage of learning to become comfortable and autonomous. This point will be argued further in the Discussion section of Chapter Five.

Although Stracke's article was published in 2007, the conclusions seem somewhat outdated as a large part of her discussion is based on her own study carried out in 2005, which broadly charted the years of 1994-2001. Nevertheless she makes frequent reference to Neumeier's (2005) article above and this is a good example of collegial and communities of practice networking, as well as a visible show of building up the body of knowledge that there is on BLL at the moment. The blended format referred to in this study was a combination of seminar-type f2f sessions with the CALL mode in the form of autonomous or self-study work on CD-ROMs. Learners' perspectives and thoughts on BLL are examined, in particular the views of three students who dropped out of a course of BLL are analysed. The reasons were categorised into a "*perceived lack of support and connection/complementarity between the f2f and computer-assisted components of the 'blend'*"; a "*perceived lack of usage of the paper medium for reading and writing*"; and a "*rejection of the computer as a medium of language learning*" (Stracke 2007:57).

It is noted by Stracke that the CD-ROMS used were structured and behaviouristic in style, thereby influencing students' picture of the BLL environment (Stracke 2007: 62). Although she goes on to state that the purpose of her study was not to analyse "the use of technology or specific software alone" (Stracke 2007:62), the choice of CALL medium (in this case CD-ROMS) had an undeniable influence on how students viewed the course. They had opinions that revealed they made a distinction between the whole BLL experience and the software used. Although Stracke claims that this should make little difference to the results, it could be reasoned that nowadays CD-ROMs are not as familiar a software experience as using online applications on the internet (Stracke 2005, Stracke 2007:62).

As already suggested the period of the study (mid 1990s to the very early 2000s) significantly dates the results, and the selected students' views seem mildly archaic in today's landscape of technologically fluent learners. It is however important to note that already during that period of time, the prevailing attitudes of students were positive and satisfied with this particular arrangement of BLL as it was used by Stracke (Stracke 2007:64). However regardless of these weaknesses in the study, some of the points brought up by the same number of less satisfied students provide some thoughts that are still currently applicable. For example, it is a fair demand that if work is to be done online, in this case with a CD-ROM and then in class, there needs to be a clear relationship and connection between the two in content, meaning, continuity and purpose. Stracke does indicate that, though "complementarity depends very much on the individual student's expectations…it was appropriate for the majority." (Stracke 2007:71). Citing Strambi and Bouvet's (2003) study done on flexibility and interaction in BLL, Stracke singles out the aspect that students' positive or negative attitudes will be directed by their relationship with the instructor him/herself and by ensuring that flexibility and support are available (Stracke 2007:71). This is indeed an important statement in web-based and online learning in general – students might be in even more need of a good relationship and support from their course instructor than in a typical f2f

situation. In those learning environments students and teachers can more easily share problems or signal a need for support and clarification than online.

The second aspect mentioned by a few students was the continued need for printed materials to support and guide online work. This brings to mind Harker and Koutsantoni's (2005) study summarised earlier, where more students on a BL course used the printed handbook than those on the equivalent distance learning course. The handbook simply explained course aims and objectives, the contents of the website, guidelines on how to use the website, FAQs and suggestions on how to benefit from the learning programme (Harker & Koutsantoni 2005:200). In Stracke's (2007) case students during that time period yearned especially for the familiarity of studying, reading and working around and with tangible and physical objects. "For these learners, one of the great advantages of computer learning, the often mentioned temporal flexibility […] was contrasted by its spatial flexibility." (Stracke 2007:73). Some of these learners found that the computer as a physical tool did not work in a parallel manner to writing by hand, and a few claimed that they could remember words better in the L2 when written rather than typed (Stracke 2007:73). Bax (2003:23) would interpret such a reaction as a sign that CALL was not yet 'normalised' in this educational setting. Stracke agrees that the results of her study reflect this same interpretation; students saw work on a computer and f2f as separate educational environments "instead of being fused and integrated" (Stracke 2007:74).

The final complaint that Stracke faced in her study was one student's rejection of the computer itself as a tool. However this seemed to be a minor concern, and if other students did comment on the computer itself as a learning tool, their criticism centred on the difficulties in "working on the computer screen" (Stracke 2007:75). This particular complaint could be the recurrent aspect of familiarity and comfort of working under certain conditions with certain tools, not to mention simple learner preference. There are

students even now who claim that they will willingly read long texts onscreen and those who abhor doing so.

The penultimate thoughts of Stracke's (2007) paper are the importance of transparency and connectivity between the two modes of a BLL, as also emphasised by Neumeier (2005); and the suggestion that printed materials need to be available in order to serve the tactile and visual needs and preferences of different types of learners, and because of its "flexibility as regards the place of learning" (Stracke 2007:75). Stracke's (2007) underlying focus in her study was thus to raise interest and concern for those students who might not like or work well in BLL or with CALL at all. As her study showed they were a minority, and her choice of materials (CD-ROM) as she herself pointed out, also had an effect on how students evaluated the experience. Nevertheless the majority of the students seemed ready to work on their own in front of a computer, and those concerns that were raised are easily solved through induction to using ICTs either in the first session or to encourage students to take courses on using computers and software programmes.

Each of the three articles has contributed different aspects of BLL. Harker and Koutsantoni's (2005) students confronted a BLL course with alacrity, and the element of live social interaction in the f2f mode was very likely very significant in maintaining students' motivation and interest in an otherwise optional course. It was however very limited in scope and only added a little fuel to the BLL fire. Neumeier's approach was more praxis-oriented, but yielded interesting and applicable guidelines for BLL course design. The strengths of her paper were that many if not all of her parameters were student-centred, although neither were the skills and disposition of the prospective BLL teacher ignored. She raised practical concerns such as that of transactional distance (TD), and how to tailor a BLL's design in order to avoid anyone experiencing TD enough to discourage them from continuing participation. There was also a remark that

was fruit for thought: students must be guided clearly in what their role is and can be in such a complex environment. Stracke's (2007) work, as already attested to, brought up some similar points to Harker and Koutsantoni's (2005) ruminations – some students might need a little coaching and encouragement to take on new technologies, and teachers must be prepared to support them with supplying what they are used to, e.g. handouts. However at this point, I would like to state that it is possible to wean students of such habits, and with the use of photocopying accounts or quotas, such as there are at the university of Jyväskylä, there is no longer a need for teachers to do this anymore if all necessary material is made available on an LMS or a course wiki. On the other hand, most students still appreciate being given handouts of essential material, rather than doing it themselves. One vital point discussed that is still worth pondering is the importance of integrating the two modes of BLL. Both Neumeier (2005) and Stracke (2007) brought this up and it is an issue that is not related to BLL alone, but to BLE in general. However what might add an extra degree of disorientation is, as Beatty (20003) implied, that L2 students are used to a combination of behaviourist and constructivist learning and teaching methods. If they practice a feature of language, for example, alone on a CD-ROM or work via the internet with a small group, they expect the same feature to be put to use, practised and/or explicitly mentioned in the f2f mode. This expectation will of course also be present depending on the type of language course and even the level. In the author's own BLL course some of the same elements as examined above surfaced, as well as others. These will now be surveyed in the next section.

4.3 Own case and experience of a BL course combining content and foreign language learning

Although at the time of writing, only a few studies have been published on blended learning usage in foreign language learning, such as those reviewed above,

experimental uses of this mixture of learning environments have been carried out informally and persistently. One such example is one of the author's own and also the original motivation behind this study.

In the spring term of 2002, an originally lecture- and video-based course introducing and discussing the issues of global English and its influence as a lingua franca was transformed into a fully blended course. In practise this initially meant that approximately 50% of the course work and interaction took place via the virtual learning environment of Optima or outside the classroom at any rate, and the other 50% in the classroom f2f with the course instructor and the students. The original decision to change the course format was motivated by the author's own frustration with the 'inherited' mode (i.e. the course was passed on from an older lecturer) which was teacher-centred and frankly uninspiring. Through no fault of the course's predecessor, the course structure allowed little room for collaborative discussion and reflection on the course themes, and even worse, the video-material that was the central medium was almost 20 years out of date. Although many of the themes on the history and accents of English were still relevant and provided many salient points, the students were often distracted by the clothes and hairstyles, not to mention the outdated technology that they saw on prominent display in the videos. Except for the last few sessions when students in groups of two or three would present a theme of their own choice (based on an essay written for the course), each session of 90 minutes unfolded thus: first, a short lecture of 10-15 minutes by the teacher on the theme for that session, followed by watching a 50-minute video on that theme. After the students watched the video they were given 15-20 minutes in which to fill in a worksheet which had one question based on the video and theme they had just viewed. These sheets were collected at the end of each session, evaluated by the teacher and kept until the end of the course, when all the answer sheets would be returned with their final essay. Although the students carried out their assignments successfully and were happy just to get the language credits, the

feedback often contained a desire to communicate more with their peers and for more contemporary and varied methods of instruction.

The course was fairly popular and allowed an intake of 50 students, although it was rarely above 30. There was moreover no opportunity with such large student numbers to realistically evaluate and comment on their course performance and evaluation, beyond the worksheets, group oral presentation and final written essay. Eventually the complete lack of communicative activities, such as actual discussion of the themes in small groups; the chance to hear their opinions and reactions and reflect on them; and a lack of real interaction between student-student, and student-teacher drove the teacher to consider other means of course and content delivery. Fortunately about the time of this period of discontent, the Language Centre had taken on the challenge of changing, re-positioning and revamping itself in reaction to internal and external pressures. During a process of self-evaluation and an exploration of needs and wants, one intriguing aspect that arose was the idea of multimedia language learning as a promising and diverse mode of learning of the 21st century. More details on the process that the Language Centre went through can be found in Taalas (2005), but suffice it to say that the author was 'bitten by the blended bug'. The idea of using ICTs and ordinary f2f sessions in the same course to complement one another, captured the author's interest and imagination. Moreover as the course was entitled 'Media Issues' at the time, it also seemed appropriate that instead of using clearly outdated audio-visual material, it was time to take advantage of the plethora of authentic text-, audio-, and video-based material 'out there' on the WWW and use that as one of the main and more updated sources of media. With help, advice and support in designing and planning from a sociocultural point of view, the course was designed to take advantage of at least some of the guidelines that Murray et al (1991) expound.

It included and still does include the same themes, but now course administration and information; content presentation (mainly PowerPoint slides); course assessment criteria; online discussions and questions, course assignments; student-student, home-group's internal peer evaluation, and teacher-student evaluation; and links (provided by the teacher and the students) are all managed via an LMS. Another significant change is that although the teacher still sets the initial themes and delegates certain tasks in the initial two sessions, after that the home-groups are expected to and encouraged to collaborate together to find elements or sub-themes that spark their interest in keeping with the course's set themes; and to prepare their thoughts and knowledge to be shared f2f or/and online in the LMS' discussion forum.

The course aims were twofold: 1) linguistic - by practising oral, presentation, written, auditory, reading and communicative skills in English, and 2) cognitive: - by expanding, discussing, exploring, examining, synthesising, questioning and challenging their assumptions, understanding, knowledge and conceptions of English as a lingua franca. The content therefore centred on aspects such as: the history of modern English; how English spread due to colonisation and other factors thus generating varieties; the origin of different accents and attitudes towards English; issues of language standardisation; the social and economic value of English and the difference in status in varieties; and the future of English to name but a few.

The course itself was optional and part of an array of similar courses provided by the University of Jyväskylä's Language Centre (and at the Department of Teacher Education) to encourage students from all disciplines and faculties, who have already completed their obligatory language courses to maintain and improve their skills, fluency and proficiency. It also attracted a large number of international and exchange students adding to the cultural mix considerably. This ELF course was therefore taught in the Language Centre from 2002 - 2006, and the Department of Teacher Education's

specialized JULIET programme from 2004 to 2006. JULIET is an acronym for Jyväskylä University Language Integration and English Teaching programme. It is a minor within the department for student-teachers who would like to additionally qualify as English CLIL (content and language integrated learning) and English teachers at primary school level.

One other significant change was in the number of students allowed to enrol for the course. It was limited to 15, and then further divided into 'home-groups' of 2-3 people in each group. Each home-group was socialised with its members as much as possible during the first few sessions through ice-breakers as well as discussions on opinions on the general themes. This was especially important in the interdisciplinary groups at the Language Centre, but less so for the tighter-knit and more homogenous groups in the Teacher Education department. In an attempt to foster group identity, a feeling of community and to enter into the spirit of the course themes, each home-group invented a name for itself in keeping with the themes of the course.

The lead mode was f2f, and thus all work done online was in preparation for sharing each home-group's findings with the whole class to raise discussion and further investigation in class. All online work was also planned to enable students who are often from different departments and faculties, and hence often physically in different places with varying timetables, to collaborate on various problem-solving, or evaluative and reflective tasks on the course content, and to prepare different forms of presenting their findings and thoughts. It must be noted here that students were also encouraged to work outside class as a group and if possible to meet f2f, but this sometimes has seemed impossible or undesirable for many.

The first session, f2f, was dedicated to the tuition of navigation and use of Optima, the course content and execution, as well as the formation and encouragement of group

cohesion between the participants, and the division of students into home-groups. The original course design was that f2f sessions would take place every second or third course session. Figure 2 shows the 2002 course outline. The course went over a period of nine weeks in total with the last two weeks being dedicated to group presentations and discussion.

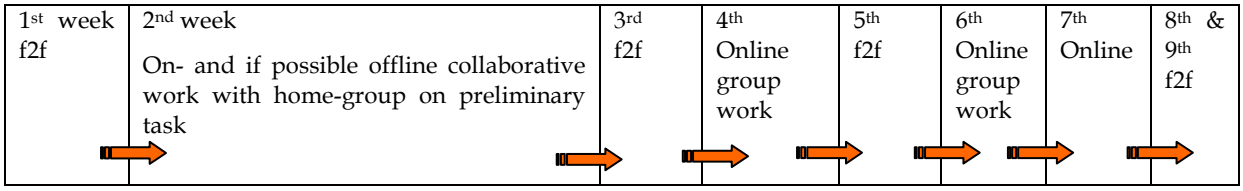

Figure 2. The blended learning course sequencing of modes in 2002.

During the period that the course ran in the different units (Language Centre and JULIET programme), feedback was consistently collected and evaluated via Optima and in the form of in-classroom discussions in order to improve the course design, content and execution, and learning experience. The feedback had a great impact on the running of the course; therefore during the period of 2002 to 2006 extensive changes were made, according to the reactions of the participants to the amount of online work done collaboratively and/or individually and the number and frequency of face-to face sessions. The last time the course was held (autumn 2006) the proportions had changed tremendously with 70% of the course providing f2f contact, and 30% of course work done online.

In the Language Centre course, students unfortunately did not consistently fill out the online feedback questionnaire, although requested and reminded repeatedly, and therefore the pool of actually respondents to date is 28. However the consistency of responses were similar enough over the period of four years in the Language Centre and the two years in the Department of Teacher Education to provide much food for thought as to what students actually want and prefer in web-based courses. An example of the

responses: amongst Language Centre respondents, 61% of the students preferred meeting f2f rather than working via Optima or other computer-mediated communication (CMC) applications such as different Instant Messaging software or email. 21% stated that they were more comfortable with the ease of CMC communication and mode of working. It is difficult to generalise with these results alone, however the course run for student-teachers revealed an even clearer bias.

During 2004 to 2006, although the students themselves often mentioned enjoying the multimodal aspect of the course, all the groups of student-teachers were overwhelming in favour of more f2f time for discussions mainly, with the other students and instructor. It is not the intention or aim of this study to compare particular bodies of students, and it can only be conjectured why the more homogeneous group of students (classroom teacher-students) seemed even more against the use of technology for its own sake, compared to the heterogeneous and interdisciplinary groups in the Language Centre courses. The latter group seemed marginally more favourable towards negotiating and completing course work with their peers using email and the learning management system. It is very likely that reactions mirror those of the students in Akkoyunlu and Yilmaz Soylu's (2006) and Ausburn's (2004) studies - the students were largely unfamiliar with working and navigating in an electronic environment for educational purposes. Their request for more contact teaching and interaction could very possibly be a case of feeling insecure in a new learning context.

This point is illuminated even further when comparing the types of responses of Information Technology and Business and Economics students with those from less technology-oriented faculties and departments during the years of the Language Centre course. Those students already familiar with doing collaborative tasks in groups online (i.e. within a virtual learning environment) appeared to feel most comfortable with working in both environments. It is noteworthy however that many of those same

people, when asked which one they felt suited them best, opted for the chance to work and discuss as much as possible in f2f situations either in class or outside. This could also have been due though to the realisation that one's fellow group members did not want to or were not comfortable collaborating and discussing matters in depth electronically, and they were thus themselves unintentionally coerced into taking the path of least resistance, and meeting face-to-face. It is an intriguing paradox that the most used features of Optima were the 'General discussion' folder and, if they created it, the individual home-group's own discussion folder; yet in the final feedback many claimed that the biggest issue had been to meet and collaborate f2f outside class-hours, even though they were aware of and encouraged to use Optima or IM-applications for this very purpose: "sometimes it was a bit difficult to find a good time to meet outside class" (Milla-Henriikka) and "yes, but only because we didnt (sic) have time to meat (sic) regularly outside class" (Ali). At this point without further information, it can only be conjectured that as long as the option of f2f was available either in class or out, students preferred it to negotiating issues through an online forum.

This also brings to mind the question of the language of interaction – whether this had an effect as well, or if it was even central to the choice of medium for more demanding language functions. Most of these students seemed comfortable and fairly fluent users of English, possibly C1 on the CEFR (Common European Framework Reference). However the level of proficiency was not measured in any way, although many students had completed their obligatory courses in English, or as in the class of the JULIET students were considered to be C1-C2. Again this point is all conjecture, but this would possibly be a good lead to examine in further studies of BL and foreign language learning.

Another issue that might have influenced how well groups worked together was the cultural backgrounds and working culture of the home-group. As mentioned earlier, the course attracted many international degree and exchange students. This was a definite

asset, but within the home-groups' there were sometimes clear clashes of working styles and expectations. Without naming any nationalities, it was not uncommon for those from western and eastern (Europe and Asia) cultures to find that they had different expectations and understanding of what it meant to collaborate. Being encouraged to work and collaborate online usually enticed more cultural clashes to the surface, as, for instance, one realised that some members were more comfortable and fluent in ICTs usage than the others. Although all the home-groups were encouraged to use their technical and linguistic skills and know-how to support one another in achieving their group's goals, it was obviously a suggestion that could not be enforced, but only strongly suggested. However having said this, there were also sometimes clashes between students of the same nationalities, and the differences between working styles and traits of faculties and departments seemed at times to be the root of the problem. This problem rarely occurred in the more homogenous groups of JULIET students who seemed to know 'how' to work well with another and to exploit to good use the strengths of their group-members.

One final feature that might have had an effect on students' views on working in a BLE (in the Language Centre course), was the ease of communicating in a L2 when you could see the others' facial expressions, tone of voice, as well as ask for clarification. Some students, especially those proficient in the L2, did not seem to have problems communicating and discussing their thoughts and opinions in the course Discussion list. Those who were less proficient or felt they were seemed to prefer discussions and negotiations f2f where meta-linguistic clues were available amongst other tools to ease communication.

All in all, BLL has worked well in the author's experience, but the reluctance of the majority of students to work via the online environment has revealed that there must be a solid and well-founded reason for its use, which must spring from the learners' needs,

not just the instructor's desire to experiment. There is also evidence that the course design must take into account the students' various social, cultural and disciplinary backgrounds. By no means an easy task.

This concludes the review of selected literature on BLL including the author's own experience. Many similar themes have arisen such as transparency and connectivity of offline (in class) and online components or modes and in particular the design; the mutated roles of both learners and teachers, and the importance of the relationship between instructor and students; the need for students to become more autonomous and for teachers to therefore encourage metacognitive skills. These points will be reflected upon in the Discussion of Chapter Five especially in respect to the current and future generation of university students.

5 DISCUSSION

The purpose of this study was to evaluate on the basis of selected research, practise and theory, the use of blended learning as a feasible learning mode in language learning with learners at university level. Particularly learners defined as the Net Generation with supposedly different styles of learning and a hitherto unseen repertoire of skills and needs. Blended learning was chosen as the examined mode of instruction as it is gaining popularity in universities in most disciplines, including learning foreign languages, and has been used by the author herself. Most importantly it is hypothesised that this mode might be better suited to today's tech-savvy students. In this chapter the various points that arose will be discussed and concluded.

The initial questions were to see what other studies had to say about BLL, how successfully they had worked, and to see if there were commonalities between students' responses and reactions to this new mode of learning in other higher education settings. The author was especially trying to find some answers to her own questions based on her observation that BL was not a panacea for all language learning 'ills' as she had anticipated or rather hoped – a particular issue that puzzled her was the lack of community and collaboration between many of the participants despite her best efforts to plan for it and promote it within the course parameters. This naturally led to the desire to explore the ascendancy of two 'newcomers' to the arena of learning in communities: communities of practice and affinity spaces. It was hoped that by studying the theoretical frameworks of these approaches and ideologies, a solution would be found that could be easily applied. Another factor that arose was the nature of the students themselves whom many, though not all, had had a different introduction to the world of ICTs compared to their instructor, the author. The author also thus questioned whether she really knew who her students now were and whether their ways of

learning were in any way different from pre-Internet generations. The truth and outcome however revealed a wonderful complexity, and a reminder that there are no simple answers.

5.1 What theoretical frameworks are being applied or could be?

This study entailed the hope of exploring what sort of approaches BLL favoured, and seeing where current interest in communities of practice and affinity spaces might be placed. However it would appear that even though there is an emerging discourse on the use of more situated learning environments within CALL, as often claimed, the field of ICTs and hence CALL is still largely constructivist (Beatty 2003, Felix 2001). Beatty (2003) states that any form of CALL will be a mix of behaviourist and constructivist set-ups due to the nature of the computer's environment itself, and it seems that as long as we are limited by the linearity of computer programming, this lack of fluidity and spontaneity within an electronic environment might not be easily solved. What is appealing in situated (language) learning is the vision that learning can be as engaging and in theory as unrestrained as it is real-life. Learning does not, I believe, move orderly from one point to another, but is more chaotic and therefore memorable according to what strikes our fancy and imagination at the time. Can learning via ICTs imitate this variability and unpredictability? From the field of SLA, Larsen-Freeman's (1997, 2007a, 2007b) suggestion is that there is more understanding to be gained by accepting this seemingly uncontrollable complexity as exemplified by chaos/complexity theory. Indeed in her own words, the question is "how to understand that relationship between the learner/learning and the context. Understanding the unity of the two remains challenging since both are not only interconnected, but also they are continually being transformed." (Larsen-Freeman 2007a:37). This point is equally valid in CALL.

Indeed, glancing at the studies available on BLL, including the author's own, the pedagogical approach invariably sees the web-based environment in the slightly rigid terms of a tool that provides information and enables its exchange through a degree of collaboration. In this the use appears to be indeed a combination of behaviouristic and constructivist methods. The behaviourist approach comes through elements such as a task's purpose being clearly stated; then reinforcement of the desired information takes place through text, images, audio, animations and/or video. Or there might be multiple-choice questions, hotlinks and pre-constructed response answers i.e. programmed instruction. One criticism that has been directed against this type of use of ICTs in CALL is the fact that it might teach details about the language, but any element of the communicative aspects of the language is completely missing (Rivers 1981 as cited by Beatty 2003:89). However the inclusion of a constructivist influence is apparent in tasks which involve students discussing, reflecting and building on their knowledge through collaborative and cooperative tasks.

The formal side of learning is therefore still strongly represented in CALL, and it seems – at the moment – that change in course design and learning methods might not be led by any favoured belief, theory or concept, but by what software and hardware is available. This is understandable as a course will be designed and then directed by the tools and resources made available to the instructor and their institute, and of course according to their own skills, knowledge and motivation to use them. However it is fortunate that since the advent of new ICTs, universities, including the University of Jyväskylä, have provided much training and staff-support to introduce, implement and design new learning environments. Unfortunately there is not always the time to take advantage of them.

Nonetheless the advent of Web 2.0 and its impact on learning is being seen with typical optimism and perhaps this is not completely displaced. Sociocultural applications are

possible in CALL (e.g. Warschauer 2005) and subsequently in BLL; and thus there is an increased appreciation for other types of learning (mainly informal and situated) that might be the next step in CALL evolution (cf. Yang 2005). In BLE there seem to be many examples of where students' social, cultural and possibly even historical needs are taken into account in the design and execution of the course. Scaffolding, for example, is provided in many forms during the unfolding of a BLL with help and challenge no longer provided by the teacher alone, but through more collaborative means from peer learners, as well as the careful structuring of the online environment. The content of an LMS must, for example, anticipate the administrative, intellectual and educational needs of its users, serving in some manner almost like an online tutor. It would be exciting to see if sociocultural constructs could improve the learning experience, and to compare it with an environment devoid of such aspects. However there is the possibility that some students prefer just 'getting on with it' and concentrating on more traditional language acquisition, especially those who are more independent and self-motivated students. Yet this prediction cannot be known until it is tested and this will in turn have an impact on teaching in BLEs.

I believe that this sociocultural trend is a step in the right direction as it is also a move towards a more holistic picture of learning. When one sees how many factors can affect the acquisition and development of a foreign language, it seems very one-sided to plan a BLL without taking into account, for example, some of the factors that arose in this study: such as the importance of the instructor's attitude towards the technology s/he is persuading the students to use; the positive and negative feelings of students in a new learning environment and how that might affect their learning. This is (again) where course design must take into account these factors, not for only the instructors to know and plan for (as best as they can), but also to bring it to the attention of the students themselves. Students' awareness of the sociocultural factors that will affect their and others' performance and experience in both modes (f2f and online) might be a useful and enlightening learning experience. At this point no quick answers can be given, but if

actually implemented and researched, this is an area that might unearth some surprises or at the least provide further clues of how to plan a flexible BL mode that takes into account more than just what the computer and its software can do. Let us not forget to look at what people can do or want to do – or not – with the tools at their disposal.

Regarding the L2 factor in the context, I am in full agreement with Block's (2003:131) encouragement that in the research and study of L2 languages it would be illuminating to shift from a "focus on the acquisition of morphemes [and instead examine] whether or not learners are able to become fully participating members of the communities of practice they wish to join." This urging of a shift would also apply to learners in a blended environment.

As regards the proposed tenets of adult education summarised in Chapter Two, these do appear to be present in BLL in the form of an environment that supports autonomy, a use of earlier knowledge to construct new, and the recognition of reflection as part of higher thinking skills (cf. Houle 1996, Mezirow 1985, 1990). In truth it has been many of these theories and concepts that have arisen out of informal educational contexts, such as situated learning, that have been seen to be vital in these same environments. Many teachers have used online chat or discussions, and collaborative tasks to encourage their learners to learn through practise and negotiated meaning through shared tasks and a variety of mediated tools, the web-based environment being of course the main one. In BLL the mix of both types of learning environments seem to take into account the situated and socio-cultural context: community is formed, roles taken on and constantly negotiated.

If situated and constructivist means of learning take into account the social, cultural and cognitive nature of a learner, then theoretically and pedagogically BLEs are an ideal medium. Indeed completely online learning seems to provide the optimal conditions for

the formation of communities of practice, and many studies on CoP or similar learning communities in distance learning courses have reported or at least theorised about the success of this mode (e.g. Cousin & Deepwell 2005, Garrison & Anderson 2003, Guldberg & Pilkington 2006).

Hodgson and Reynolds (2005) were highly critical of the widely accepted inception of communities of learning in higher education, stating that the notion of community should be built on different premises, rather than a fear of social fragmentation and individualism (Hodgson & Reynolds 2005:14). It would seem in the author's own experience that trying to artificially form students into a community of practice does not always work, and is at best a hit-and-miss affair. More needs to be known of how these can work and if they really can, but only after seeing if these assembled learning communities are viable for the learners themselves. After first randomly forming students into 'home-groups', the author of this study found through trial-and-error that students did not adhere as a group based on common goals alone, but that a completely different premise was needed. Gee (2004) in his portrayal of affinity spaces asserts that in such a setting people will not be interested in gathering for the people themselves, but the endeavour or interest (Gee 2004:84). One could also plan how to include the idea that a person is never just the member of one community, but part of several, and should not be made to adopt a false sense of community because of popular participative practices in higher education (Hodgson & Reynolds 2005:17). In fact if members of a learning community were not artificially moulded into a uniform and democratic community "differences and ambiguity would become accepted without an expectation that they should somehow be resolved, and yet resisting their becoming used as grounds for exclusion" (Young 1986).

It is apparent by now that one issue that has also arisen several times during this exploration of BLEs is the centrality of course design in such a complex learning

situation. Gee's (2004) affinity spaces provides an intriguing avenue to redefining and re-designing new learning spaces based on less rigid structures, and in turn radically redefining the roles of learners and teachers. Many of Gee's (2004) proposed features seem feasible in higher education, in language learning, and possibly in BL. The ones that now seem most promising after the review of literature on BLL are, for instance, the encouraging of intensive and extensive sharing of knowledge among all members of a space. If one keeps in mind the other feature of an affinity space – the mobility and flexibility of membership - this means that learners would be encouraged to share what they know with all, and not just within their own group. This brings to the mind the popular 'jigsaw' cooperative method of sharing knowledge. Another feature that sounds very democratic is the idea of allowing the learners to make changes, and naturally additions to the content, and possibly even the direction of the learning space. In such an environment there are no set leaders as such, and as Gee (2004) defined it, "leadership is porous" (Gee 2004:87) with leaders or experts in particular areas being used as resources rather then being expected to direct every one else's actions.

5.2 The verdict

Does blended learning offer the best of both possible learning environments in language learning to this and the upcoming university generation? What are the signs? A few studies on blended learning have looked at the learners themselves measuring their perceptions, levels of achievement, and even testing if procrastination can be averted by this mode of learning. Can anything conclusive be stated? It would appear that BLEs as defined by this study (mainly net-based and fully integrated instructional mode of f2f and online), do not yet seem to exist in a widespread manner in foreign or additional language learning, and at the moment there seems to be no compelling reason why it should. Nevertheless the benefits of web-based platforms, such as LMS' advantage of

easing course management issues, are just one example of how seamlessly some forms of online application have been subsumed into students' and staff's lives. Nevertheless some important aspects of using BL have emerged from the literature reviewed, and they are dealt with separately in the following paragraphs. The first theme outlines the continued importance of live interaction and relationship with the instructor of the BL and the other learners, in addition to computer-supported collaborative work. The second feature discusses the learners themselves; their relationship to ICTs in education and in CALL; and also the changes in student profile: the Net Gen and more mature students.

5.2.1 The importance of the instructor and fellow learners: role and relationship

When Derntl and Motschnig-Pitrik (2005) investigated the role of structure, patterns and people in blended learning, they concluded with the observation that their BL course motivated students to take an active role, because the instructor was perceived as being "a highly open, respectful, and understanding person" (Derntl & Motschnig-Pitrik 2005:128). In other words, they claim that it was not the technology itself that motivated the students, but the quality of their interaction with the instructor as well as his perceived attitude towards the technology used:

> …the pivotal conclusion here is that in order to improve learning effectiveness and motivation of students, technological advances must go hand in hand with improved interpersonal skills and attitudes of educators. Novel scenarios need to be matched with respect to increased freedom and self-initiated activities of learners. (Derntl & Motschnig-Pitrik 2005:128)

The above statement accords well with what representatives of the Net Generation have stated - one primary ingredient that they require from their higher educational experience is interaction and contact with others and especially their teachers (Howe &

Strauss 2000, McNeely 2005, Oblinger & Oblinger 2005). Their learning expectations in fact begin with the expertise and enthusiasm that only their teachers can give (Roberts 2005). Additionally it was described earlier in the previous chapter how the elements of contact and interaction between all parties concerned (instructors and students, students and students) made all the difference (Harker and Koutsantoni 2005). Then in her description and recommendation of course design elements, Neumeier (2005) took into account the model of integration. She was aware that working in different environments might cause a feeling of transactional distance between all the participants, and that therefore the sequencing of online and f2f modes should support learners' social needs by not isolating them from their teacher and each other. Lastly, Stracke (2007) appears to be in agreement with Derntl and Motschnig-Pitrik (2005) in her assessment of the ramifications of the teacher-student relationship on students' positive or negative attitudes towards a BLE.

One of the purported fears aroused by ICTs as it gained ground at tertiary level in the 1990s, was that it would altogether replace the need for live instruction and interaction. That can never be entirely ruled out, but for the moment the consensus would appear to be that in a world where all sorts of 'truth' are available on the internet, students seem to be at least unconsciously aware that they are in need of live dialogue to critically decipher what 'truths' they need to know personally and professionally. It would also appear that the time spent interacting via the internet does not satisfactorily substitute for time spent face-to-face, and might in fact even sharpen the desire for real contact. The drive for f2f contact and interaction might also be a result of the anonymity, facade and unreliability of the internet. Although one might sometimes doubt it, most students are aware that information presented on the internet needs to be more critically assessed than information shared in a more authoritative and 'quality-controlled' atmosphere such as a university classroom; or an online environment where any provided links, for example, have been carefully screened by the instructors as reliable sources of

information. Blended learning, if well designed, appears to provide through its twin modes opportunities for this interaction and social collaboration to take place.

5.2.2 Who the learners are, their familiarity with ICTs in educational settings, and their current study circumstances.

A common theme that arose is the significance of the learning profiles, experiences and lives of the learners themselves and not just the technology or educational devices available to them. In fact these factors supersede any concerns regarding the tools or media used for learning. Therefore the relevance of these factors, and possibly discipline of study, naturally plays some part in students' acceptance of learning a foreign language in a BLE. This study chose to focus mainly on the idea of a new breed of 'digital natives', but before scrutinising this particular section of the student body, a few words should be said about the other type of students, the so-called non-traditional students who also arose as a focus of research in blended learning.

In quite a few of the studies into blended learning, the target audience were older students ranging in age from 26 to approximately 50 (e.g. Ausburn 2004, Donnelly 2006, Motteram 2006, Rovai & Jordan 2004). Ausburn's (2004) study singled out the preferred elements of course design in adult learners (over 26-years-old), as in the American context these seem to be the students most in need of blended modes of study (for reasons of motivation, retention and ease of time, place and pace) (e.g. Ausburn 2004, Hughes 2007, Romano et al 2005). However I would argue that many of the traits mentioned in her study are valid in a Finnish setting as well regardless of age. Any noticeable student differences in her study were dictated by factors such as: learning strategies; what experience, if any, they have had with the use of ICTs in an educational capacity; their ability to be self-directed; and even their gender (Ausburn 2004:335). It

would thus appear important to take into account both the learning styles, skills and preferences of the average university student in their early twenties, and also of the more mature students.

As discussed above, the profile of the average university student is changing - not only is the number of more mature students, non-traditional students (over 25 years-old) in mainstream education rising, but in general students' lifestyles have changed in response to economical and social changes around them. Many Finnish students, for example, seem to be working part-time and some even fulltime as they begin and whilst studying. This would indicate that more flexible modes of learning must be organised and offered. Moreover as studies on blended learning in general and in language learning have proven, when possible, tertiary level students prefer face-to-face learning for certain learning situations, but are more than content to use the technological shortcuts and opportunities available to them (e.g. Harker & Koutsantoni 2005, Stracke 2007).

There was also the question of familiarity with ICTs that caused difficulties for some students in the literature reviewed. This is of course understandable in the case of the more mature student who might have been up to that point immersed in work- or family-life, and might not have been exposed to studying in newer environments. Oblinger and Oblinger (2005) and other proponents of the Net Generation-argument claim that the younger generations just entering universities will be completely familiar with CSCL. However this premise might be misleading; experience and the facts state otherwise (Bennett et al 2008, author's own action research). Students tend to use or feel most secure in learning environments that are familiar, and will prefer, for example, the computer as an add-on simply because they might be used to it as a peripheral learning tool (Felix 2000, 2001). Akkoyunlu and Yilmaz Soylu's (2006) study presented a similar finding, although they had a narrow student base (n=64) on which to make their

assumptions. In addition, it is not easy to compare studies carried out outside Europe without taking into account possible cultural, technological and national divergences. Therefore before making such presumptions of students' ICTs know-how, research needs to be done into the actual ICTs skills, preferences and knowledge of university students within a clearly delineated culture. Perhaps this information could be culled when students first enter university, and subsequently at the beginning or end of each year of their studies. It is in fact very likely that it is being done, but has not come to the author's attention. Nevertheless, this kind of information and awareness of student profiles would be quite beneficial to those instructors who plan to or would like to integrate ICTs into their teaching, especially in the blended form. Although there is a lot to be said for following one's teaching instincts and intrinsic knowledge, more informed practice in the classroom (and online) based on such research might eventually mean a better all around learning experience for the learners themselves. Planning a BL course without such knowledge seems a little like shooting fish in the dark.

However to sum up, there will very likely always be students who avoid 'interacting' more than necessary with any form of technology, and thus have less experience and more reluctance. Initially BLL might not work as well if the factors mentioned above are not taken into account; 'learner fit' (Chapelle 2001) is indeed a vital aspect of design in BLL. Although having said that, there is evidence to show that BL is certainly a good introduction to CALL and CSCL if there is proper support from the instructor and more experienced peers (author's own action research). Hartman, Moskal and Dziuban's (2005) quote, cited in Chapter Three on the feasibility of BL as a bridge to span the needs of all generations still in higher education, still rings true and holds considerable merit. In an ideal BLL the needs of all the learners would be taken into account, but there is also the role of the learners themselves and their responsibility towards each other to be contemplated. In any learning situation, but especially where there might be differences in ICTs know-how (if that is the most significant differential), one would see students sharing their skills with one another to help further their joint goals. By this, I do not

mean to imply that it should be one-sided with the Net Gen showing the 'newbies' how to manage online, but that the instructor would also encourage and enable the skills and knowledge (in particular metacognitive skills) of students from different backgrounds (not only of age) and experience to be consciously shared. As Gee (2004) himself listed - tacit knowledge should be consciously distributed, and segregation should not occur on any grounds, in this specific scenario - between those who are proficient in this new landscape of BLL and those who are not.

Another intriguing aspect of situated learning is the thought that learning does not solely transpire in the classroom, but that it is what has happened 'outside' in learners' every day lives that has the greatest impact. My earlier proposition discussed how these experiences could be unleashed in the classroom, but here it would be important to plan how the course design could draw upon these experiences and propagate them within a BLE. Perhaps before a course's participants even meet face-to-face they could be encouraged to exchange life experiences (and attitudes) of the language (L2), technology and BL format either within the course's LMS, or more likely via lower-level technologies such as email, if it seems that not all are yet familiar with such virtual environments. The outcome of such a pre-course strategy might be two-fold: it would encourage the formation of online community (at least to a superficial degree) by laying down a foundation for later possible asynchronous CMC and CSCL; and it would reveal to all participants (including the instructor) what kind of roles they would be free to enact – how they could put their individual strengths to use for the good of the whole learning community. This might very well have been tried before, but it is not mentioned in the literature in BLL reviewed, and might be worth putting to the test and evaluating. Therefore it appears vital that in order to help students to find their identity and role in a BLL environment and to support others, this must be part of the course design already at the onset.

5.3 Limitations of the study

The limitations of the study can be easily located. First there is the acknowledged paucity of in-depth research on the use of this blended method in FLL and especially on empirical studies in this field. There are more empirical studies done on BLEs in other academic fields, specifically that of teacher education and education (e.g. Ausburn 2004, Donnelly 2006, Hughes 2007, Rovai & Jordan 2004).

Secondly, another issue is the Anglo-centric perspective on university students including the degree of multimedia saturation in this study. Even though there are clear signs of changes in lifestyle and attitudes in Finnish higher education, echoing the features of American higher education and its student body, there are also undeniable differences. Finland does not have such a complex strata of age and ethnicity, social and economic status at the tertiary level - at least not yet in comparison to the United States. However it is incontestable that the percentage of international exchange and degree students in Finnish universities is increasing, and many of the efforts of Finnish and European universities to internationalise will mean an incrementally more diverse profile of students over the next few decades. Most of the literature and research available on and interpretations of the younger generations are based on the American experience and interpretations. The author must and does question as to whether these can be laid over the Finnish and European perspective and fit exactly. Nevertheless the characteristics and studies on the Millenials does provide food for thought as well as a gateway into culture- and nation-specific studies, as well as a simple inquiry into students' technological make-up in general.

In truth, the intense and over-arching social networking of the internet and other media has blurred some cultural lines between today's university students. Just recently

Finland was placed as being fifth in the list of the most technologically saturated countries, the USA was at the top (Fishbein 2008). Although there naturally is a trickle-down effect from the US to other highly technical, post-industrial societies, not all societies can be assumed to take on exactly the same characteristics as the generation defined by Howe and Strauss and others. There are other social and cultural factors at play in what is available to a generation, and the most telling one is that of income and sometimes especially field of study. Additionally, based on the author's own experience, there are still many students in their first and second year who have never before created their own PowerPoint slideshow. McNeely (2005) wryly commented on the students of his generation fearing 'death by PowerPoint' due to the extensive use of that medium to present class and lecture notes. The same cannot yet be said for every faculty or even department in this university, although more and more staff are making use of it, and more students are encouraged to use it for their own in-class presentations and reports.

Another flaw in the recount of the American 'Next Great Generation' is that it belies a reality that might not exist even in the United States, but for a small number. Furthermore, as discussed in Chapter Two, there are also grounds to approach the highly optimistic proclamations of this new breed of student with caution, but also with an open mind. There is not yet enough empirical and carefully evaluated evidence that universities are being or will be swamped with something akin to a swarm of a cognitive and technically skilled version of the 'Bionic Man', a popular TV-show in the author's own youth, that hinted that my generation was on the brink of a new age of unstoppable technologically superior beings. However it is also naïve to think that students are not possibly armed with different capabilities and needs from those who grew up in different surroundings, these need to be examined.

This study did not include any distinction between the different levels of education and degree programmes and whether that might have an impact on the results cited from various articles. The Sloan Consortium report (2007) examined the density of blended learning in higher education according to the degree level of the programme: graduate; post-graduate; and continuing education. The same report also examined what type of institution offered blended learning in terms that do not apply to Finnish universities, but might to some European institutions: were they public; private, but non-profit; or private, for-profit. If a similar study were to be carried out in Finland, the issue of organisational infrastructure and its ramifications on choice of teaching and learning resources would be somewhat clearer.

Finally there were no studies of BLL that explicitly used any approach other than the traditional constructivist one, and therefore any suggestion that more social theoretical and sociocultural constructs such as CoPs and/or affinity spaces might work is pure conjecture. This matter is discussed a little more in the following section.

5.4 Unanswered and unasked questions – suggestions for further studies

Further studies would fill in the holes of not only this study, such as those mentioned above, but especially in the areas of Finnish university students' level of technological sophistication and preference. Do Finnish students set themselves apart from the generations before them and would they define themselves for example in similar terms to their American counterparts or rather Prensky, Howe and Strauss, Tapscott, Oblinger and Oblingers' understanding of a member of the Net Generation? Moreover, what do students expect and want out of technologically-enhanced language learning? Arguably a comparison between different cultures' use of and identification with ICTs in learning (in the industrialised world) might not yield much data, and as has been suggested

(personal communication with Taalas May 2008), further understanding is needed of today's university student in general. This knowledge can only be coaxed out through students being encouraged to increasingly reflect on their own learning suppositions and capabilities, including their contribution to and effect on the learning situation and environment.

Another angle of the online and learning aspect that was not touched upon was the role of identity and its construction in synchronous and asynchronous environments in BLL (e.g. McConnell 2005). There has been increased interest in how L2 learner identities and language skills might be supported by computer-mediated communication, especially intercultural identities brought by multiplayer online gaming communities (e.g. Thorne & Black 2007). In direct relation to this there has been a growing interest in the use of more non-traditional and entertainment-based learning modes and structures, such as online gaming. Their actual use in language learning has been supported in only a few studies (e.g. Purushotma 2005), but they are intriguing enough to encourage an investigation into alternative modes of learning languages. BLL, in comparison to such new virtual CALL frontiers, could be considered to be quite conventional.

And what of communities of practice and/or affinity spaces in CALL? It would be intriguing to see if a course could be conceived and then carried out with the blueprint of either of these features, or better still, an amalgamate of the two that could take into account the different types of students. Both approaches have something to commend them as pointed out earlier, and after reflection the author can see how these might already be happening at some level, but these principles have not been 'designed' into the course structure.

Thus one element that assumed an importance not thought of before this research, was the centrality of course design in BL. No longer can a teacher or course- and curriculum-

designer sequester themselves away with their course plan, and design such a multifaceted instructional mode without knowing who their students now are. Neumeier's (2005) proposed design parameters are a promising place to begin. I would also like to propose that it should become commonplace for course design to be planned collaboratively – with fellow teachers and colleagues, and where possible with the students themselves. If teachers are to fully assume the role of facilitator and model the position of porous leadership, then that means equipping their students to become good learners by expanding their awareness of what they bring with them into the classroom, and involving them in the design of learning. If one adopts Gee's ideas of affinity spaces where participants are all creators in different ways, why not expand the walls of the course design 'chamber' and allow the users in? A utopian dream, possibly, but we will surely not know until we have tried.

6 CONCLUSION

It could be suggested that students coming into the CALL classroom might be better equipped to deal with multimodality in ways that their teachers are still learning to exploit. However this study suggests that although students expect their teachers and instructors to be comfortable with using and exploiting educational technologies (e.g. Derntl & Motschnig-Pitrik 2005, Kvavik 2005, Robert 2005), the importance of successful learning does not begin and end with them. Instead in BL the focus should be on what the students themselves clamour for (a good balance of f2f and online work) and this ultimately means an attention to course and task design in both modes: f2f and net-based.

In conclusion, the methods with which foreign languages are taught must be 'in synch' with the pace of the 21st century student, but at the same time should answer their need for the best forms of practise in a pedagogical and technological sense. Today's learners are potentially more autonomous, technologically-gifted and dynamic, not by virtue of their personalities or a special gene they were born with, but by virtue of the multimodal environments in which they have grown up in and learnt in. Nevertheless it is important to acknowledge that at the end of the day, even today's Millenials are human beings who desire to learn in ways that take into account their human needs: to learn through social means, in an exchange of negotiation with others online and off- in a community of learning or in a less defined space brought about by less rigid ties of affinity; using technology to achieve whatever goals they have been set or set for themselves, not as an end in itself. Learning languages itself has not changed, only our awareness of how it might happen best, and how to use any tools, web-based or otherwise to provide the optimal learning environment to make our students citizen ready for the 'new capitalism' hinted at by Gee (2004).

Based on the fruits of this study, when considering the implementation of BLL, the key features to keep in mind might be summarised in the form of the following questions:

- Consider carefully who your students are – their study backgrounds, previous experiences of online learning, field of study, their lives and pace of studies (e.g. fulltime or part-time student). Based on these factors, would they benefit from working alone and/or collaboratively online? Is the inclusion of an online element sensible and convenient after taking these points into account?
- Consider your students' level of self-directedness and autonomy – will they be able to successfully balance and fulfil the demands of an integrated BLL? Coming to class demands a certain level of activity, but one can also be passive, and the instructor is less likely to bring the student to account for it as they cannot continuously minute-by-minute assess each individual student's performance. In contrast, depending on one's motivation and interest, working online and fulfilling demands set via that medium can be more demanding (the student is required to actively contribute), and his/her efforts can be more easily scrutinised and assessed by peers and the instructor. This is especially evident and traceable in an LMS which can show when a student logged into the system, how long they spent there and in what sections. Less motivated or confident students are often uncomfortable being thus scrutinised.
- How will using, for example, the online environment serve better than doing the same task f2f? How will the learning experience benefit the students and help the instructor in their assessment of that experience? There are advantages and disadvantages to doing communicative tasks online. To take an example, one compelling, but not overriding advantage of online discussion in a forum is that slower, less confident or less proficient L2 learners will have time (and often make concerted use of language learning resources, such as online dictionaries or phrase-banks) to contribute to an online discussion. Another asset in online work is peer assistance and help in writing (through peer evaluation and commentary)

and even reading and discussion tasks. On the other hand, there are clear cases where the students might feel it is more purposeful and 'real' to carry out tasks f2f, especially if they rely on getting synchronous assistance from their peers in using and developing their L2 skills. In the author's own experience, her students seemed to wish to discuss and negotiate deeper meanings face-to-face rather than online, and thus many of the tasks done f2f were communicative and reflective in nature, and online were more factual and information-based.

- Finally, what design parameters need to be considered? Neumeier's (2005) study into viable parameters seems an excellent place to start planning other features of BLL such as: how to sequence the modes; which is the lead or primary mode; how learning content, objectives, and assignment of purpose could be distributed; which language teaching methods might be appropriate for the f2f and online modes; what will be the roles and responsibilities of the instructor and students to name but a few.

In conclusion, one can partly concede to the idea that today's students might be different in some aspects, but that more research is needed to classify the Finnish dimension. Undoubtedly the world and its technologies is developing at a head-spinning rate and those of us in higher education should listen and watch even more attentively what is happening in the lives of our students: technologically, socially, culturally and historically. Perhaps only then can we claim to know how to teach the Net Generation with the best array of methods at the current level of pedagogical and technological development. Fortunately there is always a possibility to improve one's pedagogical knowledge through systematically testing different approaches through action research, and also naturally learning from others'. It is important to keep in mind that BLL is in itself nothing new and might one day be forgotten and replaced with a new mode as technology evolves and new avenues of research are explored. As one wise man said

> History merely repeats itself. It has all been done before. Nothing under the sun is truly new. Sometimes people say, "Here is something new!" But actually it is old; nothing is ever truly new. We don't remember what happened in the past, and in the future generations, no one will remember what we are doing now. (Ecclesiastes 1:9-11 New Living Translation)

However attempting to provide a better learning experience for one's learners is never in vain, and the teaching and learning of today is built on the work of the past.

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