ABSTRACT

The contribution argues that there is a renewed interest by mainly Afrikaans and English speaking South Africans in learning another indigenous South African language. This came about as a direct result of the changed official language policy, elevating all the indigenous Bantu languages to that of being official. It is further argued that many individuals interested in learning a new language, do not have the time or the inclination to do so in a formal classroom context. Access to a computer has increased dramatically in the last two decades, and hence e-learning becomes a viable option in this regard. The contribution argues that computer-assisted language learning (CALL) can very sensibly complement and even substitute the language teacher. Some existing computer-assisted language courses aimed at learning Xhosa are briefly explored, and finally the attention is turned to the particular challenges experienced in developing an interactive multimedia Xhosa acquisition course within the Multitaal framework.

Key words: E-learning, computer-assisted language learning, Xhosa

1. INTRODUCTION

The multilingual context of South Africa is well known but until recently acquiring another language was not considered a priority, particularly not by English and Afrikaans speakers. The reasons for this state of affairs could be briefly summarized as follows: Through the efforts of the former colonial administrators, English became entrenched as a dominant language particularly in the economy. Later, mainly because of the privileged and safeguarded position acquired through the reign by the Nationalist Party in the latter half of the previous century, Afrikaans was the dominant language used in the civil service and many other contexts. For nearly 50 years then these two languages, English and Afrikaans, enjoyed the status of being the official languages of the country. The indigenous languages, all of them belonging to the Sub-Saharan grouping called the Bantu languages, did not enjoy any such privileges although they co-existed with English and Afrikaans. They did develop individually and separately even through the dark days of apartheid (roughly 1950 – 1990), but it mostly happened in an isolated way. The policy of apartheid was by and large a policy that controlled space and discouraged spontaneous interaction between various peoples and by implication, also between language communities.

These languages did not perform any higher functions, and although used as mediums of instructions for a few initial years at school, and although literature development took place, albeit slowly, they functioned mainly as mediums of communication in own circles. The indigenous languages were effectively relegated to the periphery. There were bodies like language boards that oversaw matters pertaining to standardizing the orthography, screened and recommended literary books as prescribed texts at school, but by and large the indigenous languages did not form part of any serious discourse on language or literature. Native speakers of Afrikaans or English, the only two official languages prior to 1994, never had any pressing need to learn any of the indigenous languages. They could function perfectly well economically and socially without any knowledge of these languages, and it is likely that the overwhelming majority of English and Afrikaans speakers had no desire to learn any of these languages. By contrast, black South Africans had no choice but to learn English and/or Afrikaans in order to enhance possibilities of employment, and hence to survive economically.

The socio-political transformation in South Africa since 1994 has changed the scenario dramatically. Soon after the first democratic elections in 1994, all nine indigenous languages were elevated to the position of being official languages alongside Afrikaans and English. It was clearly a political decision at the time but, given South Africa’s history, also understandable. The new policy gave recognition and status to various linguistic entities and identities. The country therefore has eleven official languages, a policy that is obviously problematic from a pragmatic and functional perspective, but that is another debate. The fact is that the constitution of South Africa, widely hailed as an exemplary one, expresses itself clearly on language rights: in Chapter 1 (p.4) the following appears:

Recognising the historically diminished use and status of the indigenous languages of our people, the state must take practical and positive measures to elevate the status and advance the use of these languages.

A body legislated by the national government, i.e. the Pan South African Language Board (Pansalb) was established to promote the indigenous languages. There is currently a widespread feeling in South Africa that neither Government nor Pansalb has been successful in exercising their mandates. Pansalb has claimed that they do not get the necessary support from Government, and activist language practitioners like Neville Alexander, for example, are not shy in criticizing Government and/or Pansalb for the lack of action. At a fairly recent symposium7 organized by the Linguistics Department at UWC, the Pansalb representative, Julius Dantile, outlined all the problems they are experiencing and how they are hamstrung by the lack of support from government.

7The Multilingual Citizen – Symposium organized by the UWC Linguistics Department and supported by the HSRC, 23-24 February 2007, Two Oceans Aquarium, Waterfront, Cape Town.
The cynics claim that the appeal of English as a global language and its associated status is so strong that there is no real political will to drive the language initiatives.

2. LANGUAGE LEARNING NEEDS

Many Afrikaans and English speaking South Africans, however, now realize the importance of learning one or more of the indigenous languages for a variety of reasons. Society is opening up, and more and more South Africans realize that it would be beneficial to them if they could communicate, even on a very basic level, with speakers of these languages. People in service delivery contexts realize the need to serve their customers in the language of their choice. Many feel that, particularly given the history of the country, learning a language of ‘the Other’, would demonstrate goodwill and secure better inter-cultural communication and understanding. The point, however, is that the emphasis on acquiring multilingual skills in present-day South Africa for multiple purposes (socially and special), is high on the agenda of many, and the time is ripe to introduce learners to opportunities in this regard.

As regards the need for learning Xhosa, one should take note of the fact that it is the second biggest language in terms of first language speakers in the country, and is an official regional language in four provinces: Eastern, Western and Northern Cape, as well as in KwaZulu-Natal (who very recently added Xhosa to their list). The 1996 census suggests that there are approximately 7 million speakers out of a total population of just over 40 million. Only Zulu is bigger (9 million). All these figures are dated and are likely to be higher. The formerly marginalized Xhosa language is therefore gaining recognition and status. The fact that Xhosa is the mother tongue of former president and international icon, Nelson Mandela, as well as of the former president, Thabo Mbeki, helped in foregrounding the language, and despite all the problems regarding the implementation of the new language policy, there are many initiatives currently underway to expedite the development and promotion of all the indigenous languages.

3. THE ADVANTAGES OF E-LEARNING

E-learning is an umbrella term for any electronically assisted instruction most often associated with instruction offered via computer and the Internet. Why is e-learning a viable option, also for Xhosa, when looking at language acquisition? Not everybody interested in learning a language has the time or the inclination to do so formally over a long period of time in a teaching/classroom context. With the development of technology and the much easier access to computers whether at institutions of learning or individually, it was not surprising that language practitioners realized the potential in using computers to assist with language learning.
Computer-assisted language learning, commonly referred to by the acronym CALL, has since developed as a field of study all across the world. It is not the purpose of this contribution to discuss significant contributions within this very large field. An internet search, for example, reveals a vast body of scholarship. One expects applications within CALL to be constantly evolving given the rapid development of technology that would improve design features and that would address appropriate pedagogical matters pertaining to such programmes. In an interesting contribution, Hubbard (2003) targeted 120 CALL professionals all across the world, and asked them to formulate one single important CALL research question they would like to have answered. He received 64 usable responses that one could accommodate in 4 areas: Design-centred issues, questions around the effectiveness of CALL applications, learner-centred issues, and research matters. That seems to suggest that even experienced and professional CALL practitioners still grapple with unresolved issues.

CALL does recognize the importance of involving a teacher as part of the package, hence it is language learning ‘assisted by a computer’, not necessarily substituting the teacher. Having said that, it is clear that many such programmes, particularly those aimed at distance learning, build in a self-assessment component, enabling the learner to keep track of his or her progress, and supply feedback. There are therefore such language programmes that to all intents and purposes are designed to be self-contained, and where the only reference to a teacher might be through a name as the individual(s) responsible for the development. Swart (1998), focusing on a programme called ‘Developing Effective Writing Skills’ aimed at first year students at the University of Stellenbosch, formulates the apprehension around such courses as follows:

At best skeptics maintain that computer-assisted instruction can only play the role of jester in language acquisition and instruction, in other words, provide entertainment and some exposure to language. At worst it is seen as a pretentious villain usurping the role of the true master.

This view might be held by some, but key qualities of the ‘computer teacher’ are often overlooked: provided there is power supply (a not unreasonable expectation in the modern world), this teacher never falls ill, never feels down, does not mind if the learner repeats sections ad nauseam, never gives up, never loses hope, and keeps on rewarding learners with positive feedback after every small achievement. It is at this level where a human teacher is often taxed to the extreme, trying to cope with an often highly diversified class composition in terms of general language skills, aptitude for language learning, and varying degrees of motivation.
If this is linked to the sometimes unpredictable human nature and the many interruptions and interferences when 'life just happens', then the positive qualities of the 'computer teacher' are starting to shine brightly. One simply has to be realistic: the teacher and the computer can very effectively complement one another. An extremely talented, motivated and multi-skilled language teacher is probably better than a computer-assisted language course, but a well designed multi-media computer programme is also probably better than a less talented, ill-equipped and not so enthusiastic teacher. To put it simply: there is room for computer assisted language learning courses whether fully self-contained, whether occasionally linked through contact on a regular basis with a language practitioner or tutor, or whether integrated with a teaching programme. Different contexts will determine which of these would be the most appropriate.

In 1998 WorldCALL held its Inaugural World Conference on Computer-Assisted Language Learning at the University of Melbourne, Australia. This was followed by the second conference in 2003 in Banff, Alberta, in Canada, and the next one was held in Fukuoka, Japan in 2008. It has the theme 'Bridging the World through Technology Enhanced Language Learning'. The first two attracted participants from over 50 countries and dealt with a large variety of languages (see http://www.j-let.org/~wcf/modules/tinyd0/). It seems to be clear that this is a niche area that is growing. WorldCALL is only one of many such initiatives.

The advantages of such computer assisted courses appeal to many, and in particular to individuals. The possibility of working through the course when and as it suits the learner, is a strong point in favour of such courses. Developing such courses augments and strengthens other initiatives of a more traditional kind.

4. COMPUTER-ASSISTED LEARNING OF XHOSA

There are not many existing and available computer-assisted courses developed in South Africa (or elsewhere) for Xhosa. The aim here is not to compare the different existing options, but simply to list them and their developers, and to provide very basic information (where available) pertaining to the nature of these courses. There are also companies specializing in similar commercial ventures, often involving quite a number of languages. Only one of these will be mentioned.

One of the first attempts to use a computer for Xhosa instruction was developed at the former University of Port Elizabeth (UPE), now renamed as the Nelson Mandela Metropolitan University (NMMU). Britz, using BASIC as the programming language, implemented such an introductory Xhosa course and presented his findings in a contribution called 'Microcomputers as a medium in teaching African Languages' (1988).
The term 'microcomputer' dates the contribution seeing that it is a term hardly ever used today. As to the value of such courses, Britz quotes Davies (1985:16) regarding such courses in the UK:

Too many people engaged in important CALL projects in the United Kingdom have been preoccupied with making full use of the computer's potential rather than producing usable programmes. This means that text-only programmes are regarded with disdain, and full-colour graphics and intrusive sounds effects are the yardstick by which all programmes are judged. The result is a small selection of CALL packages with (often irrelevant) graphics and musical ditties rather than a wide selection of bread-and-butter programmes.

Britz suggests that the effectiveness of such a programme is determined by the 'systematic presentation' (p.78), and then says that the course notes for students have been used as a guideline. The compiled programme for the students is then listed according to its constituents. Judging from these grammatical components and the examples further provided, it is clear that the approach is rather structural and not really communicatively intended.

De Kock and Taljaard (1997) from the same university (UPE) built on the work by Britz and read a paper at the Ed-Media World conference, nearly ten years later in 1997 in Calgary, Canada. The paper with the title 'Computerized African Language Learning (CALL)!' reported on the newly developed Xhosa course which has more multimedia focus. The presenters remarked that the course by Britz 'had severe limitations'. (p.2). This was followed by another report by De Kock (1998) on presumably the same course. This time a presentation was made at the previously mentioned WorldCALL, which was the Inaugural World Conference on Computer-Assisted Language Learning held in Melbourne, Australia. The title of the presentation was "Siyanihlonela – We respect you: A multimedia CALL title for learning the Xhosa language". It's not clear whether the course had been developed further than the previous year. De Kock describes the course as 'interactive, adaptive, dynamically expandable and uses multimedia', but there is no further information.

In Cape Town a former UCT lecturer, Tessa Dowling teamed up with a software developer and launched their company called African Voices in 1998. In the same year they produced the CD-ROM multimedia Xhosa acquisition course called Speak Xhosa with Us. With the cd came a coursebook pack. The course contained 20 lessons, focusing on conversations, grammar and interactive exercises, and sound played an important role throughout. The workbook supported and supplemented the CD-ROM material.
The course was marketed as easy-to-use, learner-paced, optional repetition of sound and video, practical exercises that were also fun, and comprehensive grammar presentation. The course was developed in association with the Multimedia Education Project of the University of Cape Town. From press reports, it seems clear that the course was received very favourably (see Richardson and Willoughby, both 1998), and this prompted the developers to expand into producing further products, also drawing in Zulu. The reasonably well known and U.K. based company EuroTalk, operating under the acronym CALICO (The Computer Assisted Language Institution Consortium), has produced Talk Now! Xhosa. The developers boldly (see http://aramedia.com/eurotalk.htm) describe the Talk Now! courses 'as the world's best selling language learning CD-ROM for beginners'. They have apparently used the same template for a great number of languages. In a rather negative review of the Xhosa and Zulu programmes by Sandra Sanneh who teaches Southern African languages at Yale University, she states the following:

This CD-ROM is made from a template that has been used for twenty-eight languages and is encoded in Western European culture. The animated characters are western European in appearance, and the lexical items selected are such as one might encounter or discuss in a Western European city. The ubiquitousness of western European culture in sub-Saharan African cities notwithstanding, this template not only is devoid of relevant cultural information, but conveys inappropriate cultural information. (see www.calico.org)

The 28 languages now seem to have grown to over one hundred. Afrikaans, Sesotho and Setswana also feature in the series, possibly with the same shortcomings. This is clearly problematic and perhaps indicative of companies who want to make profit, but in the process simply ignore the fact that languages operate in a socio-cultural context.

This very brief and rather sketchy overview covered some of the main contributions regarding the development of computer-assisted Xhosa courses developed in South Africa in the decade roughly between 1988 and 1998. It is, of course, not possible to establish what impact these courses had. The EuroTalk course was released in 2000.
5. MULTITAAL/ICALLESAL

Unbeknown to me, the Multitaal project was designed and developed in Belgium through the 1990s. The driving force behind this initiative was an experienced and dedicated language practitioner at the Katholieke Universiteit Leuven (KUL) in Belgium, in the ILT institute (Instituut voor Levende Talen) in the person of prof. Lut Baten. She, in conjunction with a programmer, Bert de Coutere, also at KUL at the time, developed such multimedia courses starting with Dutch (see www.multitaal.com). The first course was called InstapNederlands (lit. Walk in Dutch). After Lut Baten had introduced her work in South Africa, staff at the former University of Potchefstroom for CHE and also at Vista University expressed interest in producing similar products for the indigenous South African languages. Guided by Lut Baten, courses for Zulu, Tswana (see Pretorius & Berg 2003) and Afrikaans were developed. The Zulu and Tswana course development was already underway when I was drawn into the project, being responsible for Xhosa. As the author for the Xhosa beginners course, I worked on the project in collaboration with prof. Baten in Belgium, and in South Africa with the Center for Text Technology (CTexT) at the University of North-West (Potchefstroom campus) who had taken over the management of the project, including the design (mainly the graphics), all technological issues, as well as production.

As a newcomer to CALL, familiarizing myself with the Multitaal authoring tool and learning how to use it, was quite a task. The Xhosa course called Sondelani! (Come closer!) was eventually finalised in July 2006. CTexT, under the leadership of prof. Gerhard van Huyssteen, has in the interim decided to extend the course development to all eleven official languages of South Africa, and established a project with the acronym ICALLESAL (Intelligent Computer-Assisted Language Learning for 11 South African Languages). Although the Multitaal project as originally conceived in Belgium remains in place with Lut Baten as a consultant to the South African project, ICALLESAL essentially now operates independently and has to generate its own funding for all future projects.

It is not intended with this contribution to provide a detailed description or analysis of the software design used in the Multitaal products. It is fairly elaborate. The following condensed description of the design will have to suffice within the constraints of space: A course consists of 4 chapters, each chapter having 6 to 8 lessons. Each chapter has a central theme and appropriate dialogues supporting that theme form the backbone of the course. Vocabulary obviously plays an important role and all entries used in the programme are included in the dictionary, as well as other basic vocabulary deemed necessary.
Every lesson is in turn linked to the vocabulary, as well as to specific functions, skills and grammar. Functions have to do with the practical usage of the relevant language in a specific context. Skills are focusing mainly on pronunciation, sound and word distinction, as well as cultural competency where particular cultural practices of the relevant linguistic community are briefly explained. The grammar section gives more detailed explanations of given structures always accompanied by many examples. Every section also has a range of linked exercises, many also with feedback. This authoring tool was developed by the Belgians and made available to the South African authors, who then had to give content to every sub-section. In order to prepare the learner for autonomous learning, special attention was given to specific skills such as intercultural competence, and to language learning strategies that include visual and audio input.

A 'secondary' feature of the course, if considered appropriate, is the inclusion of rhythmical rhyme sections, that help to accustom the learner to the rhythm and ‘ring’ of the language. Every chapter also ends with a short song that links up with the general theme in that chapter, but is more intended as entertainment, giving the student a little break from the intensive concentration needed when working through the course. The texts of the rhymes and songs are included, and the discerning learner may benefit from them, recognizing vocabulary and structures that were encountered earlier in the lesson.

Once the input into the authoring tool has been finalized, the authoring tool is converted into the learner's programme. The design enables the learner not well versed in language acquisition principles to move through the programme at his own pace but meticulously. At the same time the more sophisticated learner is accommodated by allowing him/her to move through the programme perhaps more rapidly or to spend more time on sections requiring cognitive linguistic skills such as covered in the grammar sections. Striking a balance between these somewhat more practical sections as opposed to the more cognitive that gives more detailed insight into the structure of the language under discussion, is important. It is equally important though that a 'user-friendly' approach be implemented at all times. The technical staff at CTexT are continuously looking at improving all aspects of the design. A study contract also accompanies the course.

A student, however, is not bound by this contract, but if s/he needs some guidance as to how to work through the course methodically, such guidance is then provided. The available study contracts cover 3 weeks, 7 weeks, or 10 weeks. The last one is needed to work through the whole course and all its relevant applications. A course guide is also included (in PDF format), explaining in detail what is covered in every lesson, as well as the intended outcomes once a chapter has been completed. A learner can then assess him/herself as to the attainment of the goals as listed in the outcomes.
6. CHALLENGES EXPERIENCED IN DESIGNING THE XHOSA COURSE

The challenges facing the author of such a course, are substantial. The present course has Afrikaans and English speakers as a target audience. These two languages are both from the Indo-Germanic variety, whereas Xhosa is one of the many Bantu languages in Sub-Saharan Africa. The differences between these two language families are immense, and unlike the Xhosa speaker who is bombarded daily with particularly English input through the media and at the workplace, the opposite does not happen. The author needs to be aware of this consciously before any input selection is done.

Experts in curriculum design (e.g. Long 2005) often stress the need for a thorough needs analysis that should precede the development of any language course. It is at this point that the author/developer faces the first challenge. The likely learner of Xhosa is bound to have different motivations for doing so, is likely to interact with Xhosa speakers in various and many contexts, is likely to have widely differentiating skills pertaining to language learning, and is likely to come from a variety of social contexts. The developer then has to exercise options trying to accommodate as many of these as possible. The obvious challenge is to define the profile of the likely learner in greater detail in order to design a course that takes into consideration the needs of such a learner. Such details are in principle impossible to acquire. In the conceptualizing phase, therefore, the authors and developers of the Multitaal products could not proceed beyond the 3 following very basic guidelines regarding the likely profile of the learner:

- the course is intended for an adult target group (17+);
- it is aimed at a beginners language level (as opposed to intermediate and advanced);
- it requires basic computer competence (as opposed to intermediate and advanced).

These guidelines clearly do not effectively address the likely needs of the learner and the author is left with having to make decisions on content not exactly knowing what the profile of the likely learner might be. How then does this translate into developing a course that would ostensibly try to meet all these diverse needs as outlined above? To put it simply: can one particular course address the needs of a housewife, a lawyer, a farmer, a shop-owner, to name a few professions? The author has little choice but to use his knowledge of the social context existing in South Africa, and to rely on his intuition in selecting content. This was confirmed in informal discussions with other authors.
He also needs to take into account that the learner might range from the sophisticated (with extended exposure to various learning contexts, also e-learning) to one with very little previous access to computers and exposure to e-learning of whatever kind. It stands to reason that each individual developer may react to this challenge in different ways, seeing that our perceptions of the social context and how groups and individuals interact in that context, may differ.

Communication in South Africa between speakers who have Afrikaans or English as a preferred first language, and those who have an indigenous language like Xhosa as a preferred language, is still not as open and free as one would like it to be. Casual and informal socializing between different cultural and language groups has not 'normalized' yet. It takes a long time for attitudes and social interaction patterns to change. For that reason it is at this point still possible to identify the likely contact points between these two groups. These logical contact points then form the basis for the dialogues that in turn form the backbone of the course. Various interpretations of the possibilities may emerge, but one simply cannot accommodate all possible options and hence has to settle on a number of situations based on the considerations listed above.

Another matter to be considered is the possibility that the original design of the authoring tool might not be as appropriate for a Bantu language such as Xhosa, seeing that it originally had been developed for application in European languages. In that sense the authoring tool and its accompanying learner's programme was 'imposed' upon the authors working with the South African languages. Xhosa is an agglutinating language with a multitude of meaning carrying prefixes, infixes and suffixes, and there are further distinct differences between Bantu languages and Indo-European languages in terms of grammar, manner of expression, orthography, and more. In a language with a conjunctive way of writing as in Xhosa, the concept of a 'word' takes on different proportions.

This is a problematic area in all learning contexts pertaining to the Bantu languages, whether electronic or not. The other side of the coin is that the likely learner in South Africa, probably having English or Afrikaans as a first language, is familiar with the architecture and design of the programme which was originally aimed at Europeans wanting to learn Dutch, a sister language to Afrikaans. The biggest challenge then is to reconcile the particularities of a Bantu language such as Xhosa with the suggested authoring tool format particularly regarding the lexicon.
Most language practitioners recognize vocabulary as a very necessary and early step in acquiring the building blocks leading to communication. As already said, Xhosa is an agglutinating language, suggesting that prefixes, infixes, suffixes and other extensions to basic vocabulary units are the norm. Xhosa is therefore rich in morphology, and there are an extremely great number of morphemes that carry meaning but cannot be considered as 'words' in the traditional sense. Accommodating these sensibly in the dictionary, an integral part of the learner's programme, is a daunting challenge. The programme requires that every word, i.e. every morphological unit of meaning used in the dialogues, for example, should be included in the dictionary, so that the learner can click on any individual such entry to get its meaning and its pronunciation.

If basic stems, e.g. verbs are listed as vocabulary items, it is not that helpful in terms of communication because a host of other morphemes should be used in combination with the basic verb stem to establish meaningful communication. The range of these possibilities, however, is so huge that one could not accommodate these in the dictionary either. It appears as if it is more useful to learn 'chunks of language', even phrases or multiword units rather than single lexical items. Developers of similar courses for Bantu languages, particularly those with a conjunctive way of writing such as Xhosa, should consciously keep this aspect in mind and think of innovative and effective ways of handling the lexicon. An illustration:

A simple and important question within a service delivery context, is the following: What can I do for you? Accommodating these 6 items in an English lexicon context poses no problem, because all six are considered to be autonomous words, each with a distinct form and meaning. In Xhosa, however, this same sentence is rendered as follows: Ndingakwenzela ntoni?

Morphologically and semantically the constituting components can be identified in the following way:

Nd- = I
-nga- = can
-kw- = you
-enz- = do
-ela = for
ntoni? = what?

None of these constituting elements has any autonomy except for the interrogative or question word ntoni? (what?). The subject marker 'Nd-' has to connect with other parts of speech, notably verbs or other predicates. The potential morpheme '-nga-' always appears embedded in verbal constructions.
The object marker ‘-kw-’, representing the object, is a phonological variant of the normal ‘-ku-’ because of its appearance before a vowel verb stem ‘-enza’. The ‘-el-’ is a verbal extension. Although the interrogative ‘ntoni?’ occurs independently in Xhosa, it is always preceded by a verbal form. This system, also including the word order, deviates quite dramatically from the likely knowledge the learner with an English or Afrikaans background will have.

The morphology and accompanying meaning can be explained in the Grammar section of the programme, albeit with some difficulty. It makes little sense to go into too much detail for beginner learners. At the same time it is impossible not to go into the morphology: one has to 'break open' and dissect the greater units into its constituent components in order to introduce the way the language works and how meaning is generated. Striking a balance between enough and too much detail is not always easy. In the lexicon section the author has to indicate whether the entry is translatable (which nearly always is the case), and whether the entry can be considered as a lemma. A lemma is generally considered to be a dictionary entry. Basic verbs and nouns pose no problems. A principle of the programme (and it is a good one) is that the learner may click on any item (a unit or word) in any of the dialogues, and can then choose between listening to the selected item (pronunciation) or see its meaning.

The author then has little choice but to include all compound entries like the one discussed above as 'lemmas' in the lexicon. Once that is done, the authoring tool then allows the author to add associated information with the entry, to assign it to a word sort (part of speech), to assign it to a theme because of its meaning, give a morphological explanation (if necessary), and provide a context example with its accompanying meaning. This, in my opinion, clearly goes beyond the 'normal' use of a dictionary or lexicon. For this very reason developers of spellcheckers for agglutinating languages are also experiencing problems (see De Schryver & Prinsloo 2004). All orthographic 'words' have to be lemmatised, i.e. each orthographic word is linked to its canonical form, i.e. that form under which the item would, for example, be found in a reference work. The concept of a 'word' takes on other proportions in agglutinating languages such as Xhosa and Zulu: 'lemmas' or dictionary entries that would also apply to spellcheckers, have to be 'filtered' from bigger units of language although they may appear orthographically as a 'word'.

It is suggested then that useful phrases or 'chunks of language' should form part of the Xhosa lexicon. This is particularly appropriate with predicate forms. Verbs in isolation have very limited application, especially for beginner learners. Learners, particularly those not interested in the grammatical aspect, should therefore be encouraged to learn such practical and useful phrases as vocabulary items with their associated meanings.
That is obviously a big task, given the average length of such phrases. Some random examples of these Xhosa 'chunks' follow below. On the left the basic entry with its meaning is listed, and on the right the derived 'chunk' that incorporates the basic root, also with its meaning:

- sebenza (to work) akasebenzi (s/he is not working)
   bendisebenza (I was working)
- azi (know) andimazi (I don't know him)
- phila (live) andiphilanga (I am not well)
- tsatsha (marry) anditshatanga (I am not married)
- pha (give) khawundiphpe (please give me)
- hamba (go) masihambe (let's go)
- gqiba (finish) ndigqibile (I am finished)
- libala (forget) ungalibali (don't forget [you:sing.])
- ixesha (time) andinaxesha (I don't have time)
- ikhabathi (cupboard) ekhabathini (in the cupboard)
- iweyitala (waiter) ndiyiweyitala (I am a waiter)
- imali (money) yimalini? (how much?)

Although it is obviously also important to know the basic forms, the derived ones have more value from a communicative perspective. The discerning learner with greater cognitive learning skills, should, by analogy, be able to generate a multitude of similar phrases not in the programme once the principle of the structure is understood.

Computer-assisted language learning courses provide an option that appeal to many and are useful and needed in the South African and probably many other contexts. E-learning is clearly developing in all areas and access to computers is becoming easier daily. The greatest advantage remains the possibility to work through the course at your own pace and whenever you feel like it. Such courses can also complement more traditional classroom courses. In the South African context these products can also be seen as 'outreach' projects, building bridges between formerly segregated language communities, and hence contributing towards nation building. Despite all the challenges, whether technical or from a content selection and approach kind, it is worth investing money and energy into the further development and refinement of such courses.

7. REFERENCES


www.cs.upe.ac.za/staffHomePages/csagdk/papers/xhedm97.htm

De Kock, G de V. 1998. Siyanihlonela – We respect you. A multimedia CALL title for learning the Xhosa language
www.cs.upe.ac.za/staffHomePages/csagdk/papers/WC98DeK.htm


Richardson, Ed 1998. Learning to speak the language now – with only the Basics in multimedia technology. Eastern Cape Herald.
www.africanvoices.co.za/reviews/eherald.htm


www.saalt.org.za/abstracts98.htm

Websites consulted: http://www.multitaal.com
http://www.j-let.org/~wcf/modules/tinyd0/
https://www.calico.org
http://aramedia.com/eurotalk.htm