

**FOSTERING LEARNER AUTONOMY AMONGST SECOND
LANGUAGE STUDENT TEACHERS WITH COMPUTER
ASSISTED LANGUAGE LEARNING IN A SUPPORTIVE
ROLE**

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DECLARATION

I, THE UNDERSIGNED, HEREBY DECLARE THAT THE WORK CONTAINED IN THIS THESIS IS MY OWN ORIGINAL WORK AND THAT I HAVE NOT PREVIOUSLY IN ITS ENTIRETY OR IN PART SUBMITTED IT AT ANY UNIVERSITY FOR A DEGREE.

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SUMMARY

A new school curriculum, the Revised National Curriculum Statement 2002 [RNCS], was implemented in 2004 in South Africa. This, as well as the social political changes since 1994, necessitated a new approach to teaching in general and to undergraduate teacher training.

One of the potentially most far-reaching “critical outcomes” cited in the new curriculum is the development of the learners’ capacity to “organise and manage themselves and their activities responsibly and effectively”. Another is “to use ... technology effectively and critically ...” [Department of Education, 2002:11]. The first of the two goals underscores the need to adopt the fostering of autonomy as educational goal, while the second goal can be interpreted as encouragement to enhance teaching through using technology.

Our particular interest is in the teaching of a second language as part of the teacher-training curriculum. Therefore the role of autonomy needs to be investigated, using CALL [Computer Assisted Language Learning] to promote it in the second language [“First Additional Language” in the terminology used in the curriculum statement] training programme.

Undergraduate teacher training is an obvious place to engineer the development of new skills, knowledge and attitudes over a wide spectrum, since suitable intervention at this level can potentially effect the practise of both the newly qualified teachers, as well as that of their colleagues within the wider school community.

However, there is not much evidence forthcoming on the actual practical classroom benefits of either autonomy or CALL. Consequently, the teacher trainer hoping to “set up” a course with autonomy as educational goal and course strategy, and CALL in a supportive role, will need guiding principles in order to steer away from the many pitfalls possible because of the multiplicity and complexity of these two constructs.

The issue becomes even more complex when we remind ourselves of the duality of teacher training: the learner is both learner and “teacher”. Not only do the learners [teacher trainees] need to acquire book knowledge in order to understand why they are doing what they are doing, but they also need to be able to reflect critically on their teaching experiences [including their own practice], in order to become more proficient in the target language, develop a capacity for autonomy and critically evaluate, select and use CALL effectively.

It is the task of the teacher trainer to ensure that she uses principles compatible with the latest research findings with regard to language learning, fostering autonomy and the effective use of CALL, to guide the process.

The aim of this study is to generate such principles through a thorough analysis of the relevant literature.

OPSOMMING

In 2004 is 'n nuwe kurrikulum, die "Hersiene Nasionale Kurrikulum Verklaring 2002" in skole in Suid-Afrika geïmplimenteer. Hierdie verwikkeling, sowel as die politieke veranderinge sedert 1994, het 'n nuwe benadering tot onderwys in die algemeen, maar ook spesifiek tot die opleiding van voorgraadse studentonderwysers, genoodsaak om sodoende transformasie in die onderwys en in die breër gemeenskap te bewerkstellig.

Een van die "Kritieke Uitkomst" van die nuwe kurrikulum is om die leerders se kapasiteit om hulself en hul aktiwiteite op verantwoordelike en effektiewe wyse te organiseer en bestuur, te ontwikkel [Department of Education, 2002:11]. 'n Ander een is om 'n kritiese en effektiewe bevoegdheid by die leerders te ontwikkel in die gebruik van tegnologie [ibid].

Die eerste van die twee doeleindes bevestig die noodsaaklikheid daarvan om outonomie by die leerders te bevorder as 'n opvoedkundige doel. Die tweede kan geïnterpreteer word as aanmoediging om tegnologie effektief, dog krities, te gebruik. Aangesien ons spesifieke belangstelling in die onderrig van 'n tweede taal aan voorgraadse onderwysstudente is, sal die klem in hierdie studie val op die rol van outonomie en die gebruik van RGTO [Rekenaargestesteunde Taalonderrig] oftewel CALL [Computer Assisted Language Learning] om outonomie deur tweedetaal [genoem Eerste Addisionele Taal in die kurrikulum] te bevorder. Intervensie op hierdie vlak het die potensiaal om beide diensdoende onderwysers, sowel as die breër skoolgemeenskap, te bereik.

Aangesien daar nog nie baie praktiese voorbeelde van hierdie soort geïntegreerde onderrig is nie, is dit noodsaaklik dat die onderwysopleier na basiese beginsels soek vir die daarstelling van 'n taal- en didaktiekopleidingskursus met outonomie as kursusstrategie, ondersteun deur RGTO.

Die onderwysstudent is beide leerder en "onderwyser". Die leerders [onderwysstudente] moet dus die boekekenis hê om te weet waarom hulle doen wat hulle doen, maar terselfdertyd ook krities kan reflekteer oor hul onderwyspraktyk. Dit sluit dan in hul taalvaardigheid in die teikentaal, die ontwikkeling van 'n outonome ingesteldheid en die vermoë om gepaste gebruike van RGTO te kan identifiseer en effektief te kan gebruik.

Dit is die taak van die onderwyseropleier om seker te maak dat die beginsels wat gebruik word om dié komplekse leersituasie te beplan, te bestuur en te onderhandel, versoenbaar is met die nuutste navorsingsbevindinge aangaande die bevordering van outonomie en die effektiewe gebruik van RGTO in tweedetaalonderrig.

Dit is die doel van hierdie studie om deur 'n deeglike analise van die relevante literatuur 'n aantal beginsels te genereer om die onderwyseropleier te begelei in die beplanning en bestuur van sodanige kursus.

This thesis is dedicated to four people who inspired me through their unconditional faith in my abilities:

Alexi Rousseau

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CHAPTER ONE

ORIENTATION

1.1 INTRODUCTION AND MOTIVATION OF STUDY

The concept of learner autonomy has been around for centuries. Lu Tung-lai [1137 - 1181] said that a youth who memorizes a large amount of information is not to be admired; however, the one who thinks carefully and searches for truth – that is the one who should be admired [Benson, 2001:56]. Galileo Galilei [1564 - 1642] referred to it in his often-quoted phrase: "You cannot teach a man everything; you can only help him find it within himself" [Benson, 2001:23]. It appears then that the concept of autonomy does not necessarily belong to a specific culture or era in history.

In the twentieth century the work of theorists such as Dewey, Freire, Rogers and Vygotsky all contributed to a revival and a better understanding of the multifaceted nature of learner autonomy. The work of Henri Holec for the National Council of Europe's National Language Project [1981] is regarded as particularly authoritative in the field of autonomy in language learning, but the debate really gained momentum in the late twentieth century when it borrowed from constructivist theory the key ideas of "action knowledge" and "active learning" [Benson, 2001:40].

The multi-faceted nature of autonomy, however, makes it difficult to agree on a single definition. Holec's definition of "the *ability* to take charge of one's own learning is to have, and to hold, the responsibility for all the decisions concerning all aspects of this learning" [Holec, 1981:04], has invited criticism on the basis that it is too technical and ignores the cognitive and affective factors involved in the development of autonomy [Benson, 2001:49]. In the words of Little [1991:4]: "Essentially, autonomy is a *capacity* – for detachment, critical reflection, decision-making, and independent action. It presupposes ... that the learner will develop a particular kind of psychological relation to the

process and content of his learning. The capacity for autonomy will be displayed both in the way the learner learns and in the way he or she transfers what has been learnt to wider contexts.” The wider contexts stretch far beyond the classroom and institutional boundaries and so therefore, does the educative value of what is learnt.

What is of paramount importance for this study is that learner autonomy is not a methodology or simply self-instruction. It is an educational goal and it is an interactive and social process [Little, 1991:05]. Little, [quoted in Benson, 2001:40], claims that, in fact, “all genuinely successful learning is in the end autonomous”. Inversely it could mean that teachers can measure their success in terms of their ability to refrain from taking all decisions regarding the learning environment and withdrawing their support in relation to the learners’ diminishing need for it.

In their article “Flexible learning activities fostering autonomy in teacher training”, Kupetz and Ziegenmeyer [2006:63], suggest that autonomy has been a goal of teacher training for some time. They quote Esch’s claim [ibid:65], that a student teacher who develops autonomy in teacher training is better prepared to support his/ her learners in becoming autonomous learners and therefore, “... teacher training should offer opportunities to support the development of autonomy”. Autonomy should become both a goal and an approach used by the lecturer responsible for training prospective second language or “additional language” [a term used in South African curriculum documents for languages “added” to the Mother Tongue] teachers in the primary school, General Education and Training [GET] phase. To this can be added the condition that, to quote from Cotterall [1995a:220], “autonomy as a goal cannot be realized until it is translated into the structure of the programme”. This obviously holds various philosophical and methodological implications for the designer, teacher and teacher trainer [of student teachers] since it needs to become part of a course strategy and “concerns the entire curriculum, its materials, tasks and learning arrangements, with dialogue between teacher and students being especially important” [Kupetz and Ziegenmeyer, 2006:66].

However, it is doubtful that the majority of teachers see their role as one of ultimately fostering autonomy. It is equally doubtful if teacher training has adopted a focus of fostering autonomy amongst teacher trainees in order for them to engage with the concept and eventually assume the capacity as learners, as teachers and also as persons.

Various reasons are cited in the literature for the importance of autonomy in education. Cotterall [1995a] gives philosophical, pedagogical and practical reasons and indeed, autonomy and the reasons for promoting it, embrace a wide variety of disciplines. However, it is its role in second language teacher training and learning that has to be explored. According to Benson [2001:17], communicative language teaching, learner-centeredness and autonomy “share a focus on the learner as the key agent in the learning process”. He proceeds with the argument by pointing out that several prominent researchers such as Nunan [1996, 1997] and Littlewood [1996, 1997] incorporated autonomy into their work in the field of communicative language teaching while Breen and Mann [cited in Benson, 2001:17] maintain that the usefulness of autonomy as an organising principle for broader possibilities in language teaching and learner-centred pedagogies, affords it great value in the current educational climate.

Various researchers have tried to identify ordering factors or categories for the concept of autonomy. Littlewood’s three domains of autonomy is quite useful in identifying the learner as communicator, as learner and as person [Littlewood, 1996:431]. This capacity to take charge of one’s own learning [and destiny] can be developed through learner training and as such becomes an educational goal [Aoki and Smith cited in Benson, 2001:57]. Teacher training has to incorporate this goal into its curriculum in order to equip teachers with a theoretical understanding of this capacity as well as the ability to practise it at all levels. Thus a purposeful initiative is needed to develop the capacity of autonomy. It will not flourish as an add-on or simply an incidental contributor to the language teaching curriculum.

In the South African context twelve Critical and Developmental Outcomes were identified by the South African Qualifications Authority [SAQA] to form the bedrock of Outcomes Based Education [OBE] and to introduce radical changes into the South African education system after the demise of the *apartheid* regime. The third critical outcome [see Addendum 1] envisages learners who will be able to “organize and manage themselves and their activities responsibly and effectively” [Department of Education, 2002]. This outcome can be translated into a performance outcome of becoming autonomous: a self-directed and responsible learner, a “prudent, organised life manager” [Spady, 2004:174] and therefore the producer [rather than consumer] of own life destiny. Again there is a direct reference to the fact that autonomy as educational goal comprises more than influencing simply the classroom or institutional sphere – it may empower an agency as big as society at large. This principle is particularly important in a developing country such as South Africa where previously, a transmission model of teaching with the teacher as authority and only decision maker [after government, department of education and principal] was the rule rather than the exception. A major mind shift is therefore required from teachers, learners and teacher trainers.

Becoming proficient in at least one additional language of a region is another requirement of the South African curriculum for primary and intermediate-senior schools. Current legislation allows the Western Cape Education Department [WCED] to implement the policy of making 3 languages compulsory as it is in line with the South African Constitution, the South African Schools Act and the Western Cape Provincial Schools Act [Western Cape Education Department, 2003]. In the Western Cape these three languages are English, Afrikaans and Xhosa. Afrikaans, Xhosa and English are all taught at second or practical language level [first and second additional languages according to the terminology of the curriculum [Revised National Curriculum Statement or RNCS]] to non-Mother Tongue speakers of these languages.

For example: English speaking teacher trainees in the General Education and Training [GET] phase at the Cape Peninsula University of Technology attend a course in Afrikaans as a First Additional Language and Xhosa as a Second Additional Language in order to improve their proficiency in the language. Since they are both “learners” and “teachers”, the programme aims at improving their proficiency in the language but also to model the key methodological and philosophical aspects of interactive language teaching. Rüschoff [2001:1] puts language teaching within the constructivist paradigm with the following statement: “On a methodological level, construction of knowledge and information processing are regarded as key activities in language learning”. The learner becomes an active agent, co-responsible for the design and implementation of the learning programme. The natural link between the learner’s agency as producer of his own unique life world and learner autonomy which can be translated into the ability “to take charge” of own reality, is self-evident and therefore reflects a major mind shift away from the transmission model.

Technological¹ demands have also become central to the changes envisaged both nationally and internationally for schools as well as institutions of higher learning such as universities and colleges. Elizabeth Boling and Keng-Soo [1999:468] refer to the fact that “language teachers ... seem to feel a strong impetus to do something now with the technology currently available. Doing so carries a great deal of both risk and promise ... the craft of teaching and learning will be supported by technology, as long as teachers remember who they are.” This serves as a warning to remind us that the role of teacher cannot be relinquished to computer technology. Yet it is significant that in a country such as South Africa where teaching and learning standards are often questioned and where many schools struggle without some of the most basic requirements such as electricity and security, the Department of Education released a *Draft White Paper on e-Education: Transforming Learning and Teaching through Information and Communication Technologies*, September

¹ “Technology“ indicates a broadening out of the field covered by computers, but according to Levy [1997:82] lacks focus since it is such a general concept.

2003. In this document the practical benefits of Information and Computer Technologies are presented as a “key for teaching”.

A natural link between technology and the development of a capacity for autonomous learning seem to be taken for granted judged by the number of sources allocating an article or a chapter or two to this relationship [Benson [2001], Blin [2004], Egbert and Hanson-Smith [1999], Jones [2001], Kupetz and Ziegenmeyer [2006], to mention but a few]. Blin [2004:377] warns that “while the concepts and principles associated with learner autonomy underpin a broad range of CALL applications and research projects, current debates and research paradigms in CALL do not provide adequate tools and models to investigate in depth the relationship between CALL and the development of learner autonomy”. Sara Cotterall [1998:61], on the other hand, refers to technology “as a critical dimension in implementing learner autonomy”. With specific reference to CALL, Benson [2001:140] concedes the “potential” of technology to provide learners with the necessary skills associated with autonomy. He warns though that “a great deal depends on the ways in which technologies are made available to learners and the kind of interaction that takes place around them”.

Key research questions around technology-based approaches to autonomy in additional language learning should therefore focus on the learning activities and the way in which they are implemented with the assistance of technology, rather than on the characteristics of the new technologies. There is therefore a shift in emphasis towards methodological and procedural issues when CALL is used. It is the role of the teacher to negotiate with the learners if and how CALL will be used. Ferdig [2006:749] reminds us that the issue of whether the technology is pedagogically sound or not, in addition to the recognition of the fact that it is but part of “a complex process involving the people in the implementation of the innovation”, is of critical importance. Blin [1999:145], suggests that investigation of this relationship will have to take cognisance “of the context in which instructed language learning is taking place. Only then will we be able to investigate the type of language learning taking place in various types of language learning environments supported by technology”.

Questions about the role of the computer should therefore rather focus on whether “*the system* of teacher, student, and technology is working for the learners” [Egbert & Hanson-Smith, 1999:3]. In short, clarification of individual and collective roles and the principles that guide them, is needed.

Since teachers are instrumental in bringing change to the classroom and beyond, teacher training can play an important role in the quest to develop learner autonomy and establishing the extent to which computers can promote autonomy. The second language learning process might be served well through the support of CALL in fostering learner autonomy as an educative value over and beyond simply acquiring an additional language, but we need to be sure that teachers are well prepared to take on this complex task.

Although it might be true that some decision makers in higher institutions, both nationally and internationally, choose to see the potential of technology as panacea because of the solutions it might offer to the ever increasing number of students [Kenning, 1996:223; Davies, 2003:5] and its implications for staffing, both autonomy and Computer Assisted Language Learning [CALL] should be central to the planning and implementation of a Second Language course for teacher trainees for the reasons mentioned here rather than for the sake of the financial implications. Unless teachers and teacher trainees are given the knowledge, skills and values to cope with changing demands, albeit technological, methodological or philosophical, they will fail in their endeavour to bring about the transformation needed in South African [primary] education.

This study will focus on fostering autonomy in the additional language classroom, supported by the computer, thereby enhancing not only the learning of the additional language, but also providing opportunities for learners to become autonomous as life long “learners, as communicators and as persons” [Littlewood, 1996: 431]. As much as we contend with the view that as human beings there is perhaps a natural inclination to want to control our own destiny, it is clear to us that within the social and institutional learning

environment, this inclination becomes obscured by the many other life experiences that impact on us as life long learners to the point that most learners become inhibited and eager to follow the “safer” route of the passive follower rather than the active “master of own destiny”. In this study we want to focus on the options open to the lecturer intent on fostering autonomy, promoted by CALL, in the second language classroom. More specifically we are looking at creating an optimal learning environment for the learners who are prospective teachers themselves and who will be facing the realities of the 21st century classroom.

While the role of teacher is no longer seen as the heart of educational processes, there is not the same kind of clarity or consensus about how the role of the teacher has changed and how it articulates with the other role players or participants, including the instruments selected to assist in the educational process.

1.2 SCOPE OF INVESTIGATION

A first major question is how the integrated processes of becoming proficient in a second language whilst becoming an autonomous learner, supported in both processes by CALL, can best be facilitated. Empirical research seems to indicate that although self-instruction in language performance and acquisition is possible, there is a high risk of dropout. One of the key factors contributing to the risk is the availability of support or the lack thereof [Broady and Kenning, 1997:187]. In other words, the role of the teacher remains crucial, albeit as mediator, mentor and facilitator rather than the traditional role of teacher as transmitter of knowledge, skills and values.

A second major question is how CALL can assist the learner in the process of becoming autonomous instead of becoming just another mechanism controlling the learner, trying to take over the role of the textbook or teacher. Esch [1997:165], warned against reducing the would-be autonomous learner to “a set of skills” with a range of technical possibilities for “accessing information and manipulating data”.

A third major question is how the instructional processes described above should be structured in order to fulfil the dual purpose of providing for the communication needs of adult additional language learners, training to become teachers of that language at primary school level and of becoming autonomous as learners in general, assisted by the computer.

A fourth question: How can the roles of the participants and the processes that they engage in, be described and analysed in order to act as a practical and flexible framework? Teacher trainers and teacher trainees [additional language] need principles to guide them when developing and fostering learner autonomy and using CALL towards this objective. A major issue here will be the gradual relinquishing of control by the teacher while the learners take charge and begin to construct and transform their own reality.

A fifth question: to what extent is the goal of autonomy [promoted by CALL], also supported by the official course documents, i.e. the school and teacher training curricula?

A pragmatic approach providing an instructional framework in the form of guiding principles to support teacher and learner in the planning, implementation and evaluation of the dynamic power relationship of letting go and taking control in the particular South African context described above, will be a useful departure point towards changing the traditional role of learner as consumer and teacher as producer. Such a framework must incorporate the support that CALL can offer in this regard, thereby also assisting the learner in becoming an active user of technology for transformational purposes.

Pennington [1996a: 16], points out that it is a pragmatic approach that is needed - a methodological framework - that will assist teachers, learners and developers in any specific teaching situation.

Hypothesis: a practical and methodological framework of guiding principles based on theoretical insights gained from existing textual data, can be designed to:

- ❖ Analyse, plan and describe the support CALL can provide in fostering the capacity of Second Language learners to become autonomous and independent learners while acquiring and learning the language
- ❖ Analyse, plan and describe the interdependent roles of the participants in the integrated processes of learning a language, developing a capacity for autonomy and learning to teach
- ❖ Describe the conditions necessary for the development of a capacity for autonomy while acquiring and learning the second language
- ❖ Provide guidelines for the teacher trainer aspiring to “set up” an additional language teaching course with autonomy as a course strategy, supported by CALL

1.3 RESEARCH PROBLEM AND OBJECTIVE

The conceptual problem that will be focused on is the nature of the roles that teacher training, and more specifically the second language teacher trainer assisted by CALL, can play in fostering autonomy amongst additional language learners and prospective teachers in the primary and intermediate sectors, GET Phase.

General Purpose

It is proposed that an in-depth non-empirical study be made of the literature which examines the dynamic roles of teacher and learners in an additional language learning environment where the aim is to foster learner autonomy. Data will also be gathered about the nature of CALL, its potential to assist and promote in the acquisition and learning of a second language and the role it might play in fostering autonomy while doing so.

Specific Purpose

The specific purpose of the study is to construct a framework of guiding principles to guide a designer-facilitator or teacher trainer in her/ his role of fostering autonomy with the assistance of CALL in the learning environment described above.

1.4 RESEARCH DESIGN AND METHODOLOGY

This non-empirical study will provide an overview of scholarship in the field of second language learning and teaching and more specifically the challenges of developing autonomy amongst the learners and the potential of CALL to enhance these two integrated processes. Sources will be selected carefully in order to provide a review, which is representative of recent developments in this field.

The concept of autonomy will be analysed with regard to the role it can play in second language teaching as well as its broader educative goal.

An analysis will be made of the nature of CALL and its potential to enhance second language teaching. Its potential as instrument will be analysed and commented on.

The potential for developing an integrated approach where CALL is used to support the fostering of autonomy in second language teaching and learning will be investigated through the study of relevant literature. The relationship between the various components and participants within the course framework will form part of this investigation, while the school and teacher training curricula will also be examined in order to establish to what extent they support the goals of autonomy, supported by CALL.

The data will be used to develop a practical framework informing and guiding the planning, design and evaluation of second language programmes [for teacher trainees] aiming at fostering autonomy with CALL support.

1.5 OUTLINE OF THESIS

Chapter One will provide an overview of the rationale and motivation for this study.

Chapter Two will deal with the historical background of fostering autonomy in the classroom and more specifically in second language acquisition learning and teacher training. A selection of significant definitions for and viewpoints of autonomy will be analysed critically and used to constitute a comprehensive understanding of the concept and its potential to be fostered in an institutional environment.

Chapter Two will also focus on autonomy as an object of research: The roles of participants and the interaction between them will be investigated with regard to holding or letting go of control. The broader “educative” value of learner autonomy will also be highlighted, using the description of the learner as communicator, as learner and as a person. The affective and cognitive issues that combine to create optimal conditions for the developing of a capacity to become an autonomous language learner in the second language classroom will also be analysed.

Chapter Three will analyse the distinguishing features of CALL as revealed by the relevant literature. The latest trends and key debates in research on CALL and its application in the second language classroom environment will be discussed. Problem areas and some promising developments will be identified.

Chapter Four will analyse the relationship between the fostering of autonomy and CALL: how CALL as tool fits into the learning environment and how the roles of all the participants, together with CALL, interact to create an optimal and dynamically interactive learning environment. In addition to this, we will analyse the extent to which the curricula of both the GET phase at school level and the document “Norms and Standards for Educators” [South Africa, 2000] prescribing the roles teachers are trained for, support the functional

partnership between CALL and fostering autonomy. Conditions for the fostering of autonomy in teacher training [language teaching] will be discussed.

Chapter *Five* will seek to identify guiding principles for fostering autonomy with the assistance of CALL as an integral part of the teacher training curriculum. This will be done against the background of a target group that comprises of primary school [GET Phase] second language teacher trainees in their first year of study. The framework of guiding principles will focus predominantly on the roles of the participants and the processes they will be involved in. The development of a capacity for autonomy will be considered as the main objective.

The larger relevance and value of the study will be discussed. Certain recommendations will be made for further research, the implementation of findings and possible policy implications.

CHAPTER TWO

AUTONOMY

2.1 TOWARDS A DEFINITION OF AUTONOMY

In Chapter 1 we referred to the pronouncements of historical figures such as Galileo Galilei and Lu Tung-lai. For the purpose of this study, we are predominantly interested in the way autonomy has been defined in the latter half of the twentieth century and more specifically in the sphere of second language teaching.

In 1979 Holec [1981:13] described being autonomous as being capable of self-directed learning – a progressive succession of objectives fixed for and by the learner according to personal needs and motivations - steps to be challenged and/ or amended by the learner at any time. In 1981 [1981:3] he continued his search for an all-inclusive definition by describing autonomy in the following way: “... the ability to take charge of one’s own learning is to have and to hold the responsibility for all the decisions concerning all aspects of this learning, i.e.:

- determining the objectives
- defining the contents and progressions
- selecting methods and techniques to be used
- monitoring the procedure of acquisition properly
- evaluating what has been acquired.”

Little [1991:4], rather than using the word “ability”, settled for “capacity” in his own definition, thereby highlighting the psychological dimension. He deliberately draws attention to the psychological dimension when he declares that the autonomous learner “will develop a ... psychological relation to the process and content of his learning ... displayed both in the way he or she learns and ... transfers what has been learned to wider contexts”.

Underpinning this understanding is a “broader based philosophy, which argues that man is as much a producer of a society as a product of it” [Macaro, 1997:168]. This also implies self-initiation rather than simply responding to instructions – both in an institutional setting and in real life.

Another useful way of going about a description of autonomy is to distinguish between the different domains of control, thereby specifically giving recognition to the fact that its sphere of influence is wider than simply the classroom, institution or even the educational environment. In the previous chapter we referred to Littlewood’s description (see *Fig. 1*).

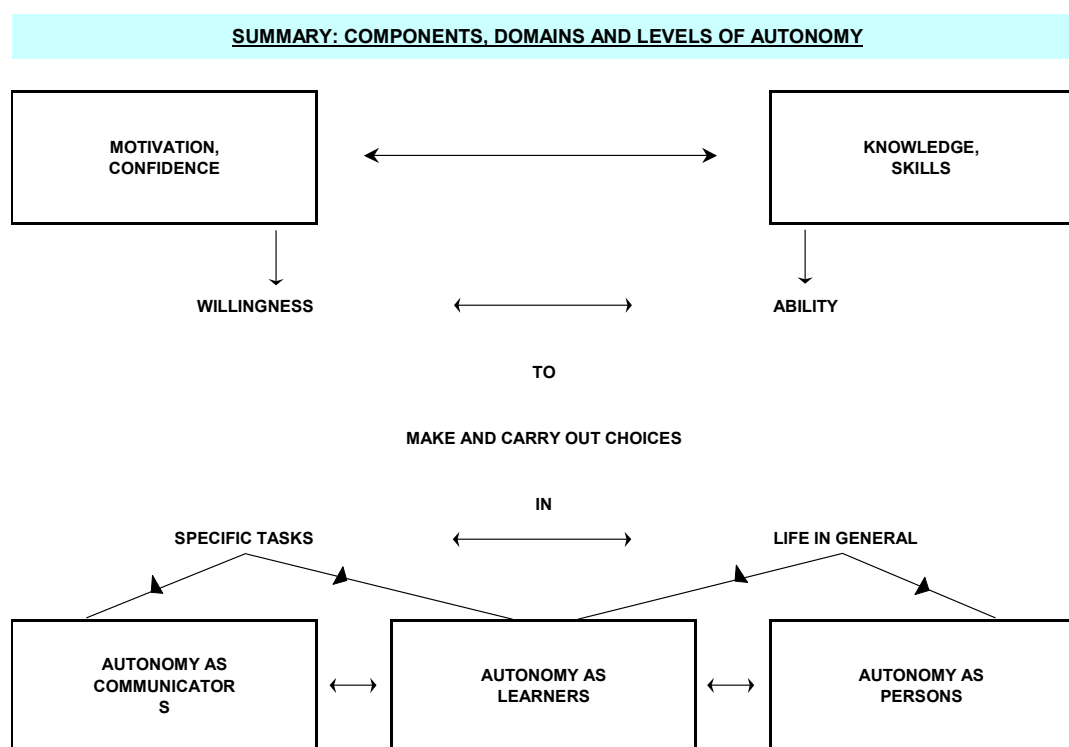


Fig 1: Components and domains of autonomy in foreign language learning
[Littlewood, 1996: 430]

Littlewood’s view corresponds with the view that the term “educative” includes the added value of “giving broader value and meaning to the learner’s life” – i.e. educating the *whole* person [Williams & Burden, 1997:6].

At this point it might be interesting to look at the way in which researchers have attempted to define autonomy by drawing attention to what it is NOT: Holec [1981:3-4] pointed out that autonomy is not a “behaviour”, nor is it an “inborn” quality - it has to be acquired either by natural means or through formal learning in a systematic and deliberate way – thus a *potential*/capacity to learn.

The concept “autonomy” is also not simply a number of things the learner should be able to do during the learning process. It does not mean, either, that the autonomous learner will always put this capability into practice – he will do so only if “permitted” to do so by material, social and psychological constraints and if he “wishes” to do so. Little’s view [1991:2-5] proceeds from this argument by stating emphatically that the permanence of autonomy can never be guaranteed since the freedom of the autonomous learner is always conditional and never absolute. He considers autonomy to be demonstrated best by the way in which a learner transfers what has been learnt to wider contexts. He puts forward the following list denoting what autonomy is NOT:

- “it is not self-instruction
- it is not a matter of how well learning is organised
- it is not a substitute for a teacher
- it is not a new methodology
- it cannot be described as simply a few typical behaviours”.

Leni Dam [1995:1-2] offers definitions for both “learner autonomy” and “autonomous learner”: According to her, *learner autonomy* “... is characterized by a readiness to take charge of one’s own learning in the service of one’s needs and purposes ... a capacity and willingness to act independently and in co-operation with others, as a socially responsible person”. An *autonomous learner* “... is an active participant in the social processes of learning ... an active interpreter of new information in terms of what she/he already knows ... stimulated to evolve an awareness of the aims and processes of learning ... capable of ... critical reflection ... knows how to learn and can use this

knowledge in any learning situation she/he may encounter at any stage in her/his life.”

Focussing on her research and in answer to the question why the development of learner autonomy is “desirable, important, even necessary” she replies that “giving the learners a share of responsibility for planning and conducting teaching learning activities, caused them to be actively involved ... led to better learning, ... increased their capacity to evaluate the learning process ... a virtuous circle was created: awareness of HOW to learn facilitates and influences WHAT is being learned and gives an improved insight into HOW to learn.” [Dam, 1995:1-2]

To the question why autonomy should be desirable, Sara Cotterall [1995a: 219-220] cites the following philosophical reason: “the belief that learners have a right to make choices with regard to their learning ... [also] ... the importance of preparing learners for a rapidly changing future in which independence in learning will be vital for effective functioning in society ... [and] ... maximizing their life choices”. She quotes Littlejohn’s [1985] suggestion that one outcome of learners acting more autonomously may well be an increase in enthusiasm for learning – a value that no society can afford to discard.

As a pedagogical rationale she cites Joiner [in McCafferty [1981]], reporting that learners involved in making choices and decisions about their learning, feel more secure. To this, one can no doubt add, that a learner who feels secure, is also more inclined to take risks. Here one is reminded of Steven Krashen’s [in Brown, 2007:294] hypothesis highlighting the fact that the learner with a high affective filter due to anxiety is seldom able to transform input to intake, i.e. to internalise the input.

That the process is unpredictable, in fact, “highly variable and uneven” in the words of Benson [2001:53-54], means that there might well be periods of smooth development of the construct followed by a phase of reversal for

individuals and/ or groups. This also results in “autonomy” being a very difficult construct to measure and describe in totality.

Deborah Healy [1999:391] tried to increase understanding of the construct by joining the ranks of people like Dickinson [1987] “in using the term *self-direction* to refer to learners’ attitudes and *autonomy* to refer to the instructional framework: the degree of independence the learner is given in setting language learning goals, the path to the goal, the pace of learning, and the measurement of success”.

Perhaps because of the complexities in giving an all-encompassing definition, several researchers attempted to describe the profile of a so-called “autonomous learner” rather than trying to measure the behaviour of an autonomous learner. Candy’s list of a 100 competencies grouped under 13 headings, is cited in Benson [2001:85-105]. Benson points out that a list of competencies such as Candy’s, often go beyond observable learning behaviours – personality and attitudinal factors are also included until we eventually simply end up with an unpractical list of factors describing “the ideal learner”.

Benson’s [ibid] solution to the problem is rather to distinguish between three interdependent levels at which learner control can be exercised:

- learning management, i.e. the behaviours and strategies the learner(s) use to manage their learning, e.g. meta-cognitive, affective and social strategies
- cognitive processes, i.e. where the emphasis is on psychological factors underpinning control over learning behaviour, e.g. attention, reflection and development of meta-cognitive knowledge
- self-determination of learning content

When referring to autonomy in *learning*, it is about people taking control over their learning in and outside classrooms and therefore a philosophical and political argument. In *language learning* it is more about people taking control

over the purposes for which they learn languages and the ways in which they learn them and this is, therefore, predominantly a pedagogical argument [Benson, 2001:46].

Phil Benson and Peter Voller [1997:1-2] quote Anita Wenden's comment about the pervasiveness of autonomy specifically in language education when she stated: "few teachers will disagree with the importance of helping language learners become more autonomous as learners". Benson and Voller sound a word of warning though, saying that in spite of this, there "... remains a good deal of uncertainty about ... [its] meanings and applications for language education". They point out that autonomy has been used in at least five different ways in language education alone:

- for situations where learners are entirely responsible for their own learning
- for a set of skills to be learned and applied in self-directed learning
- for an inborn capacity somewhat suppressed by institutional learning
- for accepting responsibility for own learning
- for the right to decide on the direction of own learning.

From a pragmatic point of view, the lack of a single satisfactory definition is not a major stumbling block for classroom application. Healy [1999:392] indicated that the challenge for teachers is rather "... to establish frameworks for autonomous learning that can work in conjunction with the cultural values learners [and their parents] bring ...". She does not, however, refer to the fact that the teachers themselves probably first need to grapple with and adopt the view that autonomy is an integral part of learning and teaching and that it impacts quite drastically on the way they see their own role.

Nevertheless, what has become apparent is that words such as "transfer", "authoring", "control" and "transform" have become key words towards grasping the broader meaning of autonomy. It is suggested through these terms that autonomy has distinct operational qualities of reaching beyond the immediate realities of learning or language learning to effect change both at

individual and social levels and herein probably lies its major potential for education in its broadest terms. Benson [2001:45] states in this regard: “autonomy is to be understood not only as the authoring of the individual’s life, but also as the authoring of the social realities that constitute our collective lives.”

Since there are so many variables, no single definition of autonomy is likely to satisfy all of its advocates. No doubt the multi-faceted nature of the concept with different spheres or domains of influence such as its variable application possibilities in education, ranging from basic learning theory to, for instance, language learning, to second language learning, to computer assisted language learning, add to this problem. All of these contribute to the uncertainty surrounding the concept and make it all the more difficult for its proponents to advance its cause. Its complexity may well obscure its enormous potential in a world of quick fixes.

Ultimately, Benson’s advice [2001:50] to avoid too long and impractical definitions for autonomy by simply stating the obvious focus of “a capacity to take control of one’s learning” and leave space for emphasizing different dimensions with particular importance in particular contexts, makes sense.

2.2 TOWARDS CLARIFYING AUTONOMY WITHIN A HISTORICAL CONTEXT

Most educational strategies or goals gain popularity as they fill a gap left by another educational theory or approach. A well researched example of this phenomenon is the succession of learning theories in the twentieth century: from Classical Behaviourism [Pavlov], to Operant Behaviourism [Skinner], to the Cognitive theories [Ausubel], to the Constructivist [Rogers] [Brown, 2007:99]. Autonomy is no exception to this rule. Although, as mentioned before, the twentieth century educational theorists did not create the concept “autonomy”, its evolvment during this period loosely followed a similar

pattern to that of learning theory, language learning theory and second language learning theory, reflecting similar influences.

2.2.1 Historical developments in second language acquisition

Before exploring autonomy within its historical context, it is interesting to look at the route followed by language learning, and more specifically SLA [Second Language Acquisition].

For a long period of time Behaviourism dictated a strict diet of teacher controlled classroom practice with the emphasis on lock step rote learning and the content focus on structure in objectivist methods such as the Audio-Lingual Method. The underpinning assumption was that a subject – and more specifically language – can be categorised into clearly defined units in a syllabus and then explicitly taught. It was further assumed that this kind of approach would result in accurate use of the language amongst the learners.

The cognitivist theories developed in response to the limitations of Behaviourism and soon approaches such as the functional-notional, situational and eventually communicative foreign language learning and acquisition became the solutions offered by exponents such as Krashen, Terrell, Asher and Lozanov. Cognitive science gained a lot from research in neuroscience and at the same time cognitive researchers started to pay more attention to what actually happens in the classroom situation [Reagan, 2003:122]. Now the emphasis shifted to keeping the learner occupied with meaningful and challenging learning tasks where interactive meaning making is of paramount importance, since the purpose is communication *in* the language rather than knowledge *about* the language. The teacher endeavours to expose the learners to real life situations and comprehensible authentic materials while encouraging them to participate actively in order to acquire the integrated language skills of listening, speaking, reading and writing. Bernd Rúschoff [2001:14] argues that cognitive approaches can be placed “somewhere in the middle on the scale between behavioural and constructivist learning because of its focus on “learning-through-guided-

experience” and on “cognitive and meta-cognitive skills in addition to purely factual learning”.

A cursory inquiry reveals that more recent trends in SLA research go far beyond the realms of Applied Linguistics. Instead, the focus is on learner centredness and its association with constructivism, both as a social and personal [cognitive, affective and meta-cognitive] construct. Concepts such as the emphasis on process rather than product, learner autonomy and the role of technology reflect this shift of focus in SLA research and debate in the late 20th and early 21st centuries. [See Benson, 2001; Chapelle, 2001; Egbert & Hanson-Smith, 1999; Macaro, 2003; Nunan, 1995; Oxford, 1994 and Wenden, 1999.]

2.2.2 Developments with regard to autonomy as educational construct

Gremmo and Riley [1995:151 –154] allude to the fact that autonomy as an educational construct has a complex relationship with developments in philosophy, political science, psychology and sociology. They add that this is hardly surprising since both language and learning “impinge on the widest possible range of phenomena”. They list seven factors, which may possibly have influenced the spread and emergence of these ideas during recent times:

- The interest and involvement of minority groups in education
- The reaction against behaviourism and the emergence of the notion of learner centredness were promoted by alternative educationists such as Paulo Freire [1972], Ivan Illich [1970, 1973], Carl Rogers [1941, 1972] and Henri Holec [1981]. The concern of linguists and philosophers such as Hymes [1972], Labov [1972] and Halliday [1973] resulted in the mushrooming of sociolinguistic theories which contributed to this development and provided the rationale for the “Communicative Approach”. The field of psychology also contributed, but through two separate movements, namely

humanistic psychology and cognitive psychology - both emphasising that learning is a process, that it is something a learner does and not something done to a learner and that it is an interactive process and therefore, social.

- The importance of autonomy in adult education was manifested in the Council of Europe's Modern Languages Project. This project, incidentally, also motivated Holec's search for a definition for autonomy.
- Developments in technology provided a rich variety of tools
- The demand for foreign languages as the world progressed towards becoming a global village
- The commercialisation of language provision with the learner as consumer making informed choices
- Efforts to deal with the ever increasing population of schools and universities.

2.2.3 Autonomy and second language learning

Benson [2001:15 – 16] reminds us that the idea of autonomy in language learning actually "originated in the late 1960's and drew sustenance from the social and ideological changes of the time. In higher education, the notion of 'student power' was current ... [and] ... educational reforms were proposed by Freire [1970],... Rogers [1969] and others".

The concept of autonomy as manifested in language education, therefore finds its roots predominantly in liberal western thought in philosophy, psychology, politics and education, with the emphasis on the responsibility of the individual to be a "fully functioning person", in the words of the psychologist-educationist, Carl Rogers [cited in Benson, 2001:5]. For

instance, when analysing the influence of humanistic approaches and its emphases on the individual learner's inner world, it becomes clear that humanism has informed the communicative classroom practice through maxims such as "allowing for choice, involving feelings and emotions" and "encouraging self-initiation", etc. [Williams and Burden, 1997:38] - thereby preparing the stage for the concept of autonomy. Both Vygotsky and Feuerstein are celebrated as having independently of each other, drawn attention to the social context in which learning takes place. While humanism helped to highlight the role of the learner as active meaning maker, social interactionism emphasises the "dynamic nature of the interplay between teachers, learners and tasks, and provides a view of learning as arising from interactions with others ... *teachers, learners, tasks and contexts* ... all interact as part of a dynamic ongoing process" - an accurate description of the essence of a social constructivist model of the teaching learning process [ibid:43].

Benson concurs that one of the characteristics of research in autonomy in language learning "has been its willingness to look at sources beyond the field of education for insights and intellectual guidance" [2001:23]. From the political field then the term obtained a somewhat controversial meaning, namely the right to be free from external control. Interpreted in educational terms in the words of Paulo Freire, it denotes a capacity to acquire the skills and attitudes assisting one in helping to transform society, thereby developing individual autonomy as "constituted within social groups". This definition exposes the inherent tension between responsibility and freedom, between the individual and the social [Benson, 2001:51] and between dependence, interdependence and independence. Obviously these tensions hold a challenge for both learner and educator in a classroom environment where the issue of control and taking charge is central to becoming an autonomous learner. Needless to say, there are clear implications for teacher training and for the role adopted by the trainer.

2.2.4 Autonomy and Constructivism

According to Benson it is primarily through the work of David Little that the influence of constructivism entered the field of autonomy [Benson, 2001:40], the key idea being that effective learning is active learning.

Constructivist theories of learning can be distinguished easily from both structuralist and empiricist approaches. Paris and Byrnes [cited in Benson, 2001:36] explain that structuralist approaches emphasised “innate categories of knowing and concepts that are imposed by individuals on the world”. Empiricists’ approaches focused on “how experiences imprint the structure of the world into the minds of individuals” whereas constructivist approaches “describe how people transform and organise reality according to common intellectual principles as a result of interactions with the environment”. Candy [cited in Benson, 2001:35] sees “as a cluster of approaches which hold that knowledge cannot be taught but must be constructed by the learner” – a somewhat radical view since many researchers agree on the importance of the social environment and the presence of the teacher.

Benson [2001:35] declares that recent research in the field of autonomy has relied quite heavily on the constructivist tradition with the names of Dewey, Freire, Illich and Rogers prominent in the debate. The work of Kelley, Barnes and Vygotsky have, in particular, influenced the field of autonomy in language learning. Of course, in the economically developed world, the importance of language as a means of communication has grown substantially. It is not surprising therefore that it is in the teaching of languages such as English “that the concepts of autonomy and independence have established strongest roots ... they have emerged as keywords for flexible approaches to teaching and learning and responsiveness to diverse needs and circumstances” [Benson & Voller, 1997:6].

Constructivism, like autonomy, does not allow a simple definition. Reagan [2003:123] points out that various researchers agree that there is no consensus on what is actually meant by “constructivism” and he quotes

Virginia Richardson in saying that there are "... fundamental theoretical differences in various constructivist approaches". He suggests that Catherine Fosnot's statement that "Constructivism is a theory about learning, not a description of teaching" is probably accurate. In the same article Reagan distinguishes between "radical" and "social" constructivism. According to him radical constructivism has its philosophical roots in Piaget's genetic epistemology and it is "... premised on the belief that an individual's knowledge can never be a 'true' representation of reality ... [it] is rather a construction of the world that she or he experiences ... the result of active mental work on the part of the learner." On the other hand, social constructivism has its theoretical foundation in the work of Vygotsky. It is accepted that the learner constructs own knowledge but it is argued that the process of knowledge construction "... inevitably takes place in a sociocultural context". The knowledge is therefore – at least to some extent - socially constructed. In conclusion, Reagan suggests that the most "reasonable" way to articulate the common elements of the two types of constructivism, is possibly to "talk about knowledge as 'socially mitigated but personally constructed'" [Reagan, 2003:124-125].

Kelly contributed to the debate through personal construct theory. He maintained that individual learners bring their own unique systems of constructs to every learning task. Although these constructs are derived from shared assumptions and values, individual systems of constructs are shaped "... through attempts to make sense of experiences ... uniquely ... [their] own" [Benson, 2001:36].

Holec refers to a 1977 report of the Council of Europe [1981: 22] in which it is stated that not all learners are capable of participating spontaneously in learning – it has to be learnt. This could be the result of early directive schooling followed by conditioning and other alienating activities inhibiting the spontaneous aspiration to take control over own learning. The majority of learners may thus have to "acquire" the capacity to become autonomous learners, thereby implying the role of a teacher/ educator and the importance of learner training.

However, it is when the learning material contradicts or is completely foreign to the learner, that the assistance of an educator becomes essential in order to help the learner to become aware of her/ his assumptions around the learning process and motivated to overcome these prejudices in order to take control of her/ his own learning. The challenge involved is both at cognitive and emotional level. The learner needs to be willing and act intentionally and purposefully. There must be a choice to act autonomously.

The educator needs to maintain the balance between encouraging independence while providing sufficient support in whatever way to sustain a sense of security and positive encouragement in the learning environment. It goes without saying that this is a dynamic situation where the actions of the learners dictate all decisions, whether it is about methodology, content or classroom management. No wonder then that Little [1991:21] points out that while personal construct theory provides justification for the promotion of autonomy, it also calls attention to the difficulties involved in fostering autonomy. He concludes by suggesting that teachers should – throughout this process of assisting the learners – also reflect upon their own personal constructs and beliefs informing their practise. Again this has direct implications for the content and methodology selected in teacher training.

2.2.5 Cultural Perspective

When researchers try to argue conclusively about the origin of the concept autonomy and whether it should be attributed to nature or nurture, questions about the cultural aspect surface. Thomson is cited in Benson [2001:59] as referring to the fact that although young children take control over their learning and more specifically that of their mother tongue, they seem to give up a lot of this autonomy as learning becomes more challenging and channelled through school. Whether the way in which school learning is organised, actually suppresses this natural tendency towards autonomy, remains to be proved. However, it is interesting that while researchers operating in the Asian countries today, often refer to the so-called “passiveness” of the learners as well as their reluctance to challenge authority

in academic environments [Benson, 2001:55, 56], others such as Benson himself and Pierson [cited in Benson, 2001:56 as well as Lee, 1998:282], challenge this perception. Pierson attributes the so-called passiveness to colonial education policies, pointing out that Sung Dynasty scholars already recognised that “if you could get rid of the habit of being dependent on others, you will make your advancement in your study”.

Ernesto Macaro [1997:167,168] also reminds us that, because the roots of autonomy can be traced back to a number of cultures, different interpretations exist and each one reveals the particular “sphere of influence from which it emanated”. So, for instance, stressing the *independence* of the learner may well become part of the debate around “self-access centres”. On the other hand, emphasizing *student centred learning*, draws its rationale from theories of “individual learner differences” and may well lead to discussions around the influence of cultural differences or motivational variations. This view confirms the wisdom of Benson’s advice [2001:50] mentioned before, to avoid too long and impractical definitions for autonomy by simply stating the obvious focus of “a capacity to take control of one’s learning” and leaves space for emphasizing different dimensions with particular importance *in particular contexts*.

2.2.6 A Situational Perspective

When one analyses the Critical and Developmental Outcomes that are supposed to underpin Outcomes Based Education now advocated in South African schools, the references to critical thinking and problem solving are clearly meant to address the lethargy amongst learners to think for themselves and think critically. However, this is by no means only a South African phenomenon. Little [1991:37] writes: “By the time ... [learners] ... reach third-level education some learners have formed such a rigid view of what learning entails that they find it very difficult to become autonomous”.

One of the difficulties for students in their first year at university is their lack of capacity to question and delve deeper for meaning. Lecturers in the

educational faculty where the writer teaches, have often expressed concern about the fact that teacher trainees prefer to be given notes they can reproduce verbatim – an arrangement they may help to proliferate amongst their own learners at school one day. Second language students in the same institution explain their inability to use the target language for communicative purposes by referring to a tendency in some schools to prepare learners for literature and grammar papers at school leaving level by providing them with teacher's notes. Some claim that they have never actually read the prescribed books themselves. In-service training often resorts to handing out copies of templates for marking schemes, exemplars of term plans and lessons in order to assist the teachers and "save time". The decision makers attempt to address the problems of high drop out and weak literacy and numeracy levels by providing support in the form of prescriptive materials and control through assessment guidelines.

It is in this climate that autonomy has to grow. Decision makers, teachers and teacher trainers need to be reminded that autonomy is not simply another approach, but rather an essential "educational goal" [Holec, 1981], "meant to allow learners to contribute to the transformation of their societies".

When the authors Williams and Burden [1997:3] listed what they regard as "areas currently of interest to language teachers", it comprised of the following:

- Learner training: learners can be helped to acquire appropriate strategies for learning languages such as cognitive and meta-cognitive strategies.
- Motivation and more specifically what it is that motivates the language learner.

Both these issues show clear association with the key elements of autonomy, namely the capacity to accept responsibility and actively take control of own learning and working independently towards this goal.

It is now 2007 and the question may well be asked why many South African school going learners still show so few, if any, signs of a capacity for autonomy since the national school curriculum, underpinned by constructivism as learning theory, is now in its tenth year of implementation. It is possible that the answer does not necessarily lie with autonomy as an attribute of the learner or learners, but rather with autonomous learning as a mode of learning and the educational practices designed [or not designed] to foster autonomy.

2.3 TOWARDS AN OPTIMAL LEARNING ENVIRONMENT FOR FOSTERING AUTONOMY

Autonomy is generally regarded as an attribute or capacity of the learner, rather than of the learning situation and although an educational goal, the concept as a whole is not something that can simply be taught or learned. According to Benson [2001:110], most researchers use the word “fostering”, thereby referring to processes *initiated* by teachers or institutions. Benson himself uses the term “developing autonomy” exclusively to refer to processes *within* the learner only. [Benson & Voller, 2001:110 -111]. The word “initiated” is quite significant here, since it refers to the fact that, although learner training is part of the fostering process, there are no guarantees that the learners will display or exercise their developing capacity towards effective autonomous behaviour; also that the trainer’s contribution is largely in preparing or “setting up” and facilitating a learning environment conducive towards fostering autonomy, rather than controlling it.

2.3.1 A Dynamic Teacher Role

The roles of the participants [other than the learner] in the learning environment have in recent years become more prominent as the object of research in the field of autonomy. Benson [1997:2] mentions that there has been increasingly more research on autonomy in the classroom and the so-called “teacher-autonomy”. He [2001:12] continues along the same vein when he says that in recent years, “... research in the field of autonomy has

emphasised that the development of autonomy necessarily implies collaboration and interdependence”. This too points in the direction of a dynamic classroom environment rather than independent and individualised learning. The same author [Benson, 1997:161], alludes to the fact that it is quite likely that the capacity to act autonomously develops *more* effectively in the classroom “where learners are more readily able to collaborate with other learners and *draw on the support of teachers ...*” [author’s italics].

Macaro’s [1997:168] definition confirms this view by stating that autonomy is “an ability ... learnt through knowing *how* to make decisions about the self as well as being *allowed* to make those decisions ...” [author’s italics], and takes us a step closer to our premise that the role of the teacher in the institutional learning environment and the choices she makes with regards to support systems and approaches, are of critical importance in the process of fostering autonomy. Learning to make decisions can draw on psychological factors such as the teacher’s willingness to allow learners to do so, her own inner sense of acceptance that autonomy is the ultimate goal of all learning and her personal autonomy as a model. That the teacher structured her course in such a way that the autonomy of the learner is part of the course strategy and incorporated into her course opportunities for learner training, point at her pedagogical acumen which may [or may not] have been part of her own training.

Questions about the willingness, ability and intention of the learner[s] to embrace autonomy, invariably raise questions about the attitudes on the teacher-educator’s side to foster autonomy: to let go of control in an organized and flexible manner in order to create opportunities for the learner[s] to develop their potential to become increasingly more autonomous as a learner, as a person [at individual level] and as communicator at a social level. By the same token, any discussion of the issue of control of learning processes raises questions about the “teachability” of different levels of control in an institutional context and more specifically in a classroom. Does it imply a certain type of teacher? It is quite possible that the research interest in “teacher autonomy” is at least partially the result of a realisation, that the

paradoxical task of letting go of control while orchestrating the actual process, will not be an easy task. One cannot help but wonder to what extent teacher *trainers* are aware of this plight.

All the participants in the learning environment - including the “human” participants [teacher-educator, learner(s)], institutional rules and instruments, tools such as textbooks and computers - need to work in an integrated fashion towards the goal of autonomy. David Little confirms the importance of the role of the teacher in this powerful association and partnership when he states that autonomous learning does not make the teacher redundant, nor does teacher intervention destroy learner autonomy. He maintains that autonomy in the classroom needs active encouragement from the teacher but warns that it is not something that can be developed within a few lessons and that in fact, autonomy is “hard-won” [Little, 1999:4]. Macaro [1997:186] very aptly refers to it as a “push and pull” situation.

The implication is that although rarely a smooth process, autonomy can be [and should be] nurtured. Instead of inhibiting the development of autonomy as feared by educational philosophers such as Jean Jacques Rousseau, Ivan Illich and the psychologist Carl Rogers and in spite of the obvious complexity, most researchers in the field “now believe that institutional learning can be organised in ways to foster autonomy” [Benson, 2001:30] – a process that implies significant roles for each of the participants: learner[s], teacher, institutional environment, teaching tools and content. This obviously also holds true for SLA.

The role of the teacher requires a complex balancing act between designing and maintaining a rich learning environment with a variety of tools and information resources on the one hand and on the other hand, facilitating language acquisition in a most sensitive way through encouraging increasingly more autonomous action from the learners, thereby relinquishing control to the extent that the individual and collective learners demonstrate the capacity to cope constructively with the newly acquired autonomy.

It also means that the “mind-attitude” of the teacher and her experiences and beliefs about learning and teaching and life in general, will influence the choices she makes with regard to her approach to fostering autonomy. A practical example: A group never before encouraged to act autonomously, should be guided carefully towards autonomous behaviour, with the emphasis on strategies to build motivation and confidence in each of the domains [as learner, communicator or person] with a facilitator/ teacher mindful of and sensitive towards their lack of experience. A mismatch would be if the teacher believes in a radical form of constructivism and her “mind-attitude” is that autonomy is simply handing over control to the learners!

Mindfully and intentionally “setting up” an optimal learning environment to accommodate and encourage the fostering of autonomy, thereby addressing the needs of a specific target group within their own context, requires a knowledgeable and skilful “draughtsman”. While this task will be predominantly that of the teacher-designer-facilitator who will also be the one to implement and initially drive the process of “fostering” autonomy amongst her learners, the other “participants” [learners, but also those practices chosen for their qualities that are intrinsically supportive of autonomy and essential to the approach[es] chosen by the teacher, e.g. technology], need to be part of the conceptual stage through to the actual implementation and evaluation because of the interdependent and dynamic nature of the process.

Benson [2001:161] reports that critical approaches such as critical discussions around the purposes of procedures in the classroom could help the learners “towards a more realistic understanding of the value and limitations of control over classroom activities”. Add to this the additional charge of the teacher *trainer* to create regular opportunities for her students to reflect critically on the role of the second language teacher fostering autonomy amongst her learners and the task, although potentially powerful and with far reaching consequences, can intimidate even experienced teachers. In fact, one cannot help but agree with Lee’s suggestion [1998:287] that teacher counselling in fostering learner autonomy “should be more widely used and explored”.

Fostering the ability to develop collaborative learning should be another priority, since it is through peer learning that social autonomy or “autonomy as a communicator” [Littlewood, 1996:431] will develop. However, assisting learners in becoming autonomous as individual persons may prove to be the most difficult of the three domains to facilitate since we know that students will use strategies and techniques “that have proved personally successful in ... [their] ... past”, especially if the techniques [and strategies] used by the teacher, are too unfamiliar [Rees-Miller, 1993:684]. A conflict of beliefs with the teacher regarding what to learn and how to learn, may in fact lead to students withdrawing, either literally or figuratively, from the course. If this is true at a learner and communication-in-the classroom level, it will be even more relevant when coming to issues relating to the very identity of the student, or, for that matter, the teacher in conflict with the specifications of the curriculum.

Whilst clearly important to understand the concept of autonomy as a capacity, it is towards the way in which we should organize learning to allow our learners within their specific context to become equipped with the skills, knowledge and values to become autonomous, that we now have to turn. We are looking at a way or ways of organizing the learning, rather than at the capacity - the educational goal – itself. We are seeking the conditions and the guiding principles we need to be mindful of as teacher-designer-facilitator when designing and implementing an optimal learning environment.

2.3.2 Fostering Learner Autonomy

Icy Lee [1998:283] applied five conditions she regards as crucial to the development of learner autonomy, in her self-directed learning programme for tertiary students in Hong Kong. They are:

- Voluntariness: learners benefit more if they voluntarily join the programme

- Learner Choice: learners make choices with regards to content, outcomes, progressions, methods, techniques, evaluations, etc.
- Flexibility: students can change their options according to their needs and interests
- Teacher support: the teacher plays an important role in facilitating the process and in order to be successful she needs to establish a good relationship with their students, “supporting and guiding” them by helping them to formulate goals, “providing feedback, encouragement, and reinforcement”
- Peer support: interaction, negotiation, collaboration, etc., are important factors in view of the social aspect of autonomy

The emphasis is yet again on learner choice, social agency and the role of the teacher.

An interesting feature of Lee’s research findings is not only the fact that the students responded to her programme in different ways, but the paradox that “the more ‘autonomous’ students [those who did not seek help and support from the teacher] are less enthusiastic and motivated”. This seems to confirm the importance of personal autonomy - the willingness, intention and motivation to work independently. The learners who were more enthusiastic to participate in the project from the beginning had high expectations of themselves and of the teacher’s role. They maintained regular contact with the teacher, asking for feedback, etc. The less successful learners were neither enthusiastic about their own learning, nor did they capitalize on opportunities to consult their teacher. All of this points to the importance of what Carver and Dickinson [cited in Lee, 1998:286] call “an attitude of mind” and perhaps this is at least partially responsible for the fact that many self-access centres – in spite of huge capital outlay – fail to deliver as expected. One is reminded here of the words of Benson [2001:9]: “... there is no necessary relationship between self-instruction and the development of autonomy and ... under certain conditions, self-instructional modes of learning may even inhibit autonomy”. It also confirms the importance of not only the

presence of a teacher figure, but also the need for the teacher to contribute towards the smooth progress of the process even while ceding control to the learner[s].

Lee [1998:287] indicates that the less successful students may have been less predisposed towards the notion of autonomy, but that does not mean that they cannot be trained. The training should be incorporated into the programme and aim at increasing their confidence as learners by finding ways to learn a language "... in ways ... compatible with their personalities" [ibid:287]. Macaro [1997:179] agrees with this viewpoint and states the need for curricula to prepare the way for a coherent strategy for the development of learner autonomy. He warns that a framework for developing learner autonomy should be part of the process of language learning and not simply a "bolt on".

William Littlewood [1996:428] reminds us that "... since the over-arching goal of *all* teaching is to help learners act more independently within a chosen range of domains, an appropriate methodology in language teaching is also, by definition, a methodology for furthering [*or fostering*] autonomy." He continues by saying that "one of our tasks as language educators is to develop strategies for helping learners to make choices at ever higher levels ... these strategies will constitute our methodology for developing autonomy in and through foreign language learning" [ibid:431]. He suggests his framework [see *Fig. 2*] for developing autonomy in foreign language learning be used as a basis of coordinated strategy "... for providing students with opportunities to develop the motivation, confidence, knowledge and skills for autonomy in relevant domains ... to become increasingly independent communicators, learners and individuals ... also a framework for language teaching".

Fig
A FRAMEWORK
FOR DEVELOPING AUTONOMY
IN FOREIGN LANGUAGE LEARNING

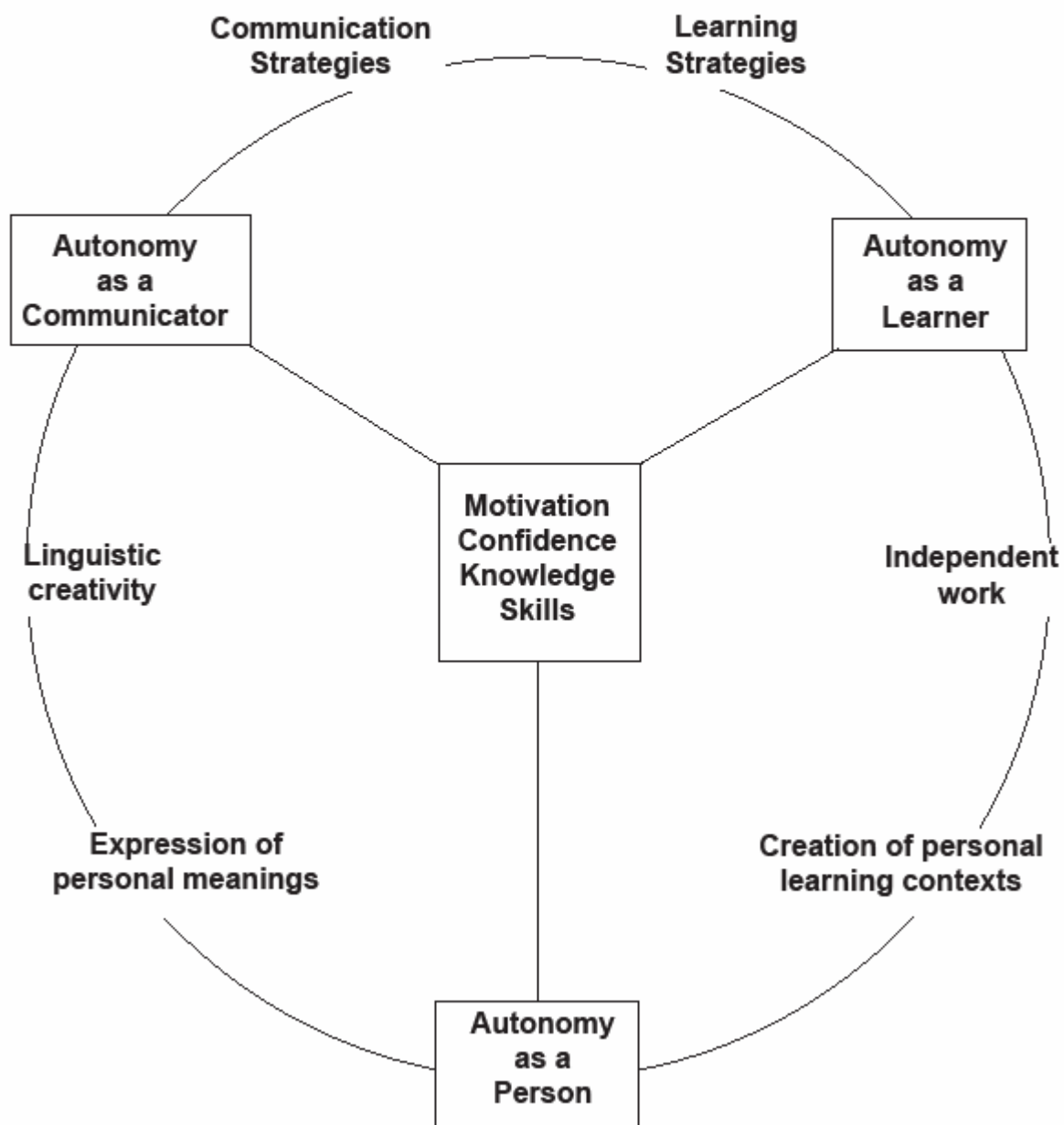


Fig. 2: A Framework for developing autonomy in Foreign Language Learning
[Littlewood, 1996:432]

Littlewood's model claims that the "capacity" the autonomous learner has to make her/ his own choices, depends on two main components, namely "ability" and "willingness". Ability depends on possessing the knowledge about the alternative choices available and the skill to carry out these choices. Willingness depends on the motivation and confidence of the learner "to take responsibility for the choices required ... [and] ... if a person is to be successful in acting autonomously, all of these four components need to be present together". Motivation and confidence [willingness] and knowledge and skills [ability] therefore appear at the centre of the framework, while the three domains of autonomy [communicator, learner and person] are linked through the circle. "Since the abilities to communicate and learn independently are major factors in enabling a person to make choices in life, they also contribute to each learner's autonomy as an individual". Each of the three domains is flanked by a further breakdown of what they incorporate, e.g. autonomy as a learner depends on both the ability to engage in independent learning and the ability to use appropriate learning strategies. It will be up to the teacher to select the most appropriate methodology to allow the learners to exercise their capacity to become autonomous, although it is not impossible that a knowledgeable target group, already quite advanced in the process, might be involved in the selection of suitable methodologies.

The role of the second language teacher intent on fostering autonomy is implicit in this model: the teacher is responsible for preparing the learning environment using the curriculum and her course outline to make provision for the teaching of knowledge, skills and values matching the needs and interests of the learners. The learners will become increasingly aware of the rationale for choices made by the teacher regarding the content, the management of the learning environment and the learning processes. The teacher will use appropriate strategies and ensure that the learners will become increasingly aware of their value and able to select suitable strategies independently and purposefully as the need arises.

This ties in with Benson's suggestion [2001:50] of three *interdependent* levels at which learner control may be exercised:

- Learning management
- Learning content and
- Cognitive processes.

Planning, implementation and evaluation phases will alternate as the need arises, i.e. according to the needs of the learners. Enough suitable resources need to be selected in order to provide choice and challenge, albeit hard copy or on-line. Since the availability of choices is crucial, part of the fostering process will be to make the learners aware of choices, able to select appropriately and capable of using them successfully – only then will they be “genuine” choices.

The major challenge is therefore to “*foster*” autonomy amongst learners. “Fostering” implies a guiding hand – someone to plan, to “train”, to design, negotiate, assist – someone willing and able to hand over control as the need arises, sensitive enough to notice when the learner shows readiness to take control in a responsible manner.

2.3.3 Educational Challenges

Thinking of the South African teacher training context, one becomes aware of the unique challenges facing the educator intent on fostering autonomy in the second language classroom with its emphasis on the foundational, practical and reflective.

While outwardly most teachers and parents might be in agreement with Little [cited in Benson, 2001:40], when he claims that “all genuinely successful learning is in the end autonomous”, many parents and teachers might not be so eager to agree to a process whereby the learners are intentionally guided to become autonomous and therefore independent of them in their thoughts and decisions.

News reports comment on circumstances currently prevailing in many schools in countries such as the USA and South Africa whereby learners are becoming increasingly more violent and difficult to discipline. Clearly this will do nothing to encourage the significant role players to relinquish more power to the youth within the learning environment unless first changing their philosophy and perceptions about the importance of learner autonomy.

Although, to my personal knowledge, none of the statements regarding the disposition of the educators or the way in which they interpret and use the concept of autonomy, have been tested amongst the South African teacher population responsible for additional language teaching, there is little reason to suspect that teachers will disagree regarding the importance of autonomy in learning and more specifically in language learning, sometimes referred to as “learning for life”. In spite of this, the concept of autonomy is not a dominant feature of the school curriculum. In South Africa, second language teaching has been stuck in a structuralist paradigm for a very long time – not least of all because many of the teachers lack proficiency in the language and feel safer when teaching in this way than trying to do so interactively. Although the current departmental document, the 2002 Revised National Curriculum Statement [RNCS] [Department of Education, 2002], encourages outcomes such as reasoning and thinking for the teaching of an “additional” language, the WCED so much as admits in its recently published “The New Literacy and Numeracy Strategy” that they “oriented” teachers in becoming conversant with the contents of the Revised National Curriculum Statement to enable them to implement it in terms of its prescribed procedures, but that they failed to “train” them to use the conceptual tools “to navigate the new educational pedagogy” [Western Cape Education Department, 2006:1]. In a way this amounts to further disempowering teachers already lacking the ability to act autonomously, since the educational system during the apartheid era did not encourage teachers either to question or to change the directions of the curriculum. The Western Cape Education Department hopes to alleviate the problem by including in the document referred to, a 17 page discussion of theories underpinning the current curriculum. Constructivism takes up approximately 11 pages of the 17 mentioned before.

Although constructivism is obviously a student-centred pedagogy, as is a communicative or interactive approach to second language teaching, “the identification of instructional and learning objectives ... [are] ... the teacher’s responsibilities ...” [Reagan, 2003:131]. Whatever the reasons may be, there is also ample research – especially with regard to self-access centres for second or foreign language learning - to indicate that both adolescents and adults prefer to have the support of teachers and teacher materials while attempting to acquire an additional language [Benson, 2001:59]. Clearly this reliance should become increasingly more relaxed as the learners become more confident decision makers in the classroom.

2.3.4 Teacher Autonomy

If we agree that the role of the teacher is a significant one in fostering autonomy in the second language learning classroom, this in turn implies that teachers and, in fact, all educational decision makers and teacher trainees, should be aware of, knowledgeable about and skilled in the realm of autonomous learning and the fostering thereof.

For Louden [cited in Williams and Burden, 1997:52-54], teachers confronted by new problems and challenges, struggle to resolve them in ways consistent with their own understanding. “A language teacher’s horizons will be shaped ... by her own personal experiences but also by traditional ways in which other language teachers throughout history have made sense of what it means to be a language teacher”. The authors pursue the argument by pointing out that teachers – like their learners – “reshape their ways of understanding, their knowledge structures and ... meanings ... they attribute to events and ideas as a result of the interactive process ... therefore ... an important component of a constructivist approach to education is for teachers to become aware of what their own beliefs are ... [and] to become ... reflective practitioner[s]” [ibid: 54].

Clearly then a constructivist view of the teacher role acknowledges the importance of that role. Rather than trying to list “the outward characteristics

of the successful teacher” or searching for *the* methodology, we should recognise the uniqueness of every teacher-mediator personality and situation. Ideally she should be someone who questions and monitors new theories and directions and is able to negotiate a flexible power relationship with the learners. Learners will then become empowered to benefit from their teacher’s input, the input of their peers and from their own critical agency. These are attributes that fit comfortably with the notion of the teacher aiming for autonomy and therefore “... [thinking] not unilaterally in terms of what learning activities to provide but bilaterally in terms of what learning activity the learner is transferring from the public domain to the private domain [exploiting] the activity for generalizations about learning as well as generalizations about language. Teaching ... relies on fixed procedures that become validated by the fact that most practitioners follow them. In language teaching, such procedures were rarely designed to serve the needs of fostering autonomy and should therefore be re-evaluated by teachers and teacher educators ...” [Crabbe, 1993:445 – 452].

2.3.5 Learner training

The idea that learners can develop autonomy and apply it in the classroom environment, presupposes a learning environment where they can enjoy support, guidance and encouragement throughout the learning process and according to their needs. In a way, all of the previous attempts towards a definition confirm Benson’s statement [2001:2] that autonomy is in essence multidimensional and takes different forms in different contexts of learning. As a result, the teacher’s role could be compared to that of the architect conceptualising and guiding operations and eventually as consultant, called upon when needed to reflect and advise on the process regarding the sourcing of materials [content], structure [management], strategies and techniques [processes].

However, the teacher is also “trainer” when teaching at tertiary level to undergraduates studying to become teachers themselves. It becomes more than a question of creating opportunities or allowing learners to make their

own choices. It is also a question of “enabling” them to control content, their own cognitive processes and the management of the learning. It is not simply to become better language learners themselves but also to engineer better learning by their own learners of the future. Under these circumstances, Benson’s [2001:150 -151] suggestion of explicit instruction, “provided learners do not simply adopt a set of techniques without developing the corresponding abilities concerned with control over cognitive and content aspects of their learning” makes good sense. Benson [ibid.] suggests a combination of explicit instruction of strategies as well as reflection practices – “integrated with opportunities to exercise control in the context of the learner’s ongoing experience of learning a language both outside and inside the classroom”. Reflective practices can include aspects such as identifying the strategies that work for them and transferring it to other learning contexts while explicit instruction could focus on aspects such as theoretical constructs of language acquisition.

Jonassen [1995:60 – 61] from Penn State University identified “Seven qualities of meaningful learning”. These qualities are: active, constructive, intentional, contextualized, collaborative, conversational, and reflective. They confirm, in fact, the outcomes researchers claim for the effective nurturing of autonomy. Jonassen points out that the combination of these qualities render “greater learning” than the individual characteristics could ever do and that these characteristics are “interrelated, interactive and interdependent” – a sentiment that is echoed by researchers such as Benson and Little when they refer to autonomy as a multidimensional concept operating in a systemic manner with interdependent qualities. Benson [2001:100] states: “It is the interplay between self-determined goals and self-determined methods that gives autonomy a dynamic and developmental character”.

2.4 SOUTH AFRICAN CONTEXT

In this study, the writer's intention is to argue the integration of autonomy into both primary and higher education South African curricula for additional language teaching. Teachers and teacher trainers must be empowered to facilitate acquisition in the target language as well as the acquisition of the necessary skills, knowledge and values of teaching the target language at primary school level. There should also be a firm commitment to foster autonomy throughout this process.

All undergraduate students studying to become primary school teachers, [Grades R to 6] had at least 12 years of schooling. The majority of the undergraduate student teachers at the university, where the author of this study is currently responsible for the teaching of Afrikaans as a First Additional Language and the didactics of teaching an additional language, admit that they never had the benefit of a teaching model that consistently involved them as co-producers of their learning environment. Most of them indicate at enrolment that the model of second language teaching they had been exposed to was predominantly a transmission model with emphasis on a study of prescribed literature in Grades 10 to 12. They report that their teachers often provided them with questions for which they prepared written answers either individually or collaboratively. Some used so-called study guides to help them. Teachers also provided them with model answers and these were learnt and even memorized.

South Africa in 2007 is a developing country where educational, political and social transformation is of critical importance. It is also a multilingual society where communication between the different language groups can contribute positively to the transformation process. Looking at the clearly noticeable match between the needs of a society such as that of South Africa and the envisaged outcomes of learner autonomy, the question could well be asked if it should not feature more prominently in the curricula of the South African school environment. [More about this in Chapter 4].

Although classrooms reflect diverse needs, a common denominator is the need for all of society to become actively involved in an agenda of transformation at many different levels. The author of this study has visited many different primary schools and debriefed hundreds of undergraduate student teachers after their Teaching Practice over the last 23 years as a teacher-trainer. During these sessions reports of classrooms where the teacher encourages autonomous behaviours and create opportunities for the learners to practice autonomy, have been extremely rare.

Articles such as “Using the SAQA Critical Outcomes to empower learners and transform education” by Spady [2004] and a paper read at the SAALT Conference at the University of Natal by T. Reagan [2002] called “Critical Constructivism and Language Teaching: New Wine in New Bottles”, serve to illustrate the same dominant theme for education in the early 21st Century in South Africa: the urgent need for transformation. Obviously this need is motivated by a general urgency for transformation [politically, economically, etc.] in a developing country where freedom from oppression was gained only a decade ago. It is, however, possible that educational answers are predominantly sought in changing methodologies, materials [including prescribed assessment structures, exemplars of lesson plans and text books written to accommodate changed world views] and facilities, whereas little real change has been effected in the belief systems and understanding of educational decision makers and educators regarding the purpose and nature of learning and teaching and therefore the roles of the participants in a dynamic optimal learning environment. A recent report from the Directorate: Quality Assurance, Western Cape Education Department, 2007, stated on page one of the report: “A serious concern is the non-compliance with provincial and national prescripts with respect to curriculum delivery. ... The continued use of outdated methodologies and old syllabi persists.”

Another simple but practical rationale for autonomy is simply that a teacher may not always be available to assist every learner when needed. In South Africa the student:teacher ratio is often such that individual attention is impossible in many government schools and teacher training programmes in

higher education institutions. Therefore, to use the teaching of the second language as a vehicle for fostering autonomy amongst the learners makes a lot of sense.

Decisions made by the teacher are generally dependent upon her beliefs about her own role and the more dependent roles of the other participants such as her learners or the tools she engages to accomplish the goal as prescribed to her by the official documents of her employer. Without a purposeful campaign to raise teachers' awareness of a drastically changed role within a constructivist paradigm and more specifically, as an agent of autonomy, there is little chance that her learners will have optimal opportunities to develop their own potential as decision makers to transfer, transform and construct in terms of their own life experience, both individually and socially.

Prescriptive documents from education departments are compiled and distributed to assist teachers. Modern tools and facilities are donated as rewards or motivations and are also meant to assist teachers. However, ultimately the effectiveness of fostering autonomy through SLA promoted by CALL, resides with the human contingent: the *willingness*, the understanding and intentional agency of the learner and the educator. The learner needs to willingly take more responsibility and control. The educator needs to willingly relinquish control. Only then will learners and teachers consider the classroom to be a safe environment for risk taking.

In the final analysis, it becomes obvious that the disposition of both learner and teacher plays a significant role in the success [or lack thereof]; when fostering autonomy in the classrooms. This disposition, however, needs to be developed and educational frameworks must make provision for its development.

2.5 TOWARDS A SYNTHESIS

Since the success of fostering autonomy then seems to depend to a large extent on the behaviour of the “human” participants and specifically that of the teacher within an optimal learning environment, the researcher interested in this complex and changing role, is compelled to extend the research angle to a broad focus, recognising diverse sources such as the psychological, the socio-political and educational to embrace the concepts of interaction, interdependence and independence.

On account of the dynamic nature of the interaction and interdependence of the participants, the investigation must also be seen against the background of the context of a specific SLA target group such as a homogeneous group of undergraduate student teachers training to teach an additional language. From our discussion it has also transpired that while an integrated model is essential, the role of the teacher remains crucial. While learners need many opportunities to exercise control and make choices in order to develop a capacity for autonomy, they also require some explicit training, whereas reflection, meta-cognitive knowledge and being familiar with both direct and indirect learner strategies serve to “enable” them to do so.

Through the preceding discussion, the complex role of the teacher, intent on fostering autonomy in the classroom and beyond, has been analysed. On account of the dynamic nature of the learning environment and the importance of the approach[es] followed by the teacher, we now turn to an analysis of the role that technology can play in assisting the teacher [and learners] in fostering autonomy in the second language learning classroom.

CHAPTER 3

COMPUTER ASSISTED LANGUAGE LEARNING [CALL]

3.1 INTRODUCTION

In the previous chapter we have come to the conclusion that the capacity to become autonomous as a learner at increasingly higher levels can be fostered intentionally and purposefully in the classroom. Learners can be equipped with the necessary knowledge, skills, values, motivation and confidence to use this capacity systematically and transfer it to different domains of their lives.

Autonomy is, however, a multi-faceted and complex construct with many interpretations. The key aspect is probably the capacity of the learner[s] to take control of procedures and make own choices with regard to the management of content, cognitive processes and of learning. Clearly the learner has to be able to select and control wisely and therefore it is imperative that there are choices available and that the learner knows where and how to access the choices, what criteria to use when making choices and how to use the selected materials or procedures and processes. Though it is up to the learner to choose to use the capacity for autonomy and to seek help in doing so, human intervention in the form of a teacher facilitator committed to fostering autonomy amongst her learners, is necessary. We have also indicated how autonomy has become a natural companion to communicative approaches to second language teaching, a partnership that reflects many of the characteristics of constructivism as a learning theory. Another participant with enormous potential in providing choices and allowing learners to exercise control to the extent they feel ready for, is the computer and its vast range of applications.

Motteram, quoted in Benson [2001:136], wrote: “There has always been a perceived relationship between educational technology and learner autonomy. This is taking educational technology in its broadest sense and taking learner autonomy as the superordinate term”. The computer, and more specifically CALL, is often suggested as panacea for the difficult task of fostering autonomy through additional language learning. It is acclaimed for providing access to vast quantities of materials as well as interactive opportunities. Research focussing on self-access centres where the emphasis is on individual computer work, has however proved that the reality is somewhat more complicated. Where it is meant to serve as a practice centre, where the learners are encouraged to work on their own – there is little proof of truly authentic communication [Benson, 2001:123]. The key aspect for success seems to be pedagogical input, i.e. how it is used. Unfortunately this is exactly what these centres lack [ibid:119], since the student has to rely on the computer itself or on technical assistance for guidance. However, in this study we will focus on the *classroom* use of CALL.

If used as a tool to promote autonomy and enhance language learning, the computer should be seen as an integral part of the learning environment with all of the participants, human as well as non-human: teachers, learners, as well as text books and technology, including computers. It should not be seen as a separate entity celebrated for its ability “to make life easier” or perform technological miracles. The potential of computer used as a tool in language learning lies predominantly in its capacity to become integrated in the process of fostering autonomy and language learning through providing the learner with endless opportunities for choices and the exercise of control. Thinking of the specific learner environment chosen for this study, namely the training of undergraduate student teachers, a third goal is educating the target group to become efficient additional language teachers, able to foster autonomy in their own classrooms and utilise instruments such as the computer, to enhance the learning.

The actions of the participants in a learning environment should all be focused on the educational goals of teaching a second or foreign language, while

simultaneously fostering autonomy. While the computer is able to provide opportunities for learning, the purposeful actions of the human participants are needed to stay focused on the goals. Consequently the learning environment is a systemic environment where all components and all processes need to work together towards the same goals.

3.2 WHAT IS CALL?

Levy [1997:152] commented towards the end of the previous century that “the scope of CALL [Computer Assisted Language Learning] is broad, the topic is clearly interdisciplinary. Although reasonably well established in the language teaching field, it helps to conceptualise the computer through the role we want to attach to it, either that as a tool or a tutor”. Taylor, cited in Levy [1997:83], summed up the function of the computer used as tool in the following way: “To function as a tool, the computer need only have some useful capability programmed into it such as statistical analysis ... or word processing. The learner can then use it to help them in a variety of subjects ...” Levy [ibid:83 - 84] also points out that the difference between the computer tutor and the computer tool is that the tutor “evaluates” the student input in some way, while the tool does not. The roots of the role of the computer as tutor “lie in behaviourism and programmed instruction”, while the basis of the role of computer as tool is “fundamentally ... used to augment human capabilities ... In CALL they include [... application programmes such as] ... word processor ..., e-mail, text-based and video-based computer conferencing, ... dictionaries ...” and, we daresay, many other functionalities of which the Internet contributes a significant amount. With the computer as “tool”, its role is supplementary to that of the teacher and the student. It is “less directive” and it needs a specific CALL methodology [ibid:211], shaped by the context in which it operates. It is neutral until given substance and direction by the way in which it is used. As with fostering autonomy, the decisions made by the teacher with regard to the use of the tool, will be critical.

In this study, we will explore the potential of CALL as tool to enhance the pedagogy in an additional language teaching classroom where the fostering of autonomy is an educational goal along with additional language teaching and the training of prospective teachers.

3.4 A HISTORICAL OVERVIEW OF CALL

While one can trace the historical development of CALL to aspects of the development of learning theory as well as language learning and teaching theory, it will be incorrect to assume that it developed at the same rate. It was, for example, only in the 1980's that CALL started to enter a communicative phase after having initially entered the field of language teaching via the behaviouristic tradition.

Recently, trends in CALL research focus on the integration of CALL into the curriculum and how learners utilise it as a tool. The role of the computer as tutor substituting the teacher or promoting the latest magical technological advancements has become less attractive to researchers investigating the potential of CALL to enhance language learning. [See Chapelle, 2001; Egbert & Hanson-Smith, 1999; Fotos & Browne, 2004].

Warschauer [cited in Bax, 2003:15] identified three stages of CALL. Firstly, the seventies to eighties marked a structural approach, following in the footsteps of the Grammar Translation and the Audio-Lingual language teaching methods as paradigm. The objective was accuracy and the technology, mainframe. The principal use for the computer was drill, tutorial explanation, corrective feedback and practice. All of these functions the computer could perform well.

Secondly, the eighties to nineties brought a communicative approach with fluency as the main objective and PC's started to dominate technology. Applications became loosely based on a more cognitive approach and henceforth, communicative principles. However, it still tended to retain a tutor

role, providing input and analytic and inferential tasks [Warschauer and Kern, 2000:13], pre-programming solutions to most problems [Benson, 2001:137], thereby taking away the unpredictability associated with authentic communication while at the same time doing away with opportunities for the learner[s] to develop own strategies for independent problem solving. The emphasis remained the product rather than the process. Interaction through the use of the computer was rather limited [Bax, 2003:17] so that the label “communicative” is not a particularly appropriate term for this period if our objective is to trace the development of CALL, rather than of language teaching methods. Autonomy was not a major goal and henceforth the need for learner control and freedom to choose options were largely overlooked. Nevertheless, Chapelle [2001a:8] claims that by 1986 the status of CALL “had developed from a local curriculum or classroom issue to an international professional concern” in Europe, North America and Australia. The need for teacher education became evident.

From research in SLA came two other major influences – also during the 80’s: Krashen’s distinction between “learning” and “acquisition” and H. D. Brown’s work on individual differences. Both influences had major implications for the direction in which SLA and therefore CALL, developed. When critics tried to link CALL to explicit teaching, thereby implying that the computer could not be used to facilitate Krashen’s “acquisition”, researchers like Underwood [Chapelle, 2001a:9] were quick to point out that there is a difference to claiming that the computer cannot do this or that and realising that it is simply that no one is using the computer in that way ... yet. At the same time applications not specifically developed for language teaching, e.g. word processors and concordances, showed potential “to facilitate creative manipulation of text” and thus “intrinsically” supported cognitive and meta cognitive autonomy [Kenning, 1996:128].

Warschauer’s third phase [cited in Bax, 2003:15], Integrative CALL, is dominated by the use of multimedia and Internet providing authentic discourse while the principal objective is the agency of the learners. The view of language is distinctly socio-cognitive, a reminder that constructivism has

become a major influence on the development of learning theory. Warschauer and Healy [cited in Bax, 2003:19] go on to “enumerate a number of approaches which ... are ... ‘integrative’: task-based, project-based ... content-based ... to integrate learners in authentic environments, and also to integrate the various skills of language learning and use, ... students learn to use a variety of technological tools as an ongoing process of language learning and use, rather than visiting the computer lab on a once a week basis for isolated exercises ...” [Bax, 2003:19]. As a result, many alternative contexts and choices are provided for social interaction and learners gain access to both existing and new discourse communities.

A comparison of Warschauer’s categories with Uschi Felix’s [2002:5-6] analysis of the literature of 1992 to 2002 dealing with language learning and technology, shows a similar inclination to the constructivist ideal of learner agency enhanced by social interaction. Three interrelated trends emerge for this period: constructivist approaches, problem solving approaches and collaborative learning approaches. A common thread running through all of them is a move away from transmission models based on traditional cognitive learning approaches so often still found in CALL [and I daresay, in textbooks and classrooms]. In each of these trends the emphasis is on the agency of the learner: to construct own reality, to solve problems creatively and to construct new meaning through social interaction. Felix continues with her discussion saying that the Web has the potential “to engage students ... in the construction of knowledge”, thereby acknowledging the influence of the Constructivist movement. She points out that new approaches emphasise dynamic and situated learning environments and they have three characteristics in common with communicative approaches to language teaching: tasks have to be contextualised, authentic and meaningful to the student [Felix, 2002].

Benson [2001:138-139] too refers to a third [integrative] phase. He typifies this phase with the use of interactive technologies, multimedia and hypermedia to promote the integration of skills. These applications encourage exploratory learning and learner control. The Internet specifically opens up many new

possibilities for self-directed access to an unlimited range of authentic materials, collaborative learning, learner control over communication, process writing and real-world audiences. Benson claims that “the best of these applications support the development of autonomy by offering rich input, by presenting new language through a variety of media, and by offering branching options”.

Bax [2003:20-21] however, postulates that it is very difficult to prove that these changes did indeed take place and suggests that while the type of “integrativeness” described by Warschauer and Benson is a worthy cause for the future of CALL, it is not an actual distinguishable historical era for CALL, although language teaching certainly moved in this direction.

Bax proposes that we distinguish between Restricted, Open and Integrated CALL [Bax, 2003:21], thereby identifying the development in terms of the roles in the learning environment, rather than emphasizing the time sequence. It is Bax’s contention that we are currently still operating from a predominantly Open CALL [although there are some observable manifestations of both of the other two], which is characterised by whole CALL lessons in a separate language lab and therefore not integrated at all with the syllabus. Admittedly there is progression from the Restricted CALL phase where the feedback was simply that a student’s work was either correct or incorrect and which focused mostly on closed drills or quizzes. Integrated CALL on the other hand, puts the computer “in every classroom, on every desk and in every bag” [ibid:21]. The emphasis is on interaction between students, sometimes around the computer. CALL is completely “normalised “and integrated into the syllabus. All decisions regarding technology are preceded by an analysis of needs and context of the learners and adapted accordingly. Consequently, every “integrated “model will be unique.

Bax’s model allows teachers to define their own practice more precisely and indicate where certain roles are complying [or not] with a particular approach. In other words, it encourages reflective practice. This is crucial in any model where it is the relationship between components, rather than each component

in isolation, that matters and where it is necessary to review the situational aspect regularly in order to stay true to the goals at macro level [fostering autonomy, language learning and language teaching], and to the needs of the particular target group. Furthermore, the implication is that it is the process, rather than the product that matters and that is another strength of the model, which also serves to put it in the constructivism paradigm. Bax [2003] points out that where CALL could not keep up with language teaching developments such as the emphasis on realistic communication in the eighties, it was basically because it was not yet an effective function of CALL and only improved once the web and widely available e-mail became the norm. Perhaps the difference lies in perceptions: what is possible, versus what is actually happening on a large scale.

CALL also started to show signs of more humanistic tendencies incorporated into language teaching and learning during that time, again mirroring the direction learning theory and teaching methods were going under the influence of educational psychologists such as Carl Rogers and no doubt following in the direction of some of the so-called “designer methods” such as Suggestopaedia and Community Language Learning. One is reminded here of Warschauer’s [2005:42-43] socio-cultural analysis of the relationship between man and the tools. He borrows from the work of Vygotsky, using each of his terms: “mediation, social learning” and “genetic analysis” to clarify his point. Referring to “mediation”, he emphasizes the fact that the value of tools such as the computer lies in its potential to allow transformed human action – in other words, not simply facilitating action but allowing altered action – unique to every individual act of partnership with human participants. In this sense, the computer is not simply “assisting” or “supporting”. The computer is used to literally *enhance* and *promote* learning, albeit language learning or fostering autonomy through language learning. A practical example of this would be the connectivity made possible by e-mail between learners in two different countries or regions, one of them being an area where the Mother Tongue of the one correspondent is the foreign or second language of the other. Through the correspondence the non - Mother Tongue speaker does not only improve her proficiency in the target language, but also

through exposure to cultural elements, changes her views and preconceptions of the Mother Tongue speakers of the target language and in the process might develop a more inclusive and broader view of society free of stereotypes. Obviously, these developments will, to a large extent, depend on the specific task and the willingness of the learner to engage at this level.

Warschauer's "social learning" refers to different kinds of interactive discourse with an authentic audience supplying feedback. It also involves the whole learning environment with its human participants and helps us to understand that the use of technology is part of a much bigger reality, an age of technology, affecting students' motivation and attitudes and assisting them in designing and shaping their environment. Warschauer [2005:48] concedes that technology can be described as a tool, "but ... it mediates and transforms human activity". It is these "more-than-a-tool" qualities, as well as its amazing versatility, that makes CALL a worthy and potentially very useful partner in the learning environment where fostering autonomy is a major educational goal. We are not simply looking for a tool to help create opportunities for language use – we are interested in the way in which it can *promote* learning in the broader sense, transferred beyond the classroom into the lives of the learners and their communities.

Through this historical overview it becomes obvious that the direction in which the pendulum swung for learning theory and language learning theory, dictated to a large extent the way in which CALL developed. Perhaps the most important lesson to be learnt, is that whatever the design we choose for a particular target group, the learning environment must be developed as a whole with the needs and situational setting of the specific group in mind. Decisions need to be based on the theoretical and practical, the relationships of the components purposefully designed, while constantly reflecting on its interaction around the educational goals.

3.4 PREPARING FOR CHANGE

In 1996 Hubbard [cited in Pennington, 1996b:11], pointed out that Computer Assisted Language Learning [CALL] is not yet a mature field of research in the sense that we can simply define it in terms of what has been produced. Researchers should also focus on what CALL *could* produce in a pragmatic approach [ibid:16]. After attending the InSTIL and EUROCALL conferences in 2000, Chapelle [2001b:3] wrote that long awaited advances have been made in speech technologies and that most importantly, it became clear that “we should be prepared for change. ... The turn of the century seems an appropriate time to examine ... the future of language teaching in general, as well as how technology fits into that future.” CALL research finally shifted its emphasis away from its preoccupation with CALL vs. no CALL, but no one is sure exactly what kind of change to expect.

Researchers have expressed various views of the changes we can expect. Murray [cited in Chapelle, 2001b:4] comments that historical analysis of changing modes of communication suggests, that new communication potentials such as e-mail will complement rather than replace existing practices. Levy [1999:185] declares that it is quite possible that a growing proportion of students will interact with native speakers only in computer-mediated language-learning environments in future and so, because of the specific goals of the target group, CALL can no longer be perceived simply as a tool. Indeed, the needs of the target group should dictate the educational goals and these goals should direct the agency of all participants, human or technological.

Network Based Language Teaching [NBLT] also seems to be a very important emerging area of major interest to language teachers. Although mostly focusing on quantifiable aspects of on-line communication, some interesting research results have been published [Warschauer and Kern, 2000:17]. The same source reports on a number of studies quantitatively comparing participation in face-to-face and computer-assisted discussion and finding a more balanced participation among students as well as between students and

teacher in the computer mode [Warschauer & Kern, 2000:14]. Studies such as these can go a long way towards proving to the sceptics that CALL does add value in the language-learning environment if used creatively and thoughtfully. It is no secret that many language teachers find the students' lack of willingness to participate a major stumbling block in the language classroom, at least at the lower levels of proficiency. According to Warschauer and Kern [ibid:17] NBLT does not represent a specific technique, approach or method. Instead it is a "constellation" of ways by which students can communicate via computer networks and then "interpret and construct" on-line texts and multi-media documents as part of a process of increasing engagement "in new discourse communities". Again the links with the goals of learner autonomy and constructivism are clear.

The ways in which our learners learn, the language itself and the learners' goals are no longer changing only because of advances made in learning theory and subsequent changes in language teaching theory; it is changing also because of advances in technology and more specifically in computer technology, changing the face of communication. Although the challenge is already real to many English teachers, as cyberspace becomes more multilingual, all language teachers will have to adjust their perspective to incorporate the role of language learning in an information technology society [Warschauer & Kern, 2000:12-13]. Computer Literacy may in future become incorporated into literacy. Even if reading the Web tends to be more about clicking than reading, as teachers, we can shape how it is used [Levy, 1999:188]. All things considered, computers are here to stay and CALL deserves to be taken seriously by all language teachers and researchers hoping to prepare the learners for the future.

Rassool, as cited in Chapelle [2001a:1], lists a number of technological advances and expectations for the 21st century and offers some resulting challenges for communicative competence. He mentions the need for innovation through research and development, multileveled changes brought about in everyday lives as a result of technological developments, the open accessibility of an enormous range of information as well as the interactive

and multimodal nature of electronic text. These changes, in addition to new insights into learning theory and language learning theory, force the language teacher and learner of the 21st century to become familiar with the contributions computers can make and to reflect on to reshape its role in the classroom and reshape the classroom practices accordingly.

Inevitably, the changes have major implications for the roles of teacher and learners who need to be empowered to deal with the strains of changed theory and practice, changed beliefs around the learning and teaching of an additional language and motivation to persevere. These could become insurmountable constraints. Interestingly, in Meskill and Ranglova's work [2000:33-36] research technologies, which were utilized as tools to support independent and collaborative work, contributed significantly to the motivation of the learners since they became optimally involved and empowered through the use of these tools. In other words, what was originally seen as a potential constraining factor, became a motivation for accepting and embracing the change. The researchers indicate that the technologies utilized, played a key role in changing thinking about language "especially in terms of student autonomy, student-student collaboration and teacher participation" and provided the opportunity for the participants to co-design the language and teaching. The telecommunications component specifically seemed to have brought instructors "out of the traditional role of single knower", impacting on the beliefs of both learners and instructors while also involving them directly "in constructing new understandings in collaboration with others" – integrated CALL assisting in transformation.

One cannot help but hope that the instrument [computer], currently still seen as a threat by many teachers, may eventually become the very instrument forcing them out of a comfort zone and into the 21st century. A tool responsible for such transformation surely deserves more than "tool" status, but it will depend on psychological, technological, political and pedagogical factors to bring this kind of transformation into fruition.

3.5 AN INTEGRATED ENVIRONMENT

Clearly then the three concepts of autonomy, SLA and CALL, share an interest in what the learner does within the confines of an optimal learning context rather than focusing exclusively on the content, instruments such as the computer, or teacher behaviour. We have also seen how the other participants [teacher, content, tools] all contribute and interact in the learning process within this multifaceted and dynamic setting.

The educational goal in most second or additional language classrooms is the ability to communicate and many teachers opt for a “communicative approach” [here simply used to label second language teaching methods aiming at communicative competence]. Results from a CALL survey [Levy, 1997:123] indicates the communicative approach is the current preferred philosophy of language teaching and learning. Teachers will therefore be looking for assistance in facilitating and encouraging communication, i.e. in listening, speaking, reading and writing with the emphasis on meaning making, reasoning and thinking in the target language, using natural language. While this does not mean that form, or the teaching thereof, is discarded, fluency, “appropriacy” and connectivity, rather than accuracy, may well be the priority. Compared to the language teaching of the 1950s and 1960s, our current notion of communicative competence reflects “the complexity of language learning and teaching” [Levy, 1997:155], and thus there is a wide range of possible strategies, materials, activities, techniques and roles that teachers can choose from or, alternatively, create themselves. Simply thinking of two principles typical of current “communicative” courses, namely authentic materials and bringing the life world or “real world” into the classroom, already gives us an intimation of the variety of aspects the teacher may want to address through a course design. Obviously, the needs of her target group and situational aspects will help her and her learners to make decisions with regard to the choices they have.

It is therefore very difficult to categorise CALL procedures or materials in terms of a single theory of language teaching such as Communicative

Language Teaching [CLT]. However, Levy [1997:85] asserts that three requirements are suggested for CALL used within a communicative environment, using the approach to language learning as starting point:

- “concentration on meaning rather than form;
- the use of authoring techniques;
- and the adjusting of the programme to the needs of teachers and learners”.

Language teachers need to be trained to use CALL not necessarily as technology experts, but as language educators with access to technology. The multiple new uses of the computer force us to look at on-line activities not simply for its pedagogical value, but also for its ‘social utility’ and thus the new technologies cannot be perceived any more as merely assisting the language teacher, but as helping to shape new paradigms [Warschauer & Kern, 2000:12-13]. Meskill and Ranglova [2000:20] point out that redesigns of language courses must be guided by two interdependent considerations: current best instructional theory and practice as well as “careful consideration of the situational variables” pertaining to specific contexts of technology use. These considerations will serve to expand their understandings of the language teaching and learning pedagogies as well as seeking ways to integrate the use of technologies into the curriculum.

3.6 ADVANCEMENT THROUGH RESEARCH

CALL research now recognizes the importance of social interactive environments, i.e. the classroom learning environment [Chapelle, 2001a:16]. This development marked the beginning of a gradual recognition that the computer does not have to take the place of the human factor [the teacher] to justify its existence and that, in fact, the emphasis should be on the ways in which computer assistance can be used to enhance the whole inclusive learning environment, rather than trying to become the whole learning

environment by itself or simply taking over the job of a text book and/ or teacher.

Research methods are changing from predominantly quantitative [experimental-control comparisons] to principally qualitative methods, discourse analysis and analysis of socio-cultural contexts with data coming from ethnographic observations, social interactions and interviews. Huh and Hu [cited in Egbert & Petrie, 2005:9-15] lament the occurrence of predominantly quantitative methodology to prove the successes of CALL. They point out that statistical results do not provide the in-depth explanation and evidence essential to the understanding of human phenomena. Ferdig [2006:755-756] refers to the tendency amongst CALL researchers to compare a classroom where CALL is used with a control group where it is not used. This, he says, is problematic since it is unlikely that the two classrooms merit a direct comparison. There are simply too many variables.

The roles of the human participants within the learning environment, both learners and teachers, need to be analysed for the way in which they interact with each other and with the environment, including the tools and instruments used to effect change and improvement: thus, a development from mostly tutorial functions, to tool functions to a role integrated into the curriculum and thus in partnership with teacher and learner. The learners are in control, not being controlled by the computer as in tutor mode [Warschauer & Kern, 2000]. In recent sophisticated programmes the learner can choose to move around and explore simulated environments and choose to use optional comprehension tools to assist her in making meaning. Warschauer and Kern [2000:9] describe a multimedia videodisc programme "Philippe", which allows learners to "walk around" Paris while creating a sense of realism through the video footage while the story line "maintains the players' interest". Optional tools include a glossary, transcriptions of the audio segments and even a video album including samples of some of the language functions such as using gestures appropriately and saying hello and good-bye. These are but two of the many advances made in recent years. Still, the interaction remains between the learner and the computer, rather than between learners.

In socio-cognitive approaches the emphasis shifts to interaction between humans via the computer. The computer becomes a mediational tool. Computer networking [through computer-mediated communication (CMC) and globally linked hypertext] now allows this and thus becomes extremely helpful in interactive and authentic discourse communities [Warschauer & Kern, 2000:11]. As a result, the learning environment can now offer almost instant authentic communication: between people. It is up to the teacher and learner to decide how to use it in order to improve the learning as indicated by language learning outcomes described by the curriculum. Whether the goal is accuracy, fluency, “appropriacy” or simply learner agency, the instant availability of authentic language in spoken and written form, allows for varied creative engagement with the subject matter as negotiated and planned by teacher and learner. This can include collaborative, one-to-one and one-to-many communication – asynchronous or synchronous – all within the safe confinement of the classroom walls with technological and pedagogical help always available either from the teacher or other learners.

A more comprehensive approach would be to assess the cognitive and affective impact of CALL integrated into a curriculum. “A good innovation involves pedagogy [the process], people and performance”. Ferdig [2006:756] reminds us that affective gains often precede and drive cognitive gains and that research is beginning to “provide evidence that humans enter into social relationships with technology”.

In other words, there seems to be general consensus that a more “mature” CALL research tradition should look towards answering questions around the relationship between the human participants, the instrument and the specific learning environment or context in which it is used. The actual use of the language in its cultural context and in conjunction with the tools provided by CALL is no longer a dream. Such a seamless learning environment makes it essential for the researcher eager to find reasons for effective or non-effective learning in the broad sense of the word, to analyse the dynamics of the whole system, including all participants, rather than select isolated aspects for scrutiny and thereby missing the point, namely that an answer can only be

found in the way the whole system operates. Since such a task will no doubt also involve the views and beliefs of the investigator, the research task in itself becomes a reconstructive process, turning researcher into collaborator. Action research might be the best option for such a “messy” operation with the teacher well equipped as participant to conduct this research.

Answers to CALL research questions tend to be complex. One of the reasons is the fact that technological innovations change so rapidly that an answer could literally change on a daily basis. Another reason is that the theoretical input regarding SLA is often still neglected for the sake of reporting on the latest technological advances in the research and as a result findings cannot be properly validated, generalized or applied. Research, focussing exclusively on technological advances and ignoring the language teaching and learning context in which it is used, is of little use to those working towards educational outcomes. In isolation, computer developments have little more than interest value unless perceived as an integral part of the learning environment. When studies emphasize only the positive aspects of technology, rather than see negative results as opportunities for learning about its “learner fit”, teachers can learn nothing from it and until they become aware of the possible pitfalls, they are at the mercy of any well structured advertising campaign. While the help of a technology expert can be called in to judge the technological workings of any equipment used in the classroom, only the educator with a good understanding of the curriculum, its envisaged outcomes, the target group and the institutional environment, can judge whether the computer can add value to the processes and procedures in the classroom.

It is also sometimes assumed that technology alone is responsible for change and the human and situational factors are ignored [Huh and Hu cited in Egbert & Petrie, 2005:9-15]. The same authors suggest five guidelines for improvement in CALL research approaches:

- To link SLA theory to CALL questions, findings and analyses
- To adopt well-suited research designs

- To beware of technocentrist views
- To provide strong evidence to support claims
- To include appropriate discussion of negative results and limitations.

[Egbert & Petrie, 2005:18]

Levy [2000:189] states that CALL researchers need to provide as much detail as possible on the conditions surrounding the study. Examples are the teacher and learner roles, the integration into the course, the attitude of the participants and the language learning objectives. This is not unlike the conclusion we came to regarding autonomy in Chapter 2, where it also became clear that the research focus should be inclusive of all the participants in a specific context: learner, teacher, tools or instruments and learning environment in general. Research answers need to acknowledge the connectivity and dynamism of the learning situation. Clearly, such an approach is, as mentioned before, by far messier than a quantitative approach [ibid:31], such as simply comparing the scores of students in a CALL environment with those in a non-CALL environment. Like the cause and effect behaviourist type language teaching of previous decades, such an approach appeals to a wider audience since it is easily understood. It is, however, also an approach with somewhat less honest results and little chance to generate solutions, explain transformations and lacking the power to address the real issue, namely the complex systemic role of a dynamic learning environment and its effect on a rather multi-dimensional learning process.

Nevertheless, in 2005 Egbert [Ebert & Petrie, 2005:7] reports that CALL as a field and focus of research, is maturing at last. She suggests CALL research should henceforth look at CALL from different perspectives, many different contexts and learners, thereby beginning to get a better idea regarding the rate, the pace, the content of CALL as used in different domains, the learning theories informing the practices and how learners actually respond in terms of their learning. She also points out that using multiple perspectives and methods when collecting data will ultimately ensure that we have the “most complete answer“. A case in point is looking at CALL from a socio-cultural

perspective, analysing the roles of teacher and students and how their relationships are affected by the software structures they select. Another perspective could be the design-based perspective, where design teams might be looking at the processes involved when the tool is used effectively or not so effectively.

Jonassen's perspective [Meskill, 2005a:34] is also a useful one. He created the concept of "mind tools" underpinned by a theory of learning mirroring that of second language education, stating that learning occurs when learners interact and think in meaningful ways. This relates to Vygotski's view that "collaboration between two or more learners on a constructive task can only be achieved by externalising and thus making explicit, processes of analysis, planning and synthesis ..." [Benson, 2001:39]. According to Jonassen, computers act as tools or "intelligent partners" to support the creative, critical and complex thinking needs of the students. This, as well as the provision of a large quantity of language material with the potential to be selected and used to perform a myriad of functions supporting language acquisition, is a direction shared with the educational goal of learner autonomy.

In conclusion, the computer as a learning tool is used to enhance the teaching and learning of an additional language and therefore essentially a "neutral" concept until integrated into a particular framework and used to help shape the framework. Where autonomy is a prominent educational goal, CALL is a tool, albeit a powerful and dynamic one with endless application possibilities. In addition CALL can now begin to fit into the curriculum as a "language medium", a form of literacy of the age of technology and as such be evaluated as a part of the learners' communicative competence. More than one learner at a computer terminal will help to facilitate the collaboration between partners and with their other "intelligent partner", namely the computer.

3.7 A CRITICAL PERSPECTIVE

3.7.1 Distractions

A valid question is to what extent all these developments actually encourage the learner to deeper levels of engagement with the input and ultimately to creative and critical response. Language learners, while entertained by, for example, sound and images, may fail to identify and respond to subtler clues towards meaning making. Teacher trainees may be distracted from issues such as how the computer facilitates language acquisition and learning and how it assists in the process of fostering autonomy. Generally speaking, the broader contextual dynamics and educational goals should not be neglected for the sake of demonstrating technological advancements.

3.7.2 CALL versus textbooks

Publishers and authors often promise that textbooks or even prescribed and departmental learning materials will make a positive contribution *in their own right*. In many classrooms the textbook is still the teacher's main partner and a material-centred approach is not uncommon, often to the detriment of the learner, since it usually does not allow the learners much freedom of choice and makes no provision for individual learner differences. In addition, it does not allow for the specific needs of the students and their learning environment and frequently it dictates content and methodology because a "good textbook" is often identified by its power to leave the overworked teacher with as little preparation as possible. It seems then that teachers uninformed or unaware of the importance of adapting content and method to the needs of the target group and hopeful of major relief through textbook or computer assistance, may be due for great disappointment – especially if they are hoping to achieve both autonomy and language acquisition for their learners by handing over control to textbook or computer.

It is not the purpose of this study to investigate the power of "the textbook" or compare it with the value the computer can add. It is, however, important to

look at the expectations and beliefs governing the teacher's decisions regarding the use of the instruments they believe can potentially enhance their teaching and hopefully the learning.

Teachers' workload has not in any way diminished over the years and decision makers are forever interested in ways to reduce the number of teachers on the payroll, especially where there is a shortage of funds. It is quite possible that the contributions computers can effect in education are judged in this way. No matter which level of teaching we are referring to, herein lies one of the greatest dangers also in terms of fostering autonomy, since the student:teacher ratio will affect the ability of the teacher to give effective guidance to learners with diverse needs. The contribution of whatever tool the teacher employs, should be measured in terms of the added value to the learning process and not for its ability to take over the control thereby providing fewer choices, be they managerial, content specific or methodological.

The textbook or computer integrated into the learning environment will assist the teacher and learner, and therefore their roles will be transformed - but not necessarily reduced, or in the case of the teacher, substituted. McNaught & Amory [cited in Thomas, 2003:33] write: "the relationship between technology and learning could be summarised simply: the success of educational technology is totally dependent on collaboration between all parties that include learners, facilitators, designers, and technological tools" – the whole learning environment therefore. Tasks will have to be defined and the tool be evaluated "in relation to the task" [Levy 1997:212]. The task, of course, will be evaluated in terms of the learning outcomes assigned to it predominantly by the teacher.

Chapelle [2001b:8] suggests the following criteria for CALL tasks in the language learning classroom:

- The degree to which it offers language learning potential

- The learner fit
- Meaning focus
- Positive impact and
- Practicality.

In view of the aspects discussed in the previous paragraphs, I would like to add to Chapelle's suggestions:

- The degree to which it offers learning potential through interaction
- The curriculum fit
- The capacity to contribute to transformation in the classroom: learner, person, communicator; both learner and teacher
- The capacity to allow for various levels of language and technological competence in the learning environment.

If we agree that CALL results depend on how it is utilised, it becomes increasingly clearer that there is a major need for in-service and pre-service training, should the decision making fraternity agree that CALL is here to stay and that it can enhance language teaching and the fostering of autonomy, to identify the training of teachers in this sphere, as a priority. But it is possible that such an acknowledgement will have to be preceded by another admission: that there is no such thing as a stereotype audience and no such thing as a textbook or CALL package that will suit all; that teachers can therefore never simply utilise an instrument without creatively and critically evaluating its potential through its interaction with the other elements of the learning environment, focusing on the learning goals. According to Allwright [1981:14] the answer to the question "What do we need teaching materials for?", should be that what we really need, are *learning* materials.

There are major differences between textbook materials and CALL due to the diverse capabilities of the two mediums. Here one thinks immediately of the interactive function and the storage capacity of computers. The potential for student agency is hugely improved. The choices of content, operation and

engagement are countless, the whole picture much more elusive and therefore the teacher as principal designer and manager – even if only initially if autonomy is an educational goal – has a much more complex and creative job than she had when using the textbook as partner. Another anomaly then: the instrument assumed by many to be able to take over the teacher's responsibilities, actually requires a more creative and critical agency and a carefully conceptualised framework from the teacher. No wonder Levy [1997:111] commented that the conceptualisation of CALL materials is much more complex than conceptualising traditional text-based materials.

Should the teacher leave the conceptualisation and authoring to programmers, the danger of a technical driven programme with vague educational goals and outcomes and lack of flexibility in implementation potential becomes real, bearing in mind the ideal of integrating CALL is that computer work and non-computer work are coordinated towards the same educational goals. Again, there are clear implications for teacher training, both in-service and pre-service, to enhance and promote learner agency.

3.7.3 Computer assistance versus computer enhancement

We are not only interested in how computers can assist teachers in language learning contexts, but specifically in how it can simultaneously – as integral part of a dynamic teaching approach – enhance the practice by also fostering and promoting autonomy – a role which adds substantially to expectations since there is clearly more of a process focus than a content focus which is one of the emerging strengths of the computer. Since we have already established that fostering autonomy is no mean feat and also lacks permanency, it is a matter of course that the role the computer can play in the finely tuned and balanced process of fostering autonomy, needs to be explored carefully. Our interest is predominantly motivated by the need to establish guiding principles for a classroom based learning environment where there is a flexible and gentle balance between the “push and pull” of fostering autonomy.

If CALL enhancement is really all about what is taking place in the communication between the learners and what the computer can offer, it becomes clear that it is not about quantity [of information] or simple practise and reinforcement, but really about quality of “connectivity” [Felix, 2002:1]. A truly “constructive” process.

3.7.4 The Role of the Teacher

We can rightly ask if teachers, departmental officials and teacher trainees are sufficiently informed about CALL developments and the many options and possibilities available and whether they have been trained to access them. Knowledge of what the computer is and what it can do, will play a central role in shaping the developer’s conceptualisation of CALL. In developing countries with limited resources this can become a major stumbling block. Restricted understanding of the capabilities of the computer can not only restrict the development of the hardware and software, but also its enormous range of application potential.

Similarly, a restricted understanding of the theory of language teaching and fostering autonomy will also restrict the development of CALL and its application potential. The implications for a predominantly pre-technology trained teacher fraternity and, in the developing countries, often an under qualified teacher corps, are obvious. In addition, teachers in management posts are often distrustful of “new” materials and methods since many of them were trained prior to the introduction of computer technology into schools. When required to purchase materials, they might not be able to distinguish between suitable materials and materials simply impressive because of its technological properties or entertainment value. So-called “computer teachers” are employed for their acumen with technology rather than their ability to see a big picture whereby computers are integrated into the everyday classroom routine. Since they cannot be expected to have in-depth knowledge of what is required in a language teaching classroom or any other specific learning area, they will not be able to assist in this endeavour, either.

The 21st century teacher can learn from the mistakes of the 20th century teacher who staunchly stuck by the textbook or language laboratory and no matter what, believed in its superiority to whatever unique needs the target group revealed – an example of the tendency amongst teachers to underestimate their own judgement and instead succumb to the power of the printed word or the directive from a department – a dangerous state of mind to say the least. Levy [1997:106] refers to the generalized predictions, ignorance of curriculum and syllabus [and learning environment], vague information about the target group and knowledge taken for granted as some of the reasons why learner centeredness also meant a new focus: “an increased sensitivity” to the needs of the learners and therefore a move away from the know-it-all textbook or computer “package”. Allwright [1981:14] suggests that teachers, “in addition to their role as ‘activities managers’”, need to also become “ideas people” and “rationale people”. “Ideas people” will be able to give advice regarding language learning strategies and techniques, whilst “rationale people” will be able to discuss language learning “and justify their opinions and advice”. This distinction has obvious implications for teacher training, especially in a country such as South Africa where an outcomes based approach puts a lot of emphasis on planning activities to “cover” learning outcomes. Assisting teacher-trainees and in-service teachers to become “ideas-” and “rationale people” has the potential to foster confidence in their own ability and become less dependent on “sales talk”, whether from a publishing company or Internet.

Gremmo and Riley [1995:157] report that the major lesson that was learnt from the “ tailor-made” resource centres established in the seventies and eighties in American and European universities, was “that if they are to be successful, they must provide some sort of learner-training”.

For Bax [2003:23-26] the end goal for CALL should be “normalisation”, i.e. “when the technology becomes invisible, embedded in everyday practice” and presumably “not the centre of any lesson but playing a part in almost all” [the activities]. The computer remains secondary to learning itself and the needs of the learners should always be analysed first in order to address them in the

best possible way. If we accept that this is the way to go, the following three steps should be adhered to, according to Bax [2003: 23 –26]:

- To identify the criteria for the normalisation process
- To audit the practice of every teaching context in the light of these criteria
- To adjust our practice in every aspect so as to encourage normalisation.

Progress can then be measured according to this simple framework. These three conditions fall, predominantly, in the category of teacher agency since her unique target group and their needs are central to any decisions taken at this level.

Becker [cited in Felix, 2002:6] reports on his own findings: “teachers favouring constructivist approaches have been found to make more use of computers in the classroom, while their students use computers more outside the classroom”. The way, in which they would use computers, covers the whole spectrum from negotiating their curriculum to submitting work “in the form of published products on the web”. This, in fact, is an example of enhanced language teaching with clear overtones of autonomy. Felix warns, though, that some students need a “great deal” of guidance and intervention and she cites group dynamics, assessment and time commitment as potential problem areas [ibid]. To quote Ferdig [2006:749], “Past and present research has provided evidence to support the claim that technologies for teaching and learning must be pedagogically sound. However, educational technologies are also part of a complex process involving the people in the implementation of the innovation”.

3.7.5 Cultural factors

Hilda Thomas [2003:27] alludes to the fact that South African teachers specifically have an additional challenge in that additional languages are

taught in multilingual and multicultural classes. Obviously affective factors such as societal attitudes and motivation also contribute in these learning environments, although it has become clear from our discussion that CALL, if used correctly, can also contribute positively to the affective, such as motivation and confidence.

Warschauer and Kern [2000:6] draw attention to the fact that literacy has been increasingly seen as “a key to developing not only language knowledge but also sociocultural and intercultural competence”. Here it is interesting that Itakura [2004:49] found through his research that while an e-mail intercultural project benefited students in different ways to develop more sensitive and complex views on culture, it also often led to reinforcement of existing stereotypes when interpreting data gathered in this way and so again it becomes clear that it is the way in which the computer is used and specifically whether there is guidance available from the teacher to assist the learners in putting information in perspective.

3.8 POTENTIAL PROBLEM AREAS

What could stand in the way of progress towards “normalisation” now that web technology even allows us to strive towards authentic communication?

3.8.1 Beliefs and attitudes of the teacher

It seems that, as much as the human factor can be the key to effective use of CALL, the beliefs and attitudes of the teacher and learners can also become barriers in the way of a smooth transition towards normalisation. Bax [2003:23-26] cites two case studies, which revealed that an audience of academics and teachers had little interest in what you could do with new software demonstrated to them – their assumption was that unless it can do it all, it is not useful. This phenomenon may also partly explain the fact that, even after a lot of time and money has been spent on making CALL available, little or no effort is put into administrative or pedagogical support to integrate it

successfully into the institutional system. At the top end of the scale will be a self-access centre where the teacher role is made redundant. At the other end of the scale is the assumption that “the mere existence” of the equipment will guarantee successful implementation and normalisation. The computer becomes the superordinate construct, managing the learning environment, encroaching upon the role of the teacher, thereby pushing the learner back into the role of passive recipient and consumer rather than the one with increasingly more control and agency.

3.8.2 “Technological breakthroughs” are not properly evaluated

Levy [1997:1] makes the point that “for educators, the rapid and continuing introduction of new technology into education has outpaced the ability of teachers ... to evaluate it properly”. There is the danger that our use of computers – and in fact the planning and implementation of our language teaching programmes – become directed and motivated by the most recent “technological breakthrough[s]” rather than by its appropriate and dynamic role in the teaching of an additional language within our particular contexts. Levy [1997:127] warns against this tendency: “Not everything that *can* be done *must* be done!” In addition to this, developers of programmes must guard against a curriculum “being skewed towards a certain skill” simply because of the latest computer hardware or software purchase.

3.8.3 Practitioners need to reflect on pros and cons

Kohn [cited in Levy, 1997:3] mentions four possible reasons why current CALL is lacking:

- “poor linguistic modelling
- insufficient deployment of natural language processing techniques
- an emphasis on special purpose rather than general-purpose technology
- a neglect of the human dimension of CALL”.

Bax [2003:26] suggests that barriers such as those mentioned above, can be broken down by thorough investigation of the many factors to be taken into account. Practitioners should then be made fully aware of these factors.

Teacher trainees should also be part of this awareness campaign since it will be up to them to educate the school management in the many cases where these individuals were either trained in “Restricted CALL” or are still in awe of technology, expecting it to make no contribution at all or even endangering jobs – these CALL myths are still doing the rounds. On newly trained teachers’ shoulders will rest the task to attempt to integrate CALL into the everyday routine of the classroom and at the same time, maintain a reflective vigilance regarding attitudes and motivations, approaches, procedures, processes and progressions of all involved [including themselves] and a flexible open mindedness towards transformation and change. “The process of considering the adoption of instructional technologies should be grounded in reflective teaching, not in bells ... and ... whistles” [Egbert & Hanson-Smith, 1999:468].

Meskill [2005a:37] postulates that the transition from orientation to the machine and what it does to the learners into what learners do with it in complex social contexts, “has forced multiple perspectives to be employed in examining the teaching and learning dynamics in all of their contextual complexity”.

It remains to be investigated what percentage of *educators* and educational institutions have actually made this transition. It is imperative that schools and faculties of education should be guided to put the emphasis on the role of the computer as a tool integrated into different Learning Areas rather than on computer literacy. The transition will only be made once the educators have collectively and in-depth reflected on potential gains: transfer and transformations and the implications thereof.

3.8.4 A time-shifting approach

The emphasis in planning an optimal learning environment with computer enhancement is on focused tasks in authentic settings with lots of flexibility and opportunity for choices. In the words of Felix [2002:12]: “A realistic assessment ... is that it is not a time-saving approach, but rather a time-shifting one. Teachers will save on the time ... otherwise spent on preparing elaborate materials, but they will ... have to invest time in assisting in the organisation of tasks and projects, moderating communication, ... creating sound assessment strategies ... address the perceived risk of distraction ... and ensure that the technologies used, are robust and ... reliable”. These tasks may well include information gap models like e-mail, voice chat, research activities, bulletin boards, discussion groups and Moo’s. Others might be experiential learning models where students are even more encouraged to act autonomously and produce an end product through cooperative effort such as a published website, portfolio or magazine where multilingualism can be accommodated.

Whatever tasks are selected, the teacher or educational institution opting for computers in the language class because it is expected to take over some of the teacher’s jobs in order to free her up, will be sorely disappointed.

3.9 CONCLUSION

3.9.1 Computers are here to stay

Technology and more specifically CALL will in future affect many aspects of our reality and that this new literacy and its potential for connectivity in the “global village” might soon overtake the status of literacy as we have known it for centuries, is a strong possibility.

Should this be the case, computer literacy and seamless integration into the curriculum, might well become an international educational priority. In the final

analysis the fostering of autonomy promoted by CALL, does not belong on the agenda simply because of its buzz-word status. While computer technology, multilingualism and learner autonomy hold obvious *economical* advantages for society at large, it is the *pedagogical* motive that should drive the initiative and, in fact, it is the pedagogical long term consequences that have the potential to transform our classroom practices but also aid society in becoming responsible human beings and international citizens.

3.9.2 Teachers are here to stay

While our purpose and process are learner centred, the research seems to indicate an important role for the teacher embarking on the quest to foster autonomy through language teaching and enhanced by CALL. She is the one who will be predominantly responsible for selecting an appropriate and suitable approach according to which she will design a learning programme allowing for a learner-fit according to her analysis of the needs of her learners. She will be responsible for setting up the design and steering the procedures. She will be the one to notice when learners or groups of learners are ready or not ready to take control at a next level. She will be available to mediate and negotiate, facilitate and evaluate, be it at technological, knowledge, skills, values or motivational level.

This key figure will therefore need to be knowledgeable and skilled to make good decisions and choices over a large spectrum of interrelated and interactive disciplines in order to find the right “fit” for the specific target group, including herself, with its unique constraints and potential. In tool mode, the computer provides the tools and resources, but it is up to the learner, guided by the teacher, to utilise it effectively.

Felix reports on some of her research findings, based on a survey done in 1999-2000 amongst 104 tertiary, 82 secondary and 22 primary students:

- that students are open to quality online learning, especially as an add-on to face-to-face teaching

- that students resent the replacement of quality classroom teaching by inferior cost-cutting online ventures
- that it is not about what we can do online – rather why and how we are doing it, “since content alone will not transform our teaching approach”
- that the option most favoured by both older and younger students was within face-to-face teaching in class
- that few differences in perceptions emerged between tertiary and school-aged students
- that the least favoured option amongst both groups was distance education without a tutor.

It is my contention that the teacher role of maintaining the connectivity between all the components of the dynamic learning environment, is critical in fostering autonomy, not least of all because it is through the balanced quality of the connectivity that learners will gain confidence to gradually take over control.

3.9.3 The South African Context

In the South African context, judged by personal observations in schools in the Western Cape and limited experience at tertiary level, I suspect that we cannot as yet claim to have adopted CALL on large scale at any of the levels mentioned.

This suspicion is shared by Heyns and Snyman [2003] in their article “Afrikaans language teachers still use pick and shovel to mine the Information Super Reef” and although they refer specifically to the teaching of Afrikaans, the phenomenon is not limited to this language only. The reasons for this situation are more than likely a combination of lack of teacher training, lack of funding, political emphasis on marketing a particular version of OBE as panacea and the beliefs of teachers and other educational decision makers with regard to what CALL can contribute.

While the Government's stance on technology integrated into education is positive - as proved by the SAQA critical outcome on technology and the White Paper on e-Education [2003] - the commitment has not yet been translated into a visibly concerted effort in language teaching. The Western Cape Education Department has recently launched a new literacy strategy [Western Cape Education Department, 2006]. The emphasis is predominantly on facilitating literacy at beginner level in the Mother Tongue. While multilingualism is put forward as the ideal, no mention of CALL is made with regard to its potential to speed up the process or enhance it.

Many educators remain sceptical whether CALL can really make a positive difference, not least of all because of the emphasis on basic facilities such as classrooms and electricity in schools, but also because of the glaring shortage of example – i.e. integrated CALL programmes from primary to tertiary level.

Teachers in South African governmental schools often complain about lack of support in an institutional environment where they have to meet many challenges such as time consuming administrative tasks and assessment, discipline problems and student-teacher ratios which are far from ideal. The opportunity to train them to use technology as a support system [administratively] and to the advantage of the learning environment as a whole [for example, in language learning and fostering autonomy], is largely overlooked. Whether because of this or in addition to this, very little significant research regarding CALL in South Africa has been forthcoming. While researchers are generally in agreement that the context must form part of the research if it is to be regarded as valid [Egbert and Petrie, 2005; Levy, 1997, 1998; Warschauer, 2000 and others], it becomes self-explanatory that the lack of a substantial corpus of South African research contributes to the scarcity of examples and general lack of motivation to integrate technology into the language curriculum. In fact, while technology is certainly mentioned as a critical outcome for the curriculum, there is no specific mention of its potential role in the Revised National Curriculum Statement 2002 [RNCS] [Department of Education, 2002] for the languages.

Learners lucky enough to have personal home access to technology, streak ahead of their teachers in the use thereof - although often in the sphere of games and questionable types of entertainment – a world unfamiliar to their teachers and parents. Uschi Felix [2002:4] remarks that, although responding positively to the use of the Web as a viable environment for language learning, the school children in her research sample were less enthusiastic than the tertiary students. This, she says, could well “reflect a more critical attitude ... since many [school children] were already used to sophisticated computer games far beyond the scope of the educational materials used here.”

Previously disadvantaged South African school children are slowly but surely introduced to the world of the computer partly through initiatives such as the Khanya project. Khanya is a Western Cape Education initiative providing schools with equipment and training in the Western Cape, while some national projects are sponsored by both local foundations such as the Shuttleworth Foundation and international ones such as Microsoft. Children attending schools in areas where parents earn a reasonable income are becoming increasingly adept at mastering sophisticated games for computer, probably comparable to the ones Felix refers to. Consequently we have a new generation receiving little guidance regarding a world more “real” to many of them than the classroom environment where, ironically, teachers hope to meet them “where they are”. The impact of a scenario where learners go home after school to a “community” of computer characters familiar to their friends, but a world completely alien to parents and teachers, remains to be seen.

In the meantime, Levy [2000:22] expresses his agreement with Nina Garrett when she says: “technology is going to define language teaching”. Levy argues that computer technology will ultimately affect the very goals of learners, the nature of the learner environment, teacher education and what it means to be competent in a language. Learners, teachers and teacher trainees must be prepared for these changes.

Few will question the importance of a capacity for autonomy, multilingual communication abilities and the ability to use the computer to enhance everyday tasks in the South Africa of the 21st Century. It is only logical to argue that the most obvious place to prepare its citizens for these goals will be at school. In order to do this, teachers need to be equipped with the necessary skills, knowledge and attitude. Again, the most logical place to start, is at teacher training level. However, how do we ensure that the teacher training reflects the most important components for a flexible, integrated and practical course, taking cognisance of the most important conditions for success?

In the next chapter we will endeavour to identify some of the most important guiding principles to be utilised by the practitioner intent on designing and implementing such a course.

CHAPTER FOUR

RELATIONSHIPS IN A DYNAMIC FRAMEWORK

4.1 INTRODUCTION

In Chapter 2 we discussed the concept “autonomy” as educational goal and course strategy in the additional language classroom. We looked at the roles of the learner and the teacher, as well as the changeable relationship between them, to establish the nature of the process of fostering autonomy, while taking cognisance of the potential impact of the process on the learners.

A diagram [see *Fig. 1*] of William Littlewood [1996:430] was used to illustrate the components and domains of autonomy in additional language learning. Although this diagram does not specifically refer to a teacher training situation, it could be equally relevant for the training of teachers. We know that teacher autonomy is a growing research field, predominantly because it is clearly advantageous if the teacher’s mindset is congruent with the course strategy. Her commitment to the idea of autonomy and her ability to model the principles she hopes to reinforce with her target group, adds an important dimension [Benson, 2001:176].

The duality of the role of the teacher trainee as both learner and teacher, serves to underscore the need to regard autonomy as one of the major goals of teacher training. The connectivity between Littlewood’s 3 domains [autonomy as a learner, person and communicator], becomes crucial in order to ensure congruency between beliefs about learning and the actual practical application thereof, both as teacher and as learner.

In Chapter 3 we looked at the concept CALL and the role CALL can play in enhancing additional language teaching while simultaneously promoting autonomy. It became clear that the role of CALL within the dynamic interactive

framework of learning an additional language is shaped by the way in which it is used by teacher and/ or the learners and not a goal or method in itself. The nature of the *relationships* between the components interacting in a practical institutional environment will be examined in the fourth chapter. *Figs. 3 and 4* will be used as a visual representation to explore this dynamic interactive framework.

In addition to this, we will investigate to what extent the school curriculum for Additional Language Learning [NRCS, 2002] offers practical support for autonomy as a course strategy and educational goal in the teaching of the First Additional Language.

Similarly, we need to examine the “Norms and Standards for Educators” [South Africa, 2000] to establish to what extent it offers practical support to the view of autonomy as a major role player and overarching goal in the training of teachers.

This, in turn, should allow us to identify the conditions necessary for fostering autonomy in teacher education. We will also endeavour to ascertain if CALL is recognized as an important role player in these two documents.

4.2 DYNAMIC RELATIONSHIPS IN A LEARNING AND TEACHING ENVIRONMENT

4.2.1 A partnership

Both fostering autonomy and the supportive role of technology in a language teaching curriculum enhance the learning environment and have the potential to “educate” beyond the field of second language teaching and learning and beyond the classroom walls. There can be no doubt that the capacity of autonomy is highly commendable and compatible with the ideals of a life world operating within a constructivist paradigm, while CALL performs the complementary task of promoting autonomy through its ability to offer a vast

spectrum of authentic materials to choose from, to work with either individually or collaboratively and to engineer connectivity.

One “tool” or *course document* [see *Fig. 3*] often allowing limited flexibility is the “curriculum”. This document usually specifies the outcomes and assessment criteria envisaged for the course. Benson [2001:154] declared with regard to classroom-based research on autonomy that one outcome of the research is “the change in the role of the teacher that results from initiatives to increase learner control over learning content and procedures”, adding that “if the curriculum itself lacks flexibility, it is likely that the degree of autonomy developed by the learners will be correspondingly constrained” [Benson, 2001:162]. It is therefore important to investigate to what extent the current official school curriculum for South Africa [Department of Education, 2002] actually promotes autonomy as a course strategy and goal for additional language teaching and to what extent the official document “Norms and Standards for Educators” [South Africa, 2000] describing the roles envisaged for a teacher and therefore the goals of teacher training, promotes autonomy as a goal. It might also be interesting to check if either document makes mention of the role technology can play in promoting autonomy in the classroom as part of an integrated framework, thereby giving this valuable instrument its official nod as an integral part of teaching and learning.

While the application possibilities of technology and more specifically CALL, grow almost daily with new advances in the field of communication technology, the obvious benefits of an instrument allowing the learner vast opportunities for independent and interdependent choices and as much control over this and other learning processes as the teacher will allow, can escape neither teachers, nor learners. After all, the Draft White Paper on e-Education states categorically – when referring to higher education – that “accredited pre-service teacher training programmes will provide students with the basic knowledge, skills and attitudes required to *integrate* [my italics] ICTs into subjects of specialisation” ... in order to ... “create the most effective and efficient learning experiences” [2003:21].

The partnership between autonomy and CALL can assist in elevating autonomy from strategy to educational goal of the whole integrated system, where different components are synchronised to foster a specific capacity alongside the developing of language skills. There is no mechanistic use of CALL. CALL becomes part of this integrated system of language teaching and the fostering of autonomy “as enhancing a learning culture that both affects and is affected by teachers’ expectations, beliefs and experiences” [Levin and Wadmany, 2007:172].

To this one could add the important role of the teacher as creative force, albeit as designer of a course or critically reflecting on her practice. Indeed, the teacher is a dynamic human being with her own beliefs and internal pressures, interacting with her learners and all the other components of the learning environment, thereby collectively constructing the learning environment.

The success of fostering autonomy can, however, never be guaranteed. Its success depends to a large extent on the smooth and seamless interplay of the many facets of the learning environment. For example, the dispositions [both cognitive and affective] of both individual learners and teacher, different levels of autonomy, cultural variations, different domains of autonomy and traditional structures such as assessment driven approaches, all need to operate in unison towards the same objectives and outcomes. While the teacher and learners negotiate the locus of control, neither is likely to have full control over the total learning environment since the processes of acquiring a language and choosing to use the capacity to act autonomously, do not manifest at the same level for all individuals involved in the learning process at the same time [Benson, 2001; Little, 1991].

CALL, on the other hand, struggles to get rid of an “all or nothing” reputation. There is still an expectation from both teachers and learners that it can and should take over complete control of the learning environment, thereby guaranteeing total success rather than becoming integrated into the curriculum; that it should simply scaffold existing programmes, thereby

ensuring its success. No doubt the enormous costs often incurred in order to make CALL available has something to do with the unrealistic expectations. New technology also needs to be carefully monitored for its capacity to impact positively on the learning process rather than simply “making the task easier” for the role players. In addition to this, potential drawbacks should also be identified [Egbert & Petrie, 2005:x] in order to avoid costly mistakes. Learners should also be immersed gradually into the world of CALL, rather than bombarding them with technological challenges, distracting them from the real learning process. This gradual sensitisation should be coupled with learner training [Pennington, 1996] whereby the learner has the opportunity to acquire the skills and knowledge to evaluate their own choices and processes through suitable strategies such as meta-cognition, while supported by teacher and peers. Liebermann & Linn [1991:3] sees it like this: “... technological tools will continue to shape the nature of education. At the same time, educational practice will shape the nature of the tools. This interaction can lead to a curriculum that is qualitatively different from that available in schools today”.

4.2.2 Blin’s representation of CALL and the development of Learner Autonomy

In *Fig. 3*, which appears on the next page, the relationship between CALL and the development of autonomy is demonstrated by Blin’s [2004:385] diagrammatic representation of *CALL and the Development of Learner Autonomy*. This representation borrowed from activity theory in order to describe a collective activity, determined by its *object* or motive [ibid:382] and aiming at transformation of the object. Blin chose the creation of a website as example of an object.

CALL AND THE DEVELOPMENT OF LEARNER AUTONOMY

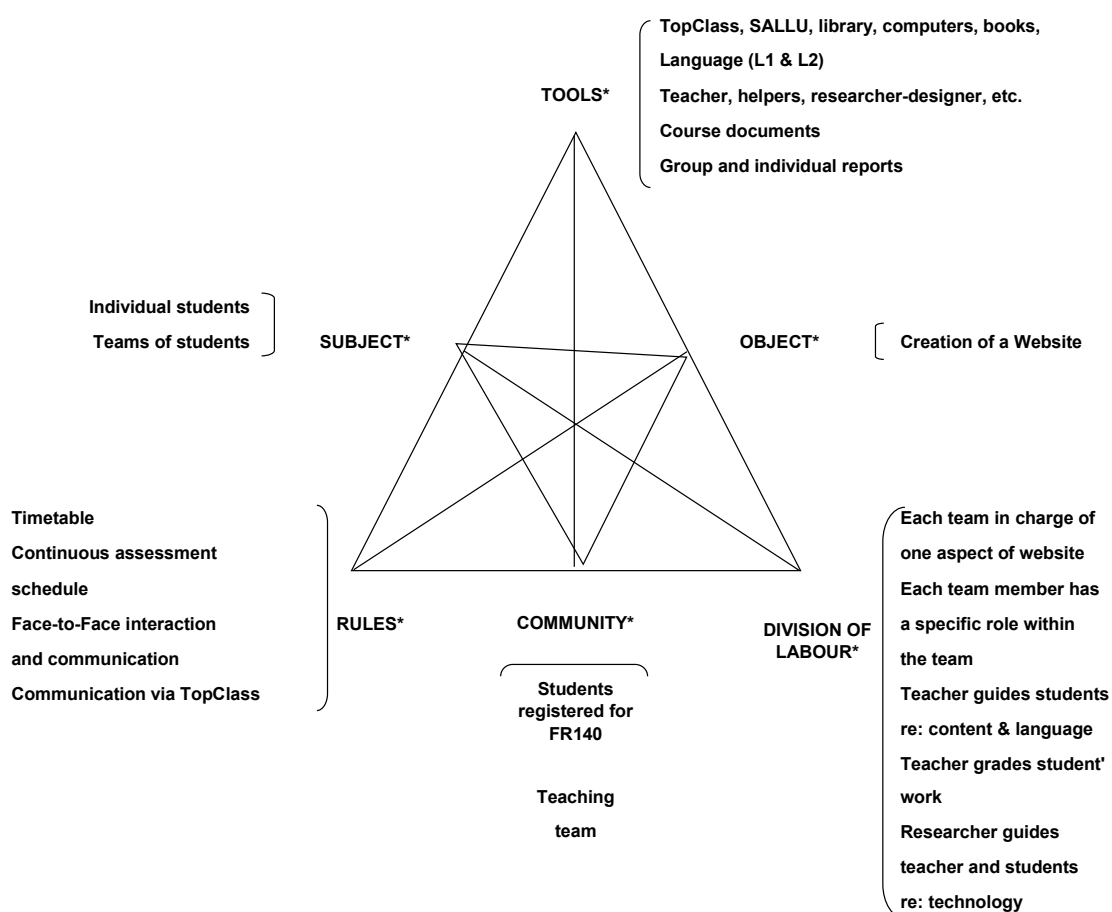


Fig 3. CALL and the Development of Learner Autonomy

[Blin, 2004:385]

Such a diagram is useful in that it offers the terminology to describe the complex relationships in the type of learning environment under investigation. Blin's [ibid] representation of a language learning activity system at micro level allows us to illustrate that there are three basic constituents in the relationship: the *subject* [which can be an individual or group of learners], the *object* or goal [e.g. designing a website] and *tools* [this is where CALL is most visible amongst other tools such as course documents and the library]. The actions are directed towards the object and therefore the object determines the collective activity. The subject is assisted by a set of tools [psychological or technical], mediating the relationship between subject and object so that the relationship changes continuously. If there is empowerment, the object is

transformed to an outcome. “Consequently”, Blin [2004:383] states, “the object is constantly in transition and under construction”.

Within this triangular relationship there could be horizontal power relations [between peers] and vertical power relations [e.g. with the teacher]. The point is that it is a systemic formation where all components and participants interact dynamically during a series of activities to effect certain outcomes of which, at macro level, language proficiency and a capacity for autonomy, are the most important. Artefacts such as spoken and written texts [e.g. oral presentation and written minutes] are created. Non-material tools will include for instance meta-cognitive functions such as reflective practice while material tools might include e-mail and Microsoft Office. Through these relationships, the subject develops and consolidates certain skills and competences of which many can be assessed. Both external [e.g. unfamiliarity with the technology] and internal pressures [e.g. personal anxiety] can, however, disrupt the activity [ibid:385].

A task such as the creation of a website in the target language [see Blin’s diagram, *Fig.3*], is indeed an authentic task and certainly one that can be used to develop autonomy amongst learners [the *subject*], whether school going or undergraduate student teachers. Such a task will involve different stages, e.g. an initial activity within the task could be one of collaboratively drawing up an agenda for a planning meeting. A follow-up activity could be an individual activity typing up the agenda and sending it by e-mail to all the members of the group responsible for the task. A next step could be actually having the meeting, deciding on a timeline and allocating jobs [*division of labour*] to individuals or smaller groups, etc. All of this is done by the *community*, which includes the registered students as well as the whole *teaching team* – presumably the teacher in most circumstances.

For each of these activities specific *tools* will be needed, giving access to e.g. spell checks, language checks, thesaurus, many formatting options, Internet, tabling, editing and e-mail. The degree, to which students can choose which tools to use and how to use it, will be part of the negotiation between teacher

and learner[s]. Ideally the students should be introduced gradually to all the options with opportunities to use them while being supported by peers or teacher and constantly invited by the teacher to reflect on the criteria for its effective use.

Blin's diagram does not reflect the influence of the learners' affective and cognitive processes on the potential for successful development of learner autonomy. However, it emphasises the relationship or interactivity between the subject[s], object and tools, including the role of CALL. The role of the teacher is also underplayed by simply listing her as one of the "tools". For our own purpose of identifying guiding principles for the design and implementation of an optimal learning environment for fostering autonomy in combination with language learning and teaching, we need a more comprehensive diagram, giving more prominence to the role of the teacher for reasons discussed in Chapters 2 and 3. Furthermore, our triad of educational goals deserves a central position whilst the multiple disciplines impacting on the processes also need to feature more prominently in order to demonstrate the complexity and interactivity of the environment. The diagram also needs to reflect the essence of the fostering of autonomy, i.e. the choices and control of cognitive, affective or psychological processes, content and learner management and training. In the last instance, the diagram needs to demonstrate the tendency towards interactivity, transfer and transformation typical of successful fostering of autonomy and learning.

4.2.3 An Alternative Framework

Fig. 4 is a diagram borrowing from the two diagrams [*Fig. 2* and *Fig. 3*] discussed previously, and adapted by the author of this study to illustrate how it can also reflect the interactivity between a triad of goals and the multiple other components involved in a teacher training situation.

Interactive Systemic Framework A Course Strategy

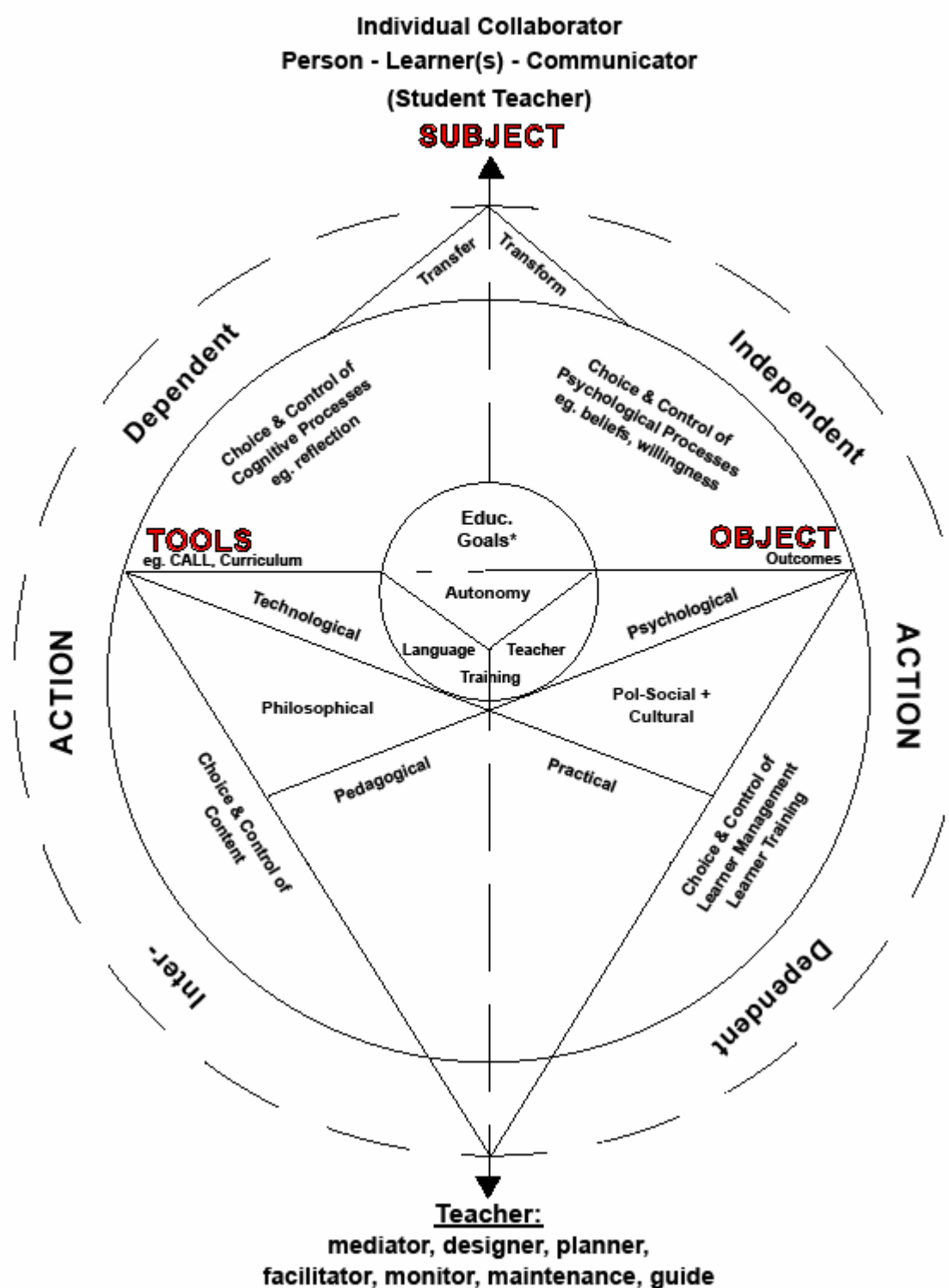


Fig. 4. An interactive systemic framework

[adapted from Figs. 2 and 3]

A unique feature of the framework is the disparate goals, the multiple roles [and therefore interrelationships between participants], disciplines and the flexibility it allows in choosing combinations from its components, thereby reflecting its scope in terms of possible relationships and routes a language learner can take in developing a capacity for autonomy.

Central to the systemic framework is the triad of educational goals, namely the capacity for autonomy, language training and teacher training grounded in the disciplines of philosophy, psychology, the political-social and cultural, the technological, the pedagogical and the practical.

We are reminded of Benson's question: "How can I as a teacher help my students become more autonomous in the context in which they and I live and work? [Benson, 2001:223]. One could answer that one of the most important things a teacher can do to help her learners to become more autonomous in their context [and beyond their immediate context], is to design the learning environment as a whole by planning the interacting roles of subject[s], teacher and "tools" in relation to the object or envisaged outcome[s] around the key concepts of "control" and "choice". Cotterall [2000:111] stated unequivocally that she regards "choice" to be at the heart of autonomy. To use Blin's terminology: in order to foster autonomy, we need to use "tools", albeit psychological or technological, to create and mediate opportunities for our "subjects" to choose the ways in which they exercise control over the different domains within the particular learning environment. CALL's inclusion in the model under "tools" promotes in its own right an infinite number of choices and levels of control, thereby promoting the fostering of autonomy as well as enhancing the language learning through its authentic and rich input and many different modes of communication.

In such an integrated course strategy, there is little point in trying to analyse the influence of each component in isolation. In the final analysis, it is the connectivity - the interactivity between goals, roles, modes of learning, tools, disciplines and dimensions – and multiplicity that makes this a complex, but potentially powerful framework as a course strategy. Its systemic organisation

enables the participants to manipulate and adapt the components according to specific needs. The choices made by learners and teacher from such a framework, will give the particular programme its unique character.

At macro level the object in *Fig. 4* can refer to transformation in the sense of demonstrating increasing competence and performance ability in the Target Language, the capacity for autonomy as person, learner, communicator and individual collaborator and the willingness to reflect constantly on the dual role of learner and teacher-to-be. The broken line of the outer circle indicates this potential for transfer and transformation to an authentic life world beyond the confines of the classroom.

As learner participants become more skilled in and knowledgeable about the capacity of autonomy, language performance, language competence and teaching, so it becomes possible for the teacher to adjust the learning content, management and cognitive processes to allow for more learner choices and control while gradually withdrawing direct support. There is therefore constant change in the relationships between the components and this reaffirms the necessity for flexibility and creativity in juggling the roles of the participants in order to encourage autonomy.

However, it is precisely this strength of changeability that can be responsible for tipping the scale to the negative. Should the teacher take decisions based on a tight and previously conceived framework, rather than a flexible one allowing learners to individually and collectively reveal their needs through reflection, performance and through a demonstrated ability to transfer acquired skills, knowledge and values to their life world, autonomy cannot develop and the learners may well not be willing to take the risks necessary to act more interdependently or independently, e.g. using CALL to support a particular learning outcome for any one or more of the educational goals.

In order to shape this interactivity between all the components, including varying roles for CALL as a tool, the teacher will change her role according to the needs of her learners and the specific context, as it becomes apparent

sometimes simply monitoring, at other times intervening directly through learner training.

4.3 TEACHER EDUCATION

4.3.1 South African Challenges

Educational changes range from national challenges, e.g. an outcomes based curriculum implemented in 2004, which requires an in-depth understanding of its social constructivist underpinning, multi-lingual and large classes, to universal challenges such as technological advances, discipline problems, drug abuse, violence and insufficient parenting.

Teachers are expected by provincial educational departments to be able to deal with the changes. Although schools are assisted in many ways by provincial Departments of Education, the problems are vast. A recent report on education in the Western Cape area [an area generally regarded as progressive and reasonably successful in terms of its Grade 12 pass rate], was slating in its analysis of the quality of education: “Many educators are not sufficiently knowledgeable about their Learning Areas/ subjects ... many of them have not updated their knowledge with the new developments in the curriculum: NCS and Assessment” [Western Cape Education Department, 2007:2].

The lack of knowledge is not, however, limited to the Western Cape, nor is it limited to the latest curriculum specifications. In an insightful article, Albert Weideman [2001:1] speculates about the reasons why, in spite of “new” sets of textbooks based on a skills-based communicative syllabus, teachers from as wide a range of countries as Greece, South Africa, Eritrea and Namibia, pay lip service to CLT [Communicative Language Teaching] while there are few signs – even at the beginning of the 21st century – in their classrooms of actually having adopted the principles of a communicative-interactive approach.

Weideman ascribes this lack of responsiveness partly to the strong commitment teachers in these countries still have to traditional language teaching – a warning that the process of change in education and language teaching in particular, is not an easy one. The same reason might well hold true for the lack of clear signs that either autonomy or technology, or some of the characteristics of a moderate socio-constructivist approach influence the actual teaching and learning in classrooms.

An example from the tertiary institution where the author is currently involved with the training of pre-service language teachers, may throw more light upon the specifics of the situation: many English speaking students at this institution express anxiety around the learning and teaching of Afrikaans as an Additional Language, in spite of the fact that they have been taught the language for at least 11 years at school. They feel unable to express themselves in the language. These fears are, in fact, reflected in their lack of performance. They themselves ascribe their incompetence to the fact that their teachers, who were also uncomfortable in using the target language themselves, often taught them the additional language through the medium of English.

The Outcomes Based Curriculum in South Africa is hardly new any more – it has been implemented gradually and 2008 will be the first year for Grade 12 [the final exit level of school based learning] to be externally assessed according to the assessment standards of the curriculum first introduced in 2004 at Foundation Phase level. Many teachers try to apply its suggested assessment structures but are still stuck in a transmission paradigm in terms of their own methodology.

An informal survey in 2007 amongst 30 third year English speaking Foundation Phase student teachers after their teaching practice in the suburbs surrounding Cape Town revealed that two thirds of the class observed transmission type teaching of the second language with hardly any signs of interactivity or any other form of non-formal participation, the focus predominantly on form and accuracy. There were no signs of the development

of learner autonomy, nor were there signs of having adopted at least a mild form of social constructivism or an interactive approach to the teaching of an additional language. Technology did not feature either as a component integrated into language teaching in spite of the fact that Khanya has trained a large number of teachers, installed technology in a significant number of schools and equipped them with appropriate software. However, it was not ascertained how many of the schools attended by the students, were actually equipped by Khanya. No valid conclusions can therefore be reached about the lack of computer use in these classrooms. In addition to this, we are aware of the fact that there is a shortage of suitable Xhosa and Afrikaans software that can be used effectively in the language classroom to enhance additional language teaching.

The provincial departments of education [in-service] and/ or Higher Education institutions [pre-service] are responsible for the training of most of the qualified teachers currently teaching in the Western Cape and using the “new” curriculum. It can be assumed that the model[s] of training, be it by the provincial department of education or at the local universities, have not been particularly successful in training for the changes. The WCED writes in a Quality Assurance half-year report [Western Cape Education Department, 2007:2] that the OBE methodology is implemented in only a few classes and that only a few educators have developed the skill of “alternating effectively between the educator – and learner–centred approaches ... [and as a result] the different needs of the learners are not accommodated”.

The promise of transfer and transformation beyond the classroom walls holds the most powerful potential offered by a capacity for autonomy. It is this potential, which should place autonomy high on the educational agenda at the start of a new century with its many challenges for both educators and learners in the South African society. There is also an urgency to address the needs of a new era of progress and improved relations and communications both nationally and internationally in order to effect the changes promised by an “African Renaissance” – currently a political slogan loaded with promise. The teacher’s role is obviously prominent in preparing the youth for this world,

not least of all because it is so vastly different from the one their parents knew. However, the student teacher herself grew up in a world characterized by change and quick fixes. She has to invent and re-invent her role while responding to the challenges in different domains and moving ever closer to an approximation of the teacher cum life-long learner. Ideally she is safe in the knowledge that her lecturer understands the duality of her role, the dynamic nature of the framework and the need for collaboration and consultation.

University lecturers involved in the training of language teachers for the GET phase could be greatly supported in making the right design choices in this complex scenario, if a list of guiding principles to be applied when designing and implementing language teaching courses of this nature, is made available to them. In Chapter 5 we will endeavour to use the “Interactive Systemic Framework” [Fig. 4] to generate such guiding principles.

4.3.2 Learner training

An internationally respected researcher in the field of CALL, Mike Levy [2000:175], found that when analysing the most frequent descriptors in the CALL-1999 research corpus of material, a number of articles under the identifier “Environment-IT” “clearly and exclusively focused on pre-service or in-service teacher education”. In South Africa both CALL and autonomy are relatively new concepts and not yet integrated into the classroom routine. Consequently very little empirical research is available on the use of either in the classroom. Yet they are mentioned in official documents. Autonomy is implied through the Critical and Developmental Outcomes specified in the NCS [Department of Education, 2002:11] while ICT [not CALL], is promoted by the government in the Draft White Paper on e-Education [2003]. However, to what extent are teachers actually prepared to deal with these new challenges and more specifically, are we equipping our trainee teachers to deal with them?

The contextual factors of culture, community and institution along with individual factors such as personality and motivation, form a framework for teaching and teaching development. Obviously the more congruent the input is with the recipient's own beliefs, teaching practices and pre-existing knowledge, the more easily the input will pass through a filter, not unlike Krashen's affective filter hypothesis [Brown, 2007:294].

According to Pennington [1996:338] "reflection is the key to lowering or opening this cognitive-affective filter ... to learning and change of beliefs and behaviour", so that input can become intake and finally "uptake" into a system of teaching values. Pennington suggests a form of reflective training whereby teachers and student teachers first be provided with new materials to work with, then encouraged to solicit reactions to their teaching of the new materials from students and peers, thereby incorporating Long's Interaction Hypothesis [Brown, 2007:304] and placing the argument safely within the socio-constructivist paradigm. A next step could be to reflect on these views and formulate a personal reaction. A final stage would be to formulate goals and strategies to implement the new understanding. The necessary progression, according to Pennington [1996:338], is to move from reflective practice around techniques and materials to the higher level of concerns about the impact of their teaching on their students and then beyond the educational arena.

When looking at the benefits Warschauer and Healy [cited in Brown, 2001:145] put forward for CALL, one is again struck by the realisation that the real value added by the computer must be in the way it is utilised rather than by its inherent qualities. The "higher levels of concern" may also include a more creative involvement. While vast amounts of information are made available through CALL to teacher trainees and afford them with many choices, they need to be guided not only to select thoughtfully from these choices, but also to add their own information and construct new relationships with the content.

Seven qualities are listed by Brown [2001:145]:

- multimodal practice with feedback
- individualization in a large class
- pair and small-group work on projects, either collaboratively or competitively
- the fun factor
- variety in the resources available and learning styles used
- exploratory learning with large amounts of language data
- real-life skill-building in computer use.

None of the qualities mentioned will automatically effect language learning, transfer or transformation without human intervention in the form of careful selection, attention and purposeful application. Instead, each one of them, except for the fun factor, can *potentially* provide teacher and learner with choices. This in itself can encourage and motivate learners to make their own decisions and choices either individually or collectively and act on them either independently or interdependently.

Still, the role of the teacher will be to guide and support learners through the maze of opportunities, many of which may lead to a cul de sac of mildly interesting, though irrelevant, information which may distract rather than enhance the learning process.

Based on the model of Guskey [cited in Levin and Wadmany, 2002:161], it has been suggested that “change in teachers’ beliefs is primarily an experientially-based learning process”. Teachers are most likely to broaden their ideas regarding learning, teaching and technology once they are able to translate abstract ideas concerning the changes at hand, into their own practical and classroom oriented terms. Levin and Wadmany surmised that since changing teachers’ paradigms is a complex matter, it would be a gradual process and that an understanding of the educational beliefs of the teachers and the context in which they teach, would be critical to the success of effecting change. Therefore, in their own research project, they had a planning phase of six months during which equipment was installed and tested, workshops as well as mentoring programmes were planned and tested

and students were trained as assistants. During the implementation phase ongoing assistance was guaranteed when needed, there were weekly in-school workshops with some activities initiated by the teachers based on their own experiences and others planned by project leaders on the basic concepts and structure of information-rich tasks and the use of the technology. The teachers were therefore provided with activities incorporating their queries, interests and classroom needs while cooperative discussion and reflection on classroom experiences were regarded as crucial to the model [Levin and Wadmany, 2002:162–164]. The research programme ran for three years after which teachers exhibited “considerably fewer positivist beliefs” [ibid:168], discarding direct instruction for facilitating collaborative learning processes with emphasis on coaching, modelling, reflection and exploration. Interestingly the different teachers’ views of technology in the classroom vary widely from a technical-functional tool to seeing it as a partner. Only three of the six teacher respondents could identify with a view of technology as an important partner. The other three were unaware and unappreciative of the fact that technology can help to develop thinking and to introduce a new conceptual world into the subject domain [ibid:171].

When new goals, practices, types of problems and instructional tools are introduced into the learning environment, the learning processes become the topics of a new discourse developing in that environment and for teachers or student teachers this may serve to “encourage or pressure [them] to modify their teaching styles and even their underlying beliefs regarding effective teaching” [Levin and Wadmany, 2002:172]. The new discourse should allow for a healthy reflective practice and meta-cognition and should ideally involve all teachers and learners in a particular institutional environment to learn constantly from each other and through their experience. This process is ultimately, however, a uniquely individual experience since teachers [like their students] respond differently to innovation.

Levin and Wadmany’s study shows that it is easier for teachers to change their views of their students’ role in a technology-rich environment where the learners are constantly challenged and they often have to assume the roles of

tutors to their peers and teachers in operating and communicating with computers. It is, though, harder for teachers to change their view of learning from knowledge accumulation to knowledge transformation and to see technology as a dialogical tool that can empower all involved in the learning rather than as a technical instrument to simply support practice.

We cannot assume, therefore, that students or teachers will be able to choose and control wisely without experiential and foundational learning. Within this “system” should be room for learner training in order to equip the “subject” with ever increasing skills, values and knowledge to exercise informed choices and thoughtful control. Learner training will have to make provision for experiential and content learning, regarding for instance the reflective skill, self-evaluation through meta-cognition, selection criteria for content from the Internet, etc. One of the most important of the skills is probably reflective practice in order to assess own development and learning and adapt processes [including choices] accordingly. Another could be an awareness training of the many strategies available to choose from when engaging with the course content.

In task based approaches incorporating CALL in different ways, the teacher can negotiate with the learners the extent to which they control the choices regarding content, learning management [e.g. learning strategies to be used] and cognitive processes [e.g. reflective practices]. Learners are “trained” in making thoughtful decisions with regards to the control they exercise. This can include anything from awareness training of learning strategies [learning management], to guidelines for meaningful reflective practices [cognitive processes], to studying criteria for selecting content for a particular task [content management].

Benson [2001:175] cites an example of learner training [in-service teacher training] at the University of Minho in Portugal, in 1997 and 1999. The assumption was that there is an integral relationship between reflective teaching and autonomy in learning. The aim of the programme was to “articulate teacher and learner development within a single framework by

exploring the relationship between reflective teaching and learner autonomy". Autonomy was taken as the focal point for reflection. The reflection focussed on issues such as approaches to teacher education, preparation and implementation.

Such training and ongoing support and guidance of student teachers and in-service teachers can prevent them and their future learners from being at the mercy of exciting new applications with little educational value [Gremmo & Riley, 1995:160] or being paralysed and overwhelmed when faced with these new challenges.

Considering the fact that the role of each component must be planned and executed against the background of the whole learning environment functioning as a system, it stands to reason that there is a need for a "director", i.e. the teacher or educator.

Included in the training of teachers, should be the planning of activities with the outcomes/ object stated in the curriculum, in mind. This could, however, be one of the least flexible "tools" [as Benson (2001:162) warned us], in a dynamic framework and could well undermine creativity and autonomy at every level. Here it might be necessary to look at the various ways in which the curriculum can be interpreted and make provision for interpretations that are compatible with its goals.

However, all participants should be aware of the fact that the many different processes and actions forming part of the system, contribute towards the overall object, namely the capacity for autonomy and language use, provided the subject[s] have the intent and are free of negative psychological influences on their actions. Blin [2004] refers to the participants' "will to act". In particular she warns that the teacher's willingness and skills are crucial. The introduction of new tools is, according to Blin, "likely to result in contradictions or tensions within and between elements of the activity system, and with other neighbouring activities" [ibid:390]. When technical problems surface, the tool itself may temporarily become the object of the activity. It is up to the teacher

as designer, planner, facilitator and mediator to watch over the “big picture” because the “social and cultural structures that characterise the learning environment will shape and constrain the opportunities enabled by the various technologies available” [Blin, 2004:391].

While agreeing with David Nunan [1995:133] that the context in which any teaching takes place, will have a major influence on what is feasible and desirable, the Tel Aviv research [Levin and Wadmany, 2007] also confirms a number of other aspects relevant to our search for guidelines: the need for ongoing support, a gradual implementation phase, the learners’ variable response to the fostering of autonomy, the importance of an experiential approach, the importance of learner training, including aspects such as reflecting on beliefs and the power thereof, learner strategies and the importance of cognitive processes such as reflective processes.

If we agree that teacher training offers an excellent opportunity for intervention in the form of orchestrating the necessary mindset shift needed to empower teachers to see themselves as producers rather than as consumers, we need to identify principles to guide this process. The teaching of an additional language lends itself to effect this kind of shift for both teacher training, primary and secondary learners, since it is focussed on communication across language barriers and it reflects the real life world outside of the confines of the institution.

4.3.3 Where does the curriculum fit in?

Benson [2001:222] commented that “helping students to take greater control over their learning is often a question of organising the day to day curriculum in ways that respond to their developing preferences and needs”. This is not a simple matter since the whole learning environment acts as an integrated system. The complex multidimensional and interacting unique whole is much more than simply a sum of its parts. The empowerment of the learner resides in the whole, not in what CALL can offer or what the teacher or any of the other components can offer.

4.3.3.1 *The School Curriculum*

We have argued that Blin's *object* can also refer to the *outcomes* specified for the Learning Area: Language: First Additional Language in the RNCS [Department of Education, 2002], i.e. the curriculum for Additional Language Teaching. These outcomes are also used to direct the *additional language* training of undergraduate student teachers.

Outcome 3 from the Learning Area "Languages: First Additional Language" in the RNCS [Department of Education, 2002:20] serves as an example: The outcome states that the learner will be able "to read and view for information and enjoyment, responding critically to the aesthetic, cultural and emotional values in texts". In practical terms, and following the *Fig. 4* diagrammatic representation, individual students and teams of students at school level and beyond, work towards these outcomes, displaying their level of competence as they go along. Pursuing Blin's example of the creation of a website, one could say that a task team of learners could collaboratively "read and view" [Outcome 3 of the Learning Area Literacy: First Additional Language] the completed minutes of a planning meeting for the intended website, respond critically [individually and collaboratively] to issues in the text and collaboratively decide on editorial changes to be made. This could include grammatical improvements. They use the computer as *tool* to make the changes, thereby enhancing the learning. At the same time, they are serving the goal of autonomy by interdependently reconstructing the text: managing the learning as well as the learning content, controlling their own cognitive processes through willingly directing attention to specific issues, reflecting on them, collectively making decisions, evaluating what has been decided.

In other words, they are taking charge of their own learning. In the words of Holec [1981:3], "determining objectives, defining progressions, selecting methods and techniques and monitoring the procedure". And in the words of Little [1991:4], learning in a way that reflects the capacity for autonomy while transferring what has been learned "to wider contexts". Presumably this last "capacity" can be observed and assessed when learners choose and are able

to use the language skills and level of control they displayed during the completion of the activities in another context: as learners, as a person and as a communicator - both collaboratively and individually.

Each of the activities within a task in the Additional Language class, at both school level and university level, will address one or more of the 6 Learning Outcomes [Listening, Speaking, Reading and Viewing, Writing, Thinking and Reasoning and Language Structure and Use], specified for First Additional Language Learning in the Revised National Curriculum Statement of South Africa. These learning outcomes “describe what learners should know and be able to do”, whilst the Assessment Standards describe “the minimum level, depth and breadth of what is to be learnt” per grade [Department of Education, 2002:14]. Student teachers training to teach Grades R to 9, university lecturers responsible for the didactics training of such undergraduate student teachers and teachers themselves, use these outcomes and assessment standards to plan the activities. Activities are then incorporated into a “Learning Programme”, described as “structured and systematic arrangements of activities that promote the attainment of learning outcomes and assessment standards” [Department of Education, 2002:15]. The document further stipulates that “Learning support materials and teacher developmental programmes will play an important role in interpreting and giving expression to the learning outcomes and assessment standards” [ibid:15]. This last statement does not, in fact, support the vision of teacher autonomy. Instead, it begins to look as if there is a discordant note in the document: the developing autonomy of the learners is put forward as a goal through the critical outcomes while there seems to be an assumption that materials [departmental?] and in-service training presumably by the provincial departments of education, will shape the practical interpretation of the curriculum. This writer will always wonder whether the departmental interpretation of the curriculum [in the form of learning outcomes, assessment standards, workshops, materials and training sessions] could not have been handled differently by rather using it as an opportunity for developing “teacher autonomy”. Teachers may for instance have been encouraged to experiment [with departmental assistance] with the interpretation of the outcomes in their

particular schools and Learning Areas. Ideas could later have been shared; the final interpretation may then have been more flexible in terms of particular target groups, while teachers could have developed confidence in their own capacity to creatively and collaboratively shape their practice.

However, it seems then that the way in which the outcomes are stated, in addition to the critical and developmental outcomes [see Addendum 1], they go a long way towards *accommodating* autonomy as a goal for the learners at school level, though not necessarily *promoting* it. Nor does it promote technology as an integrated component of a flexible, yet integrated framework.

4.3.3.2 *The role of the Curriculum in Teacher Education*

The question remains, however, how effectively in-service teachers received learner training to equip them with the knowledge, skills, values and understanding necessary to translate the outcomes into practical learning strategies and cognitive processes suited to classroom needs. Our particular interest is in the roles “described in a manner appropriate for an initial teaching qualification” in the “Norms and Standards for Educators” [South Africa, 2000:13, see also Addendum 2]. These roles or outcomes can be regarded as “object” of the didactical training of teachers according to the State. Exactly what are the official outcomes or roles supposed to direct and support the teacher training aspect of our model?

There are 7 roles. These roles are broken down into three competences each, namely Practical Competences, Foundational Competences and Reflexive Competences. The competences are interconnected and called “Applied competence”.

- *Practical Competences* refer to the learner demonstrating “the ability in an authentic context, to consider a range of possibilities for action, make considered decisions about which possibility to follow, and to perform the chosen action”.

- *Foundational Competences* is, “where the learner demonstrates an understanding of the knowledge and thinking which underpins the actions taken”.
- *Reflexive Competences* refer to the learner demonstrating “the ability to integrate or connect performances and decision making with understanding and with the ability to adapt to change and unforeseen circumstances and explain the reasons behind these actions” [South Africa, 2000:13, see Addendum 2].

The emphasis is clearly on a capacity for independent and thoughtful action underpinned by theoretical [foundational] insight - the ability to apply these insights by making informed decisions and choices regarding knowledge, skills and values. Furthermore, the learner [i.e. the teacher trainee], is required to integrate, connect and reflect in a flexible way, clearly adapting and changing to fit the needs of the target group. In other words, there is remarkable correspondence between the description reported on here and that of the capacity for autonomy in language learning. One is reminded here of terms such as “learner fit”, “teacher autonomy”, “self-management”, “connectivity” and “transformation” – terms reported on in this study predominantly in the context of autonomy as construct but also in terms of the advantages of CALL. CALL’s ability to provide choices of authentic content and many different ways of dealing with it, while simultaneously providing endless opportunities for connectivity between participants [both vertical and horizontal] and their subject matter. There can also be few, if any, other tools more versatile in allowing the learner to change direction through choice and control of content, cognitive processes and learner management, than the computer. However, computer technology is not singled out as a particularly useful tool to be integrated into language teaching or to promote autonomy.

The supposition that the combination of utilising computer technology as a tool to enhance language learning and promote the fostering of autonomy are

indeed complimentary actions, is further confirmed when looking at the roles designated for teachers:

- *The Learning Mediator* role requires the educator to “construct learning environments appropriately, communicate effectively showing respect for differences of others; demonstrate sound knowledge of subject content and various principles, strategies and resources appropriate to teaching in a South African context” [South Africa, 2000:13, see Addendum 2].

The role described here is perfectly compatible with the principles of a constructivist approach. One is also reminded of a comment of Benson [2001:176], when he referred to teacher autonomy and teacher training. He remarked that the challenge “is liable to be complex, because it involves recognition of the special character of trainee and in-service teachers as both teachers and learners” [ibid:176]. Mediating learning is therefore for the teacher trainee both a complex skill to be acquired but also one to gain from as a learner. It follows that the teacher trainee is never simply gaining from a learning experience as learner without simultaneously reflecting on the process in order to improve own practice both as lifelong learner and as teacher.

Surprisingly for a curriculum written in a constructivist paradigm, there is no reference here of building a horizontal relationship with one’s learners, a need to be able to negotiate control and choice, depending on the learners’ capacity to handle control and choice in a knowledgeable and thoughtful manner. Nor is there mention of an explicit goal of training the learner to take charge, i.e. to mediate autonomy as a goal.

It is the opinion of this writer that the roles do not make sufficient mention of the fact that the target group should be trained as both learners and teachers and that part of the learning should be to how to let go of control, how to provide choices, how to train their learners to

be able to take over the responsibility, and to point out that it is through reflection sustained by knowledge, skills and values that they will be able to move between the two roles of learner and teacher.

1. *Interpreter and designer of learning programmes and materials:* the emphasis is here on selecting and preparing suitable resources for learning and to “select, sequence and pace” the learning, sensitive to the differing needs of the learners.

Again the emphasis is on training teachers to be able to take charge with no mention of helping them to develop an awareness that they will be participants in a systemic and dynamic learning environment where the decision making and control will be negotiated.

3. *Leader, administrator and manager:* Again the emphasis is on the teacher who needs to make decisions. However, this time round the word “democratically” is used, indicating that the teacher needs to be responsive to “changing circumstances and needs”, “supporting learners and colleagues”. This is the first reference to the need for a collaborative energy.
4. *Scholar, researcher and lifelong learner:* The emphasis is on the educator’s [individual] “personal, academic, occupational and professional growth through pursuing reflective study”. There is, however, mention of using this growth in “broader professional and educational matters, and in other related fields”. This, however, does not go a long enough way to explaining that transfer and ultimately transformation are essential attributes to the successful fostering of autonomy and that it is unlikely that the undergraduate teacher trainee will develop such a capacity and in fact, understanding of her role if no learner training happens to help it develop. If the teacher trainee does not develop or understand the importance of this capacity, it is similarly unlikely that she will initiate significant change in her classroom, leave alone fostering autonomy amongst her learners. Consequently

opportunities through education to impact on a troubled society become equally unlikely albeit via teachers' organizations, her own example in the classroom or through her learners' development.

5. *Community, citizenship and pastoral role*: Here is mention of the educator demonstrating “an ability to develop a supportive and empowering environment for the learner and respond to the educational and other needs of learners and fellow educators”. HIV/AIDS is mentioned specifically in this connection and there is also mention of a “critical understanding of community and environmental development issues”. Creating an “empowering environment” for, and “critical understanding” by the learners, seem to imply more autonomy for both learners and teachers in role 5 than in other roles discussed so far.
6. *Assessor*: Again the emphasis is on the educator designing and managing both formative and summative assessment, keeping detailed records. The teacher trainee is encouraged to make assessment part of the learning process. However, the educator is both designer and manager and effecting learner involvement in the assessment processes, is not identified as an objective.
7. *Learning area/ subject/ discipline /phase specialist*: The emphasis is on knowing about different approaches and “how these may be used in ways which are appropriate to the learners and the context”. There is, thus, recognition of the importance of the specific needs of a target group and that the educator should be able to choose the most appropriate approaches, research and management even though the teacher remains the only decision maker. There is no mention of the fact that cultivating and fostering autonomy is the ultimate end goal of learning and that the teacher should develop the skills to foster it with regard to a particular phase, learning area or subject such as additional language learning.

In view of the analysis above, it seems that the curriculum specifications for teacher training does not recognise adequately its dual role of training life-long learners *and* teachers, meant to foster and model autonomy. Thereby it misses out on an opportunity to encourage higher education to train new educators able to understand their complex and changeable role as one which can help the learners to transcend and transform their immediate reality. Clearly the writers of “Norms and Standards for Educators” [South Africa, 2000] did not regard the possibility of an interchangeable role for teacher and learner, or at least a more horizontal relationship, as a goal. Judging from roles 1, 2, 4 and 6, one could be forgiven for assuming that you are training teachers for a teacher centred approach. The essence of our diagram [Fig. 3] is not reflected: neither the changeable roles, the flexibility, the integration or the interactivity. In short, the systemic nature of the process is not captured by the identification and descriptions of the roles of a teacher.

4.4 CONDITIONS FOR THE FOSTERING OF AUTONOMY IN TEACHER EDUCATION: LANGUAGE TEACHING

Guiding principles for the design and implementation of second language teaching courses need to be firmly based on theoretical reasoning and research concerned with the three pronged objective of this study namely fostering autonomy, the teaching and learning of an additional language and the way in which we can utilise CALL for maximum enhancement of the processes and procedures involved in the learning for teacher training. At the same time, our guiding principles should also be practically orientated, user friendly for the teacher and learner - a blending, thus, of declarative and procedural information. What then are the conditions for an optimal learning environment, focussing on the goals described above?

4.4.1 An Integrated Environment

Cotterall argued [cited in Kupetz & Ziegenmeyer, 2006:66] that autonomy as educational goal needs to be integrated into the structure of the programme in

order to have a chance to be fostered effectively. At a macro level, such an integrated environment may have more than one goal. In fact, while autonomy may act as one of the goals or objects of the course, alongside language teaching with computer assistance and teacher training, it is also a course strategy, influencing all decisions made regarding the teaching and learning environment.

The success of CALL also depends on the way in which it is used and integrated into the course [Levy, 2000:183] but in the role of a tool to effect the transformations needed to turn objects [macro level] into outcomes.

Another “component” involved in this integrated system of interactive and interdependent relationships are the human participants. Both at school level as well as in teacher training, the learner[s] acts as subject[s] and any transformation brought about, will change the role of the learner[s], hopefully adding value by making them more autonomous as learners, communicators and persons and at the same time proficient and competent in the language.

The teacher role is also crucial, both as teacher trainer and as school educator. She designs and manages the pedagogy reflecting learning and language learning theory sometimes independently, sometimes collaboratively and interdependently with students or fellow teachers. The course platform she creates, allows her students to co-construct and reconstruct in collaboration with her and their peers so that it becomes experiential learning rather than theoretical instruction.

According to Freeman and Johnson [cited in Kupetz and Ziegenmeyer, 2006:65], the process of learning to teach is a socially negotiated one. All components need to be translated into the integrated structure of the course directed towards its goals and sustained by an ongoing reflective dialogue between teacher and learners. The connectivity becomes more important than the content [Felix, 2002:2] and therefore has the potential “to lead to the acquisition of skills, in a way that better reflects what awaits the students in

real-life situations, in terms of both language and of social interaction skills” [Felix, 2002:8].

Such an integrated environment directed towards the goals of autonomy and language learning and teaching and utilising different tools [including CALL] to accomplish these goals, shows distinct characteristics of a systemic model where everything impacts on everything else. This holistic approach needs to take full advantage of the interdependence and collaboration it offers within a constructivist paradigm, both in terms of design and implementation. Learning never takes place in isolation and thus it is understandable that “social interactionism emphasises the dynamic nature of the interplay between teachers, learners and tasks, and provides a view of learning as arising from interactions with others” [Williams and Burden, 1997:43].

The value of an integrated approach such as the one discussed in these paragraphs, becomes clearer when we look beyond the classroom at the possible gains. Nunan [1995:149] refers to the fact that one way of narrowing the gap between teaching and learning is to incorporate into language programmes opportunities for learners to reflect on and take charge of their own learning processes. This capacity will come in handy in the course of every human being’s struggle as a life-long learner.

4.4.2 An awareness that every learning environment is unique

Every learning environment is unique for various reasons. One reason for this is the important influence of contextual factors such as the proficiency level of the learners, the culture of the learning institution and other background factors. All of these factors together constitute the background against which action is taken.

Another reason is that such a major part of the learning outcomes depends on “the will of the learners” and the adaptability of all the participants to their contexts [Benson, 2001:178].

Yet another reason has to do with the multidimensionality of autonomy so that it is generally accepted that no single definition can articulate the total meaning, yet it is stated by Little [cited in Benson, 2001:40] that “all genuinely successful learning is in the end autonomous”. It is for this reason that Benson [2001:47-48] suggests that although autonomy can be recognized in a variety of forms, the main thing is to be able to identify the form we choose to recognise it in the context of our own practice. Given that there is an inherent tension between dependence, interdependence, independence, control and choice within the construct of autonomy and how it is fostered, it seems that the “push and pull” action will shift between participants as the need arises. As Benson stated: “Control [over learning] is a question of collective decision-making rather than individual choice. ... There are three levels at which learner control may be exercised: learning management, cognitive processes and learning content” [Benson, 2001:50].

There is no single method or approach, which can guarantee success. The effectiveness of a particular approach or method can also not be judged independently of the forms in which they are implemented or the context of the particular programme. It is the very “integrativeness” of the many components described in the previous paragraphs that ensures the uniqueness. It is unlikely that challenges will be met by a simple adjustment or change of one component since the uniqueness of a particular course, lies in the relationships between the interdependent components.

To summarise: although there are many insights to be gained from research regarding fostering autonomy in the language classroom and the use of CALL to support it, every course will require new and creative thinking in order to design and implement a course “that fits the learner” in terms of the unique characteristics and dimensions of the components of that particular course and the dynamics between its participants, tools and goals. It is perhaps this factor that causes most research in this field to focus on the validity of autonomy and CALL, rather than on the actual practice and implementation.

4.4.3 Good People

Richard E. Ferdig [2006] wrote that any innovation [referring here to technological innovations] designed for use in education has to be judged pedagogically and in terms of the purpose for which it was created. Within a constructivist framework good pedagogy and the notion of good people in the process “are intertwined and must be evident to assure successful implementation” [Ferdig, 2006:750]. He continues to argue that *how* the innovation is implemented, is critical for its successful integration into a programme. The teacher has the pedagogical knowledge and academic content. Teachers have a rapport with their students – this is important in order to establish a community of learning when innovations are introduced and changes are made. Good teachers also understand the flexible nature of both teaching and technology and require innovations “adaptable enough to meet the[se] changing demands of the classroom”. Finally, and perhaps most importantly in terms of the goal of autonomy, good teachers have the commitment in spite of “intensified effort” and “broader responsibilities” within the learning community, to allow their students “to act as practitioners in the practice that they are being enculturated into” [Ferdig, 2006:752-753] – a most important condition not only when fostering autonomy, but also for teacher training.

Good teachers also understand that it is not about training their students how to use a computer application, but how to use it towards the pedagogical and educational end goals.

We have previously referred to the need for teacher autonomy. This means that not only should the teacher or university lecturer responsible for language teaching, be autonomous as human beings; teacher training should, in fact, make provision for fostering autonomy. In addition to this, Ferdig [2006:757] suggests that teacher educators should take care to focus on both pedagogical knowledge as well as content knowledge.

Because of the importance of the role of the teacher within the interactive and socio-constructive framework, no research looking at the partnership between CALL and autonomy in language teaching can be complete without looking at the role of the teacher or teacher educator. The importance of the role may well suggest additional in-service training, not necessarily to be able to use technology but rather to understand the relationships between the different components, including the complexities of her own role, that of technology and that of her students. This understanding, combined with pedagogical knowledge and classroom experience should be instrumental to bring about a mind shift allowing her to operate comfortably within a constructivist paradigm. Taking note of Levin and Wadmany's research findings [2007:173] that teachers in their sample acquired "both conscious and unconscious insights into the meaning of teaching, learning and technology through powerful and rich actions and through their reflections on these actions", we assume that the development of teacher autonomy, similar to that of student autonomy, is not a question of theoretical input – on the contrary – it is also an individual process involving, as Jacobson puts it [cited in Levin and Wadmany, 2007:172], "change depends on the teacher's capacity to build 'new bridges' through constructivist learning experiences". Nunan [1995:147] alludes to the fact that while there are many contextual factors that will impinge upon the quality of learning, the attitude and training of the teacher cannot be underestimated.

The good teacher provides psychological support, methodological information, values, ideas, techniques and, if need be, technological know-how. Her role is never static. It is through her interactions with the different components of the course, albeit tools, objects, subjects, schedules, institutional policies and content that learning opportunities are created, managed and sustained.

4.4.4 Good Pedagogy

We have come to the conclusion that the success of the partnership between CALL and autonomy depends to a large extent on the nature of the relationship. Consequently the role of the teacher is seen as central to the

successful utilisation of the partnership, since she is the one who has to design, negotiate and implement the course structure. However, her decisions and actions regarding learning management, control of content and of cognitive processes have to be made as a result of constant meaningful interaction with the target group and a sound understanding of the multiplicity and complexity of the learning environment.

Our guidelines will therefore have to be flexible enough to be re-aligned continuously according to the changing dynamics in the classroom.

We cannot control factors such as learner aptitude, teacher and learner beliefs about language learning and teaching and learner willingness, motivation or attention, in other words, the disposition of the role players. However, we can provide opportunities for learners to learn about the choices they have and explore with them the criteria they can use to make informed choices. We can help them to understand their own responses in a teaching – learning situation and we can expose them to the language of reflective practice. In short, we can foster autonomy through purposeful learner training. We can also identify guiding principles for utilising CALL to foster autonomy and enhance the learning process.

Benson [2001:177] emphasises that autonomy can be fostered most effectively through a combination of approaches. What we are planning, therefore, is not to compile a list of guidelines towards a so-called “best method”. This, we know can never exist since it will negate the unique qualities of every learning environment. Rather we are working towards guiding principles to ensure a learning environment, purposefully designed for optimal language learning and learning about the teaching of an additional language while fostering autonomous behaviour and creatively utilising the benefits CALL may offer to promote and enhance the learning.

According to H.D. Brown [2001:40] we now recognize that “the diversity of language learners in multiple worldwide contexts demand an eclectic blend of tasks, each tailored for a particular group of learners in a particular place,

studying for particular purposes in a given amount of time.” He continues by quoting David Nunan: “... the focus in recent years has been on the development of classroom tasks and activities which are consonant with what we know about second language acquisition, and which are also in keeping with the dynamics of the classroom itself”.

We agree then that no single method of fostering autonomy can be judged the best [Benson, 2001:177], that autonomy is an educational goal and not a method and that CALL provides us with tools to assist in enhancing the capacity of autonomy rather than guarantee achieving the outcomes. We are also aware of the fact that a lot depends on the way in which these goals and outcomes are addressed through the pedagogical choices made by the people [learners and teacher] involved - the way in which these choices materialise through course design and application, the way in which they “fit” into the learning environment and, of course, the cooperation and motivation of the learners. Successful implementation can never be the result of a single task or technique. Ferdig [2006] made this point clear when he pointed out that the success of technology in language teaching must be measured against the background of “good people and good pedagogy”.

How, for instance, does the teacher select computer applications for her specific target group? The answer will clearly depend on the outcomes envisaged for the particular curriculum. However, the “connectivity” potential of a particular application will play a major role in the decision making process since additional language courses focus predominantly on interactivity. An application such as e-mail has obvious advantages and it is unlikely that any other instrument can add the same value since it is easy to access, it enables both national and international connections, it supplies authentic content and audience and lends itself to a myriad ways in terms of language activities from real-time communication to pen-pal interviews to communication between teacher and learner or peers.

Collaborative projects and tasks with up to 5 learners at a terminal provides the excitement and motivation that young learners enjoy, while giving them

the opportunity to work collaboratively towards an outcome[s], processing data and generating materials for presentation purposes. Peer editing, problem solving games and web design are other examples of excellent activities and tasks, which can be done collaboratively and increasingly autonomously.

While there is more focus on form in activities such as practice exercises, it also allows for autonomous action through reinforcement of content covered in the classroom, which can be transferred to project material and therefore has the potential to transform into outcomes such as accuracy and appropriacy.

Needless to say, the vast quantities of content available on the Internet, allows students to use it for academic research purposes but also to practice critical thinking, problem solving and other learning strategies essential for autonomy, through engaging with the material to the extent that the rich and varied input, integrating knowledge from many fields, might become “intake” [Brown, 2007:297].

Autonomy and CALL can become powerful partners through their potential to engage learners in meaningful and purposeful communication, provided teachers [and eventually also the learners], accept that decisions regarding the “how to use it”, i.e. both autonomy and CALL, will be concerned with the interests of the learners, “rather than the interests of those who require their skills” [Benson, 2001:21]. This, of course, includes the potential for transfer and transformation to dimensions other than classroom learning. It also refers to the fact that it is in the interest of the learner to avoid embarrassing them by “putting them [the learners] in a spot”, bombarding them with practices they are unfamiliar with or expose their “mistakes”, putting the emphasis on the inaccuracy of it rather than using it as an opportunity to discover other more successful ways of doing the task. It is also for these affective reasons that learner training should be part of the “package” - the holistic approach to the design of the course, albeit in a teacher training course or part of the school curriculum.

4.4.5 The role of learner training in teacher training

Since this study's contextual focus is on fostering autonomy [promoted by CALL] in the additional language classroom where initial teacher training is done, there is an obligation on the researcher to acknowledge the enormous investment potential of the learning far beyond that of the target group. This in itself lends urgency to a process that holds significant transfer and transformational promise.

Nunan [1995:134] declares that we make the mistake of assuming that learners come into the classroom with a natural ability to make choices about what and how to learn – few do. This is where the concept of learner-centeredness and the learning centered classroom comes in. In such a classroom, according to Nunan, learners are “trained” in the skills they will need to make critical pedagogical decisions. As much as the emphasis is on language content, it is also on the learning process.

In this study we have identified various reasons for adopting such a stance. We advocate a process approach. One of the reasons for this is that our particular target group consist of learners studying a language in order to be able to manage the process of language learning as teachers. Secondly we advocate learner autonomy, not only because we believe all teaching should ultimately be about autonomy, but also because we realise that an “autonomous teacher” who understands the way in which autonomy operates, has a better chance to foster autonomy amongst her learners. We have identified CALL as a potential instrument or tool to enhance language learning and also, more specifically, autonomy, not because we want our prospective teachers to become experts at computer skills. This is because we want our target group to be prepared for a future where the advancements in computer use can be critically evaluated in terms of its potential to enhance the learning process in the classroom.

Nunan [1995:142–145] suggests 6 possible steps for the development of learner training:

1. to raise their awareness of the strategies underlying the particular task in question
2. to train learners to identify their own preferred learning styles and strategies
3. to involve learners in making choices among a range of options
4. to provide them with opportunities to modify and adapt classroom tasks
5. to create opportunities for them to teach each other
6. to create opportunities for the students to do research collaboratively.

Interestingly, all of the above point to strategy training such as advocated by researchers like Oxford [1994] and O'Malley and Chamot [1990]. At the same time, all of the above are strategies aiming at fostering autonomy and CALL which can be regarded as particularly well suited to promote strategies 3 to 6. In fact, Nunan [1995:148], when referring to the many skills developing through sensitising learners to the nature of learning processes, comments "it is difficult to think of another subject more appropriate for developing such skills [e.g. brainstorming, cooperative learning and fostering cognitive, affective, interpersonal and intercultural knowledge] than a foreign language, particularly when one considers the ... advantage that a foreign language has for developing intercultural sensitivities and understandings". Undoubtedly the same claim can be made for second language teaching.

Oxford and Ehrman [1993:201] identified 7 instructional implications based on research in the field of individual variation. Aspects such as learning styles, sensory preferences, age, gender and orientation to closure are discussed. The researchers conclude their report by stating: "All these dimensions should be addressed in teacher training at all levels. ... With such training, teachers can assist their students in taking greater responsibility for their own learning and selecting confidently among learning options."

In conclusion, the issue of reflective practice is probably as crucial to learner training as it is at the macro level to the fostering of autonomy. Reflective practice is where theory, experience as learner and future experience as teacher come together – the "bridge" needed to link own learning with learning

to teach in order to create an optimal learning environment with autonomy as focus. In Pennington's research [Pennington, 1996:349] the evidence points clearly towards the fact that "teacher change is promoted by and prefaced on reflection".

The insights gained through the investigation into conditions beneficial to fostering autonomy amongst teacher trainees in the language learning classroom, will serve to inform us when compiling guiding principles for the teacher/ lecturer intent on designing and implementing a learning environment with the educational goals described above.

It is against this complex background that we will attempt to establish guiding principles for the design and implementation of a pre-service teacher training course.

CHAPTER 5

DESIGN AND IMPLEMENTATION PRINCIPLES

5.1 INTRODUCTION

When consulting relevant literature in order to establish guiding principles for the design and implementation of an undergraduate additional language teacher training course, one has to turn to the seemingly unrelated fields of technology, psychology, philosophy, pedagogy and socio-politics in order to come up with practical answers. These answers need to guide us when designing and implementing an optimal learning environment for the training of primary school teachers to become efficient additional language teachers, fostering autonomy through the teaching of the target language while enhancing the teaching through CALL. It became necessary to draw our answers from these different disciplines because of the multiplicity of the construct autonomy and the fact that our goal for our subject/s [the learner/s], is to become autonomous as a life-manager, thereby converging the different domains of person, learner, communicator and teacher. In addition to this, the potential of CALL is in the way in which it is used rather than in its technological nature, whereas language learning also encompasses disciplines such as the psychological, the pedagogical and social-political. The complexity of this learning environment becomes even more obvious when we consider the fact that the educator or lecturer ideally needs to be able to model, train and teach the outcomes envisaged for the learner. The key aspects of autonomy, namely control and management of the content, the learning and the cognitive processes, are never static. These aspects always pass between learner/s and teacher-trainer in varying degrees and depend on the capacity for autonomy and willingness to demonstrate it by the subject/s at that particular point in time.

It becomes self-evident then that each learning environment is unique as is the integration and interaction of all these facets, providing opportunities for its

participants to change goals into outcomes and to transfer the skills, knowledge and insights they have gained, to the different domains of their lives, thereby either individually or collaboratively bringing about transformation in their life-world.

While the process described above is clearly learner-centred, the key role of the teacher-trainer to negotiate the process of dependent - interdependent and independent action with its inherent tensions cannot be ignored. Consequently, in spite of the systemic nature of the model as well as for practical reasons, the guiding principles will be divided into 3 categories:

- Guiding Principles with regard to the role of the learner/s
- Guiding Principles with regard to the role of the teacher-trainer
- Guiding Principles for a holistic approach.

The principles need to be seen against the background of the whole dynamic learning environment [see *Fig. 4*, an adaptation of Blin's *Fig. 3*, and Littlewood's *Fig. 2*]. *Fig. 4* is a graphic representation of a language learning system showing the potential for interactivity but also tensions between independent, interdependent and dependent relationships when autonomy also becomes an educational goal and course strategy.

It is through the actions demonstrated in *Fig. 4* that the learners will reconstruct and transform their own new life worlds, taking over control of their cognitive processes, the content of the learning, learner management and their own psychological processes.

5.2 GUIDING PRINCIPLES

5.2.1 Guiding Principles with regard to the role of the Learners

While it is in the nature of human beings to strive towards independent action, few have the capacity to apply it purposefully in learning situations. Therefore it has to be fostered and even more so with teacher trainees, since they have to develop their own autonomy but at the same time, learn to foster it amongst *their* learners. Any reference to *learners* in the following principles should therefore be read as referring to learners both at school level and at teacher trainee level. Any reference to *teacher* should be read as referring to educators in a school environment as well as trainers involved in teacher training. At the same time it is important to remember that the teacher trainee is teacher-to-be.

Even if learners receive learner training and constant purposeful guidance in developing the capacity of autonomy, it is still up to them to either individually or collaboratively, apply this capacity.

Every learner's learning and life experiences are uniquely applied to construct new realities; every group of learners will reveal their own collective unique needs and constraints. Every teacher is therefore faced with the challenge to establish the needs and constraints of her target group in order to design a "learner-fit" course for the particular target group.

Learners act in partnership with their teacher or trainer, either individually or collectively, within the constraints of their particular learning environment, negotiating across the inherent tensions of dependence, independence and interdependence. This is a dynamic partnership and therefore the rules governing the relationship should at all times be flexible enough to change according to the needs at a particular point in time.

Since learners show variable willingness, motivation and attention in their engagement with the content, they need a consistent support system

providing them with psychological, pedagogical, philosophical and technical assistance when needed.

Learners need to develop the capacity to use their learning to transform actions into outcomes and transfer outcomes to other dimensions of their lives over and above the classroom reality. They learn best through their own practical experience. Therefore it is imperative to plan their course focussing on the process, authentic experience and the procedural rather than the product.

Learners need training in order to understand the role of the affective in learning. Once they understand how beliefs about language learning, autonomy and the potential of CALL can influence the quality of their learning, it will be easier for them to reflect on the impact of their own beliefs and motivation on their own learning and that of their would be learners once they are qualified teachers.

Learners need training in order to understand the role of cognitive processes. Once they understand how meta-cognition and reflection on practices such as the strategies learners use, can influence the quality of learning and they have gained experience in applying them, it will be easier for them to reflect on their own strategies and other cognitive processes, as well as the impact it might have on the learning of their would be learners once they are qualified teachers.

Learners need training in order to understand how to deal with content such as the masses of information the Internet can give them in a short period of time. They are guided to become familiar with the difference between engaging to considerable depth with subject matter, as opposed to a superficial encounter which does not allow them to reconstruct actively in order to make the content part of their own life world. Engaging with possible selection criteria and experience in applying it, should provide them with the necessary skills to manage content.

The educational goals include additional language learning and teaching, as well as the capacity to act autonomously. Communication is therefore of paramount importance, both with peers and teacher. This is manifested in different ways but ongoing dialogue and discourse between the participants are of paramount importance not only for interactive purposes, but also because it allows negotiation around control and choice, thereby serving the purpose of fostering autonomy.

The discourse between peers and with the teacher allows the essential opportunity to reflect on actions, thereby providing the necessary bridge between theory and practice, an essential ingredient of teacher training and the fostering of autonomy.

Learners need to practice the skills of working collaboratively towards a goal, thereby becoming part of a “community of learning”. They are constructing meaning interdependently and independently of their teacher, confident that they are gradually - and in accordance with their learning level – taking charge of their own learning.

Learners [both individually and collectively] need to be able to use CALL to enhance and promote their independent and purposeful learning rather than choose its function for the sake of its impressive technological performance.

Although the learners are in partnership with CALL as a tool assisting them in their endeavour to become proficient in an additional language and increasingly more autonomous, they need the teacher’s guidance to ensure that this does not lead to an imbalanced relationship favouring CALL. CALL is useful in promoting connectivity [communication] and enhancing learning through massive rich and authentic input. However, it is not critical in the most important role of autonomy, namely enabling the subject to transform her personal life world and her relationship with it.

Learners [both individually and collectively] need to know that they can rely on the support of their teacher [face to face] when and if they need it and that

they can therefore afford to take risks in order to further their capacity to become autonomous. They know that the support can be psychological, methodological, pedagogical or technological, depending on their particular need.

Learners need to know that they are in the final instance responsible for applying the learner training they have received and that they manage their own motivation, attention and willingness, as will their own learners once they are qualified as teachers.

5.2.2 Guiding Principles with regard to the role of the Teacher-Trainer

The teacher-trainer plays a key role in fostering autonomy amongst her teacher-trainees.

She should model the key characteristics of autonomy as a communicator, person and life long learner.

She understands the importance of autonomy as educational goal, not only in the sense of school learning but also in terms of its potential in transforming the life-world of a learner.

She translates autonomy into a course strategy by planning and designing mindful of the central role of fostering autonomy at different levels and aimed at different domains while aligning her training with theory, experiential learning and constant reflection.

She guides her learners through dialogue and negotiation, mindful of the learning strategies, successes and failures of the learning situation and beyond it, to the possible needs and constraints of the learners they will one day teach.

She designs, plans and implements a course based on the needs and constraints of her particular target group, understanding the importance of the context.

She maintains – with the help of her learners – a healthy balance between the theoretical, the practical and the reflective, following an eclectic approach which focuses on connectivity between the many components of the multi-faceted learning environment, including tools such as CALL and/ or textbook material.

She is vigilant regarding the dangers of a technological overload and uses the macro [autonomy, language learning and teaching], and micro [the outcomes as described in the curriculum] goals of her course to maintain focus and purposeful direction.

She takes trouble to create a learning environment rich in resources, fully compatible with the learners' need for emotional security, yet integrated and interactive enough to generate partnerships and healthy social relationships to support the learning taking place.

She judges the actions, tasks and activities in her classroom according to good pedagogical principles rather than technological or ideological concerns.

She is aware of individual differences like the affective and cultural and she monitors consistently, remaining sensitive to these aspects in the decisions she takes.

The focus of the teacher is always on the needs of the learner as life-long learner, teacher, communicator and person.

She is simultaneously confident and sensitive, academically knowledgeable and pedagogically skilled enough to know when and to what extent to let go and when to pull back according to the needs of her target group.

She is able to accept that her role changes according to her learners' needs and that she is a participant in an interactive systemic framework, where the *relationships* between the different components decide the success or failure of a particular task or activity.

The teacher is able to reflect on her own beliefs regarding teaching and learning generally as well as specifically language learning and teaching. There is a congruency between her own beliefs regarding learning, language learning, language teaching and the fostering of autonomy promoted and enhanced through CALL.

The teacher trainer is intent on encouraging her learners to be critical of so-called "best methods" or instruments such as the computer, regarded as panacea for a particular learning situation and helps her teacher-trainees to respect the systemic nature of the process of fostering autonomy within a language learning and teacher training environment.

The teacher trainer is aware of the many roles of primary school teachers and can assist her students in becoming familiar using computer assistance also for assessment routines.

She is able to guide them through a paradigm shift with regard to the constructivist paradigm, creating an awareness of the importance of learner agency and creative involvement: producer rather than consumer.

She is able to create a course platform for assessment congruent with course strategy of fostering autonomy.

5.2.3 Guiding Principles for a holistic approach

Teacher, learner[s] or subjects, tools, educational goals, actions and processes are all participants in an integrative and systemic framework, dynamic and constantly reshaped to "fit" the changing needs of the learners.

Such an environment need to be designed, planned and implemented according to basic guiding principles, flexible enough to accommodate the constant transitions and ongoing construction and reconstruction.

Relationships between the participants and components of this complex context will dictate the measure of success of the learning.

Since the role of the teacher is multi-faceted and yet key to the purposeful advancement of the progress of the course, it is likely that this role will need support from a dedicated team which should include a technological assistant and at least one person at managerial level.

The learner environment must make provision for a balance between theoretical, practical and reflective learning.

The potential value added by any *one* of the participants or components to the learning environment, is superseded by the importance of the systemic and interactive nature of the whole, although teacher and learner[s] remain in key positions, either in vertical or horizontal relationship.

The inherent tension between independent, interdependent and dependent actions will necessitate and sustain ongoing discourse between the participants. It is this connectivity and reciprocity, which will ultimately be responsible for improved communication as well as capacity for autonomy.

5.3 IMPLICATION OF STUDY

In this study I endeavoured to focus on the principles that will decide the route taken by a university lecturer in the Faculty of Education, intent on fostering autonomy in the second language classroom, creating an optimal learning environment for learners who are prospective teachers themselves and who will be facing the realities of the 21st century classroom.

We have established that the combination of fostering autonomy, language learning and teacher training can best be facilitated by using an integrated and interactive systemic framework, designed and implemented according to a number of guiding principles which focus on the roles of the teacher, the subject[s] and the connectivity within such an environment.

The particular language learning approach selected by the teacher and negotiated with the learners can be variable or implemented eclectically, provided it is based on principles which focus on an interactive approach residing within a constructivist paradigm.

CALL, operating within such a flexible and interactive system, can promote and enhance the learning process, provided the emphasis is on how it is used as a tool integrated into the learning environment, rather than on its technological impact. The subject or learner remains the main focus and can negotiate more or less control and choice at any point in time.

In addition to this, we established that the process as discussed in previous paragraphs, is even more meaningful when the subject is also training as teacher since she has to model and teach autonomy and ideally, in order to do this, she needs to be autonomous as a person, a communicator, a life-long learner and as a teacher so that there will be congruency between her mindset and actions.

The course should therefore be structured in such a way that there is plenty of opportunity for the learner to reflect on the relationship between the different components of the learning environment under guidance of the teacher-trainer.

At the same time, *learner training* such as becoming knowledgeable about and experienced in the application of learning strategies, constructivism and language learning theory as well as the nature of the construct autonomy, becomes compulsory.

Practical experience is of critical importance and therefore the fostering of autonomy and the utilisation of CALL towards educational goals such as autonomy and language proficiency, should be incorporated into the framework for practice teaching.

The teacher trainer should at the same time be capable of and willing to accept and use the guidelines suggested in this study, including modelling the different roles of the teacher as described in the previous section. Amongst these guidelines, is the all-important one of relinquishing control and creating appropriate choices as the need arises.

We suggest the following implications of this study:

Teachers still have a key role in spite of the promise that technology may hold. Their role is now just more multi-faceted and demanding than before.

Teacher–trainers and in-service teachers of additional languages should be trained and mentored into the complex key role they have to fulfil.

The training should put emphasis on the interactive and systemic nature of the learning environment in which the teacher-trainer needs to be able to operate.

The training should incorporate psychological, technical and pedagogical aspects, fostering the capacity to act autonomously in different dimensions, as well as reflecting purposefully on the practical aspects.

The discourse during the training period should incorporate debate around the increasingly independent role of the learner[s] and the tensions that may create in a classroom situation.

Since the topic under discussion is rather multi-faceted and therefore quite complex, *new* teachers should not only be trained but should also be supported and mentored in the classroom by an expert whenever needed.

Decision makers who see the role of the computer as panacea for quality [language] teaching and learning, must reconsider and accept that it is what you do with it that matters and that CALL should, indeed, be recognised as a tool for enhancement of the learning rather than for its technological impact or ability to take over from the teacher.

Another implication is that additional language learning and teaching in a multi-lingual society, and more specifically in a teacher training situation, should be perceived as far more complex and influential than simply training people to read, write and speak another language. Therefore it should be entitled to preferential treatment in terms of staffing, facilities and funding. It is no secret that transformation in any multi-lingual society can be enhanced dramatically through communication.

It has also become clear that the training needs to be planned carefully and that in order to create a seamless, dynamic and integrated learning environment, the lecturer in charge, the technological equipment and ergonomical planning, all need to be carefully selected once the institution has decided to take this direction.

5.4 VALUE OF STUDY

In an ideal world, neither teachers, nor learners, nor student-teachers or lecturers are dependent any more on prescriptive syllabi and exemplars implying that teachers can be successful if only they follow the recipe, irrespective of the unique make-up of their target group and the constraints of their particular context. They are autonomous as learners, as communicators, as teachers and as persons.

The larger relevance of this study impacts on both the status and nature of additional language teacher training, teaching and the role and identity of the teacher-trainee, the teacher and the teacher trainer.

Furthermore, if we accept that teacher training allows us to bring about transformation in schools where our students become teachers, additional language teaching in primary schools can be vastly improved while teachers and learners develop the capacity to become autonomous in different spheres of their lives.

No claims can be made in terms of transformation of society with regard to the potential changes at school level. However, if we believe that teachers have the power to influence their learners at levels other than simply consumers of knowledge, it is not such a far-fetched assumption that there is indeed potential for transfer at the level of greater society.

None of the Guiding Principles identified in this study are incompatible with “good pedagogy”. None of the guiding principles commenting on the relationship between learners and teacher and other components of the dynamic integrated learning environment, are incompatible with our understanding of the role of the teacher in the current educational climate of moderate constructivism. The combination therefore of good pedagogy, good people and far reaching “good educational goals”, can only lead to the improvement of our educational practice, language situation and general society.

If we embrace the paradigm shift, which allows a collaborative and individual agency for responsible and critical citizenship, we are by implication acknowledging that autonomy does involve the social and political domains of learning. The capacity for autonomy is the ultimate goal of all learning according to Little [in Benson, 2001:40] and it is “fundamentally concerned with the interests of learners, rather than the interests of those who require their skills” [Benson, 2001:21]. These two aspects alone make it a worthwhile investment for the future of a developing young democracy such as South Africa.

5.5 RECOMMENDATIONS FOR FUTURE RESEARCH

Benson [2001:192] indicated that research is most likely to be valuable at this stage if it generates proficiency criteria and assessment tools relevant to autonomous learning and “documents the ways in which the development of autonomy and proficiency interact”. Measuring autonomy is extremely problematic in terms of the fact that one cannot observe a capacity, only identify behaviours associated with a willingness to control own learning. Even then, one cannot prove that these behaviours stem from any kind of intervention such as the teacher’s role, the use of a CALL application or learner training. Consequently, it is best to look at action research for answers, since that at least affords us the opportunity to control the situational variables to a certain extent.

However, future research is obviously necessary to provide evidence regarding:

- the nature of the actual relationships between the different components of an optimal integrated language learning environment in South Africa [incorporating CALL as tool and focussing on fostering autonomy at different levels] where there is noticeable improvement in performance in both the target language and the capacity for autonomy
- the changing role of the teacher in the environment described above
- the changing vertical relationship in the learning environment described above, between teacher and subject[s] where there is noticeable performance improvement in both the target language and the capacity for autonomy
- the fostering of autonomy in an additional language teacher training programme in South Africa

- the criteria for successful CALL application in a learning environment as described before

- the correlation between student's attitudes, their language performance and their willingness to act autonomously in the learning environment as described above

- the pedagogical value of CALL in a learning environment as described above.

BIBLIOGRAPHY

Allwright, R. [1981]. What do we want teaching materials for? *English Language Teaching Journal*, 36 [1]: 5- 18.

Ames, C. [1992]. Classrooms: Goals, Structures, and Student Motivation. *Journal of Educational Psychology*, 84 [3]: 261 - 271.

Baskin, C., Barker, M. & Woods, P. [2005]. When group work leaves the classroom does group skills development also go out the window? *British Journal of Educational Technology*, 36 [1]: 19 – 31.

Bax, S. [2003]. CALL – past, present and future. *System*, 31 : 13 – 28.

Benson, P. [2001]. *Teaching and Researching: Autonomy in Language Learning*. Essex: Pearson Education Ltd.

Benson, P. & Voller, P. [Eds.]. [1997]. *Autonomy and independence in Language Learning*. Essex: Addison Wesley Longman.

Blin, F. [1999]. CALL and the development of learner autonomy. In Debski, R. & Levy, M. [Eds.]. *WORLDCALL. Global perspectives on Computer-Assisted Language Learning*. Lisse: Swets & Zeitlinger. 133 - 148.

Blin, F. [2004]. CALL and the development of learner autonomy: Towards an activity-theoretical perspective. *ReCALL* 16 [2]: 377 - 395.

Boling, E. & K.-S. Soo [1999]. CALL issues: Designing CALL software. In Egbert, J. & Hanson-Smith, E. [Eds.]. *CALL Environments: Research, practice and critical issues*. Alexandria, VA: TESOL. 442 - 456.

Broady, E. & Kenning, M-M. [1996]. *Promoting Learning Autonomy in University Language Teaching*. London: Association for French Language

Studies in association with The Centre for Information on Language Teaching and Research.

Brown, H.D. [2001]. *Teaching by Principles: An Interactive Approach to Language Pedagogy*. Second Edition. New York: Pearson Education.

Brown, H.D. [2007]. *Principles of Language Learning and Teaching*. Fifth Edition. New York: Pearson Education.

Chan, V. [2003]. Autonomous language Learning: the Teachers' Perspectives. *Teaching in Higher Education*, 8 [1]: 33 - 51.

Chapelle, C. A. [2001a]. *Computer Applications in Second Language Acquisition: Foundations for teaching, testing and research*. Cambridge: Cambridge University Press.

Chapelle, C.A. [2001b]. Innovative language learning: achieving the vision. *ReCALL*, 13 [1]: 3 - 14.

Cotterall, S. [1995a]. Developing a course strategy for autonomy. *ELT Journal*, 49 [3]: 219 - 227.

Cotterall, S. [1995b]. Readiness for Autonomy: Investigating Learner Beliefs. *System*, 23 [2]: 195 - 205.

Cotterall, S. [1998]. Roles in autonomous language learning. *Australian Review of Applied Linguistic*, 21 [2]: 61 - 78.

Cotterall, S. [2000]. Promoting learner autonomy through the curriculum: principles for designing language courses skills with EAP classes. *ELT Journal*, 54 [2]: 109- 117.

Crabbe, D. [1993]. Fostering autonomy from within the classroom: the teacher's responsibility. *System*, 21 [4]: 443 - 452.

Crookall, D. & Oxford, R.L. [Eds.]. [1990]. *Simulation, Gaming, and Language Learning*. New York: Newbury House.

Crookes, G. & Gass, M. [Eds.]. [1993]. *Tasks and Language Learning. Integrating Theory and Practice*. Clevedon: Multilingual Matters.

Dam, L. [1995]. *Learner Autonomy 3: From Theory to Classroom Practice*. Dublin: Authentik.

Dam, L., Legenhausen, L., Wolff, D. [1990]. Text production in the foreign language classroom and the word processor. *System*, 18 [3]: 325 - 334.

Davies, G. [2003]. *Lessons from the past, lessons from the future: 20 years of CALL* [Online]. Available: <http://www.camsoftpartners.co.uk/coegddl.htm>. [March 6, 2003].

Debski, R. & Levy, M. [Eds.]. [1999]. *WORLDCALL. Global perspectives on Computer-Assisted Language Learning*. Lisse: Swets & Zeitlinger.

Debski, R., Gassin, J. & Smith, M. [Eds.]. [1997]. *Language Learning through Social Computing*. [Occasional Papers 16]. Parkville, Victoria: Applied Linguistics Association of Australia.

Department of Education. [2002]. *Revised National Curriculum Statement Grades R-9. [Schools]. Overview*. Pretoria: Department of Education.

Department of Education. [2003]. *Draft White Paper on e-Education. Transforming Learning and Teaching through Information and Communication Technologies*. Pretoria: Department of Education.

Dickinson, L. [1995]. Autonomy and motivation. A literature review. *System*, 23 [2]: 165 - 74.

- Eastment, D. [1996]. Survey Review: The Internet for teachers and learners. *Modern English Teaching*, 5: 258 - 282.
- Edelhoff, C. & Weskamp, R. [Eds.]. [1999]. *Autonomes Fremdsprachenlernen*. Ismaning: Hueber.
- Egbert, J. & Hanson-Smith, E. [Eds.]. [1999] *CALL Environments: Research, practice, and Critical Issues*. Alexandria, VA: TESOL.
- Egbert, J. L. & Petrie, G. M. [Eds.]. [2005]. *CALL Research Perspectives*. Mahwah, New Jersey: Lawrence Erlbaum.
- Esch, E. [1997]. Learner training for autonomous language learning. In Benson, P. & Voller, P. [Eds.]. *Autonomy and independence in Language Learning*. Essex: Addison Wesley Longman. 164 -175.
- Felix, U. [2002]. The web as a vehicle for constructivist approaches in language teaching. *ReCALL* 14 [1]: 2- 15.
- Ferdig, R.E. [2006]. Assessing technologies for teaching and learning: understanding the importance of technological pedagogical content knowledge. *British Journal of Educational Technology*, 37 [5]: 749 - 760.
- Fotos, S. & Browne, C. [Eds.]. [2004]. *New Perspectives on CALL for Second Language Classrooms*. London: Lawrence Erlbaum Associates.
- Fox, J. [1993]. EC Research in language learning and IT. *Journal of Computer Assisted Learning*, 9: 100 – 106.
- Gardner, R.C. & MacIntyre, P.D. [1992a]. A student's contributions to second language learning. Part I: Cognitive Variables. *Language Teaching*, 25: 211 - 220.

Gardner, R.C. & MacIntyre, P.D. [1992b]. A student's contributions to second language learning. Part II: Affective variables. *Language Teaching*, 26: 1 - 11.

Gillespie, J.H. & Barr, D. [2002]. Resistance, reluctance and radicalism: A study of staff reaction to the adoption of CALL/ C & IT in modern languages departments. *ReCALL*, 14 [1]: 120 -132.

Gremmo, M-J. and Riley, P. [1995]. Autonomy, self-direction and self access in language teaching and learning: the history of an idea. *System*, 23 [2]: 151 - 164.

Hannig, S. & Barkhuizen, G. [2000]. Using the Internet in a language classroom: a Case Study. *Per Linguam*, 16 [2]: 31 - 41.

Healy, D. [1999]. Theory and research: Autonomy and language learning. In Egbert, J. & Hanson-Smith, E. [Eds.]. *CALL Environments: Research, practice, and Critical Issues*. Alexandria, VA: TESOL. 391–402.

Hegelheimer, V. & Tower, D. [2004]. Using CALL in the classroom: Analyzing student interactions in an authentic classroom. *System*, 32: 185 - 205.

Heyns, D. & Snyman, D. [2003]. Afrikaans language teachers still use pick and shovel to mine the Information Super Reef. *Journal for Language Teaching*, 37 [1]: 46 - 59.

Holec, H. [1981]. *Autonomy and Foreign Language Learning*. Oxford: Pergamon. (First published [1979], Strasbourg: Council of Europe.)

Itakura, H. [2004]. Changing cultural stereotypes through e-mail assisted foreign language learning. *System*, 32: 37 - 51.

Jeon-Ellis, G., Debski, R. & Wigglesworth, G. [2005]. Oral interaction around computers in the project-oriented CALL classroom. *Language Learning & Technology*, 9 [3]: 121 - 145.

Johnson, K.E. [1994]. The emerging beliefs and instructional practices of pre-service English as a second language teachers. *Teaching and Teacher Education*, 10 [4]: 439 - 452.

Johnson, R.K. [Ed.]. [1989]. *The Second language curriculum*. Cambridge: Cambridge University Press.

Jonassen, D.H. [1995]. Supporting Communities of Learners with technology: a Vision for Integrating Technology with Learning in Schools. *Educational Technology*, 35 [4] 60 – 63.

Jones, C. [1986]. It's not so much the program, more what you do with it: the importance of methodology in CALL. *System*, 14 [2]: 171 - 178.

Jones, J.F. [1995]. Self-access and culture: retreating from autonomy. *ELT Journal*, 49 [3]: 228– 234.

Jones, J.F. [2001]. CALL and the responsibilities of teachers and administrators. *ELT Journal*, 55 [4]: 360– 367.

Kenning, M-M. [1996]. Creating an infrastructure for autonomous learning: the resource catalogue. *System*, 24 [2]: 223 – 231.

Krejsler, J. [2004]. Becoming individual in education and cyberspace. *Teachers and Teaching: theory and practice*, 10 [5]: 489 – 503.

Kupetz, R. & Ziegenmeyer, B. [2006]. Flexible learning activities fostering autonomy in teaching training. *ReCALL*, 18 [1]: 63 - 82.

Leahy, C. [2004]. Observations in the computer room: L2 output and learner behaviour. *ReCALL*, 16 [1]: 124 - 144.

Lee, I. [1998]. Supporting greater autonomy in language Learning. *ELT Journal*, 52 [4]: 282 – 289.

Le Grange, L. [2004]. E-learning: some critical thoughts. *South African Journal of Higher Education*, 18 [1]: 87 - 97.

LeLoup, J. W. & Ponterio, R. [2005]. On the Net. First, you have to hear it! ESL oral language practice. *Language Learning & Technology*, 9 [3]: 4 – 8.

Lepota, B. & Weideman, A. [2002]. Our ways of learning language. *Journal for Language Teaching*, 36 [3 & 4]: 206 - 219.

Levin, T. & Wadmany, R. [2007]. Teachers' beliefs and practices in technology-based classrooms: a developmental view. *Journal of Research on Technology in Education*, 39 [2]: 157 181.

Levy, M. [1997]. *Computer assisted Language Learning: context and conceptualisation*. Oxford: Oxford University Press.

Levy, M. [1998]. Two conceptions of learning and their implications for CALL at the tertiary level. *ReCALL* 10 [1]: 86 – 94.

Lieberman, D.A. & Linn, M.C. [1991]. Learning to learn revisited: Computers and the development of self-directed learning skills. *Journal of Research on Computing in Education*, 23 [3]: 373 - 396.

Little, D. [1991]. *Learner Autonomy 1: definitions, issues and problems*. Dublin: Authentik.

Little, D. & Dam, L. [1998]. Learner Autonomy: What and why? *The Language Teacher* [Online], 22 [10]. Available: <http://www.jalt-publications.org/tlt/files/98/nov/littledam.html>. [August 20, 2006].

Littlejohn, A. [1997a]. Making good tasks better. *English Teaching Professional*, 3: 1 - 4.

Littlejohn, A. [1997b]. Language Learning tasks and education. *English Teaching Professional*, 6: 1 - 2.

Littlejohn, A. [1998]. Sharing decisions with students: some whys, hows, and how nots. *Cambridge English for Schools Level 4 Teachers Book*. Cambridge: Cambridge University Press.

Littlewood, W.T. [1996]. "Autonomy": an autonomy and a framework. *System*, 24 [4]: 427 – 435.

Macaro, E. [1997]. *Target language, Collaborative learning and Autonomy*. Clevedon: Multilingual Matters.

Macaro, E. [2003]. *Teaching and learning a second language: A guide to Recent Research and its applications*. London: Continuum.

McGarry, D. [1995]. *Learner Autonomy 4: The Role of Authentic Texts*. Dublin: Authentik.

Meskill, C. [2005a]. Metaphors that shape and guide CALL research. In Egbert, J. L. & Petrie, G. M. [Eds.]. *CALL Research Perspectives*. Mahwah, New Jersey: Lawrence Erlbaum. 25 – 40.

Meskill, C. [2005b]. Triadic Scaffolds: Tools for teaching English Language Learners with Computers. *Language Learning & Technology*, 9 [1]: 46 - 59.

Meskill, C., Mossop, J., DiAngelo, S. & Pasquale, R. K. [2002]. Expert and novice teachers talking technology: precepts, concepts, and misconcepts. *Language Learning and Technology*, 6 [3]: 46 – 57.

Meskill, C. & Ranglova, K. [2000]. Sociocollaborative language learning in Bulgaria. In Warschauer, M. and Kern, R. [Eds.]. *Network-based language teaching: Concepts and practice*. Cambridge: Cambridge University Press. 20 - 40.

Mouton, J. [2001]. *How to succeed in your Master's & Doctoral Studies. A South African Guide and Resource Book*. Pretoria: Van Schaik.

Muller-Hartmann, A. [2000]. The role of tasks in promoting intercultural learning in electronic learning networks. *Language Learning and Technology*, 4 [2]: 129 - 147.

Murray, G. L. [1999]. Autonomy and Language Learning in an assimilated environment. *System*, 27: 295 – 308.

Nunan, D. [1995]. Closing the gap between learning and instruction. *TESOL QUARTERLY*, 29 [1]: 133 - 158.

Nunan, D. [1997]. Strategy Training in the Classroom: an empirical investigation. *Regional English Language Centre [Singapore] Journal*, 28 [2]: 56 - 81.

Nunan, D. and Lamb, C. [1996]. *The Self-directed teacher: Managing the learning process*. Cambridge: Cambridge University Press.

O'Malley, J.M. & Chamot, A.U. [1990]. *Learning Strategies in Second Language Acquisition*. Cambridge: Cambridge University Press.

Oostdam, R. & Rijlaarsdam, G. [1995]. *Towards strategic language learning*. Amsterdam: Amsterdam University Press.

Oxford, R. L. [1994]. Language Learning Strategies: An update [Online]. *CAL Digests*. Available: <http://www.cal.org/resources/digest/oxford01.html>. [September 20, 2007].

Oxford, R. L. & Ehrman, M. [1993]. Second Language Research on Individual Differences. *Annual Review of Applied Linguistics*, 13: 188 - 205.

Pennington, M. C. [1996a]. [Ed.]. *The Power of CaLL*. Houston: Athelstan.

Pennington, M. C. [1996b]. The 'cognitive-affective filter' in teacher development: transmission-based and interpretation-based schemas for change. *System*, 24 [3]: 37 - 350.

Reagan, T. [2003]. Critical Constructivism and Language Teaching: New Wine in New Bottles. *Journal for Language Teaching*, 37 [1]: 120 -139.

Rees-Miller, J. [1993]. A Critical Appraisal of Learner Training: Theoretical Bases and Teaching Implications. *TESOL QUARTERLY*, 27 [4]: 679 – 687.

Renie, D. & Chanier, T. [1995]. Collaboration and Computer-Assisted Acquisition of a Second Language. *Computer-Assisted Language Learning*, 8 [1]: 3 - 29.

Rüschhoff, B. [2001]. Construction of knowledge as the basis of foreign language learning [Online]. Available: <http://www.uniessen.de/anglistik/bernd/construction.htm>. [June 14, 2004].

Salomon, G. & Gardner, H. [1986]. The computer as Educator: Lessons from Television Research. *Educational Researcher*, January: 13 - 19

Schinke-Llano, L. [1993]. On the value of a Vygotskian Framework for SLA Theory and Research. *Language Learning*, 43 [1]: 121 - 129.

Schlak, T. [2003]. Autonomes Lernen im Rahmen einer virtuellen Deutschlandreise. *Info DaF*, 30 [6]: 594 - 607.

Soon, G.Y., Suan, N.A., Baniamin, R.M.R. & Mamat, W.A.W. [2004]. Technology and Foreign Language Learning: student perceptions on the feasibility of using WBI [Web-Based instruction] to supplement the on-campus Foreign Language Courses in UiTM. *Proceedings of the First International Online Conference on Second and Foreign Language Teaching and Research - September 25 - 26, 2004 - Beyond Borders* [Online]. Available:

<http://www.readingmatrix.com/conference/pp/proceedings/gohyingsoon.pdf>.
[August 25, 2006].

South Africa. [2000]. *Norms and Standards for Educators* [G.N. 82 of 2000]. Government Gazette No. 20844 [4 February 2000]. Pretoria: Government Printer.

Spady, W. [2004]. Using the SAQA Critical Outcomes to empower learners and transform education. *Perspectives in Education*, 22 [2]: 165- 177.

Thomas, H. [2003]. Bringing Foreign Language Learning into the 21st Century. *Journal for Language Teaching*, 37 [1]: 26 - 34.

Ushioda, E. [1996]. *Learner Autonomy 5: The role of motivation*. Dublin: Authentik.

Ushioda, E. [2000]. Tandem language learning via e-mail: from motivation to autonomy. *ReCALL*, 12 [2]: 121 - 128.

Van Lier, L. [1996]. *Interaction in the language curriculum. Awareness, Autonomy and Authenticity*. Essex: Longman.

Warschauer, M. [2000]. The death of cyberspace and the rebirth of CALL. *English Teachers' Journal*, 53: 61 - 67.

Warschauer, M. [2005]. Sociocultural perspectives on CALL. In Egbert, J.L. & Petrie, G.M. [Eds.]. *CALL Research Perspectives*. Mahwah, New Jersey: Lawrence Erlbaum. 41 – 51.

Warschauer, M. & Healey, D. [1998]. Computers and language learning: An overview. *Language Teaching*, 31: 57 - 71.

Warschauer, M. & Kern, R. [Eds.]. [2000]. *Network-based Language Teaching: Concepts and Practice*. Cambridge: Cambridge University Press.

Warschauer, M., Turbee, L. & Roberts, B. [1996]. Computer Learning Networks and student empowerment. *System*, 24 [1]:1 - 14.

Weideman, A. [2001]. The old and the new: reconsidering eclecticism in Language Teaching. *Per Linguam*, 17 [1]: 1 - 13.

Wenden, A.L. [1999]. An introduction to Metacognitive Knowledge and Beliefs in Language Learning: beyond the basics. *System*, 27 [4]: 435 - 441.

Wenden, A. & Rubin, J. [1987]. *Learning Strategies in Language Learning*. Hemel Hempstead, UK: Prentice-Hall.

Western Cape Education Department. [2003]. *Language Policy in the Primary Schools of the Western Cape*. Cape Town: Western Cape Education Department.

Western Cape Education Department. [2006]. *Literacy and Numeracy Strategy 2006 - 2016. A strengthened, co-ordinated and sustainable approach*. Cape Town: Western Cape Education Department.

Western Cape Education Department. Directorate: Quality Assurance. [2007]. Summary report on Focus Area 4 – Quality of Teaching and Learning and Educator Development: Half-year report on Trends. January to July.

Williams, M. & Burden, R. L. [1997]. *Psychology for Language Teachers: a Social Constructivist Approach*. Cambridge: Cambridge University Press.

Wolff, D. [1996]. Kognitionspsychologische Grundlagen neuer Ansätze in der Fremdsprachendidaktik. *Info DaF*, 23 [5]; 541 - 560.

ADDENDUM I

The critical and development outcomes are a list of outcomes that are derived from the constitution and are contained in the South African Qualifications Act (1995). They describe the kind of citizen the education and training institution should aim to create. The critical outcomes envisage learners who will be able to:

- Identify and solve problems and make decisions using critical and creative thinking.
- Work effectively with others as members of a team, group, organisation and community.
- Organise and manage themselves and their activities responsibly and effectively.
- Collect, analyse, organise and critically evaluate information.
- Communicate effectively using visual, symbolic and / or language skills in various modes.
- Use Science and Technology effectively and critically showing responsibility towards the environment and the health of others.
- Demonstrate an understanding of the world as a set of related systems by recognising that problem –solving contexts do not exist in isolation.

The development outcomes envisage learners who are also able to:

- Reflect on and explore a variety of strategies to learn more effectively.
- Participate as responsible citizens in the life of local, national, and global communities.
- Be culturally and aesthetically sensitive across a range of social contexts.
- Explore education and career opportunities.
- Develop entrepreneurial opportunities.

ADDENDUM II

The Seven Roles for Educators are:

Learning mediator

The educator will mediate learning in a manner which is sensitive to the diverse needs of the learners, including those with barriers to learning; construct learning environments that are appropriately contextualised and inspirational; communicate effectively showing recognition of and respect for the differences of others. In addition an educator will demonstrate sound knowledge of subject content and various principles, strategies and resources appropriate to teaching in a South African context.

Interpreter and designer of learning programmes and materials

The educator will understand and interpret provided learning programmes, design original learning programmes, identify the requirements for a specific context of learning and select and prepare suitable textual and visual resources for learning. The educator will also select, sequence and pace the learning in a manner sensitive to the differing needs of the subject/ learning area and learners.

Leader, administrator and manager

The educator will make decisions appropriate to the level, manage learning in the classroom, carry out classroom administrative duties efficiently and participate in the school decision making structures. These competences will be performed in ways which are democratic, which support learners and colleagues, and which demonstrate responsiveness to changing circumstances and needs.

Scholar, researcher and lifelong learner

The educator will achieve ongoing personal, academic, occupational and professional growth through pursuing reflective study and research in their

learning area, in broader professional and educational matters, and in other related fields.

Community, citizenship and pastoral role

The educator will practise and promote a critical, committed and ethical attitude towards developing a sense of respect and responsibility towards others. The educator will uphold the constitution and promote democratic values and practices in schools and society. Within the school, the educator will demonstrate an ability to develop a supportive and empowering environment for the learner and respond to the educational and other needs of learners and fellow educators.

Assessor

The educator will understand that assessment is an essential feature of the teaching and learning process and know how to integrate it into this process. The educator will have an understanding of the purposes, methods and effects of assessment and be able to provide helpful feedback to learners. The educator will design and manage both formative and summative assessment in ways that are appropriate to the level and purpose of the learning and meet the requirements of accrediting bodies. The educator will keep detailed and diagnostic records of assessment. The educator will understand how to interpret and use assessment results to feed into the processes for the improvement of learning programmes.

Learning area/ subject/ discipline/ phase specialist

The educator will be well grounded in the knowledge, skills, values, principles, methods, and procedures relevant to the discipline, subject, learning area, phase of study, or professional or occupational practice. The educator will know about different approaches to teaching and learning [and, where appropriate, research and management], and how these may be used in ways which are appropriate to the learners and the context. The educator will have a well-developed understanding of the knowledge appropriate to the specialism.

The roles are broken down into:

Practical Competence

Foundational Competence

Reflexive competence

South Africa [2000]. *Norms and Standards for Educators*. Government Gazette No. 20844. [4 February 2000]. Pretoria: Government Printer. 13 – 14.