

Literacy learning in Limpopo – a multilingual environment

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Abstract

This article is a report on research conducted to support the development of a multilingual literacy learning software programme for adult learners in rural Limpopo Province, South Africa. The topic of inquiry for the research was literacy learning in a multilingual environment, with special attention paid to attitudinal and metacognitive aspects. Preliminary results of the study suggest that the learners, mostly female and Sepedi mother tongue speakers, exhibited a specific and strong desire to become literate through the medium of English for personal advancement and improved interethnic communication. The central concern of this article is to describe the study, briefly discuss preliminary findings, and suggest possible avenues for further research.

Keywords: Information and Communication Technologies; low literacy level; rural population

Introduction

Background

Adult Education in South Africa

The post-apartheid South African Department of Education has placed high emphasis not only on educational attainment and achievement, but also on the right to education, and specifically, in the language of choice (Makon, 2003, 133). National expenditure on education supports this policy position. In the so-called New South Africa, the national government has spent an enormous amount on education, constituting an average of 7% of its GDP (UN). The 2007-2008 national budget allocation for education amounted to R105.5 billion, of which R11.35 billion was apportioned to the Limpopo province (ibid).

Despite the enormous expenditure on education in general, in addition to financial investment in human resources for adult education, and despite the Adult Basic Education and Training Act of 2000, no clear progress has been made (Aitchison, 2002, 146-168). In the case of rural South Africa, this is an unfortunate situation, given the recent dissolution of the 1979 Education and Training Act (a revised version of the Bantu Education Act of 1953). Clearly, too many South African adults continue to be educationally disenfranchised, despite well-intentioned government efforts to respond to these people's pressing educational needs.

Limpopo Province: Basic demographics

This study on literacy learning among multilingual adults was conducted in several villages in the Limpopo Province. Poverty is high in South Africa, especially among black people in rural areas and peri-urban townships. Poverty is particularly high among women. According to a recent comprehensive provincial demographic survey, 87% of the provincial population of 5.4 million live in rural settings, 98% are black and 54% are female (Statistics South Africa, 2007). Moreover, it was reported in 1995 that of the 47% of Limpopo inhabitants that lived below the poverty line, 96% were black. It is no surprise then that unemployment is high (at least 30%), and that when employment is found, it is mostly low-paying agricultural work, with the average black agricultural household earnings set at R14 186 p.a. in 2000 (PROVIDE, 2005). The prognosis is unambiguous: the Limpopo province is mostly inhabited by poor, rural, and black populations with few job prospects.

Three major indigenous languages are spoken in Limpopo: Northern Sotho (the most common variant of which is SePedi, commonly written as Sepedi), Xitsonga (Tsonga) and Tshivenda (Venda). In some regions, people speak all three of these languages; in others people speak only one, and there are many dialectal variants (e.g. SePulana, SeBoledu, from Northern Sotho). Many people also speak Isizulu (Zulu) and Setswana (Tswana), as well as English and Afrikaans. The Limpopo province is the most linguistically diverse province in South Africa.

Historical issues in language and literacy education

During the 1950s, the apartheid government established so-called ethnic homelands or Bantustans for black South Africans, and the current Limpopo area was home to three of these Bantustans: Gazankulu, Lebowa and Venda. The establishment of these homelands did not stem from respect for cultural heritage, but was based instead on the so-called divide-and-conquer strategy of the apartheid government. Blacks were to be divided into their ethnic affiliations and forced to live in designated areas supposedly tied to their ethnic history. Black youths were expected to learn mostly in their first language or mother tongue, and schooling would be discouraged past high school. Employment options in these areas were scarce for blacks under apartheid, and were mostly limited to menial service jobs such as gardening, cleaning or mining, and lowly paid

public sector work such as policing, security, or teaching. For acceptable performance in these duties, a modicum of Afrikaans and/or English was required.

The effect of these institutional measures, coupled with the ethnic tensions generated by the homeland system, created an environment wherein well nigh insurmountable obstacles made a good education and career – relative to white standards – extremely difficult to attain. The Bantu education system instituted in 1953 arguably did more to harm black South Africans than almost any other apartheid measure, because it crossed generations and its effects have been felt for decades. It created and/or reinforced ethnic divisions through strict language measures in education policies, which propagated the mother tongue as primary medium of instruction, with Afrikaans and English following later.

The end of apartheid has not brought an end to stubborn rural poverty and its ills. The will to educate and be educated is dogged by equally if not more pressing concerns. Given the high rate of poverty and unemployment, many people in the Limpopo count on education, especially language and literacy education, to pave the way to a better life.

Language in (literacy) education

Whereas the demands of multilingualism on African primary and secondary school curricula are extensively dealt with in policy and social research domains, this is not the case with ABET. In the light of the cultural and economic power of English, it is assumed that many ABET learners might want to learn English as a subject, or even learn exclusively through the medium of English. It is, however, an open question whether these learners are making these choices with the necessary circumspection, and on what they base their decision.

Earlier research

A survey conducted by the Bridges to the Future Initiative (BFI) in 2005 attempted to establish which young adults in Limpopo were literate and who were not. This laid the groundwork for further study aiming to come to an understanding of who were attending ABET classes to become literate, what their incentives were, and to determine the role played by the desire to learn English in their motivation to gain ABET certification. From this research study, it could be argued that multilingual learners would have relatively high metacognitive awareness of their literacy learning processes. The results, however, proved inconclusive with regard to whether there was a difference between metacognition of becoming literate in Sepedi or becoming literate in English.

Current research

The Bridges to the Future Initiative (BFI) of the International Literacy Institute (ILI) is a multinational study of the implementation of Information and Communication Technologies (ICTs) for improving the teaching and learning of literacy, both basic and technological, in developing countries such as India, South Africa and Ghana. Of particular interest in this study was determining the attitudes and beliefs ABET learners bring to their language and literacy learning. Inquiry into the attitudes, beliefs and metacognition of language/literacy learning of multilingual adults was meant to make a contribution to the body of scholarly literature while also providing background data for the development of the BFI literacy learning software.

Conceptual framework for the study

Metacognitive skills are monitoring skills people use to judge how they are learning. According to Brown (1978), Chipman, Segal and Glaser (1985), and Flabella (1976), there are two kinds of metacognitive acts during learning: thoughts about what we know, and thoughts about regulating how we go about learning.

Social cognitive theorists propose that, although the environment influences behaviour, in due course people begin to regulate their own behaviour. This regulation takes place when people develop their own standards for performance, observing and judging for themselves on the basis of those standards, and reinforcing or punishing themselves (albeit mentally and emotionally) for what they have or have not done. Thus one can help even an adult to learn by becoming more self-regulating through the teaching of such techniques as self-instruction, self-monitoring, self-reinforcement, and self-imposed stimulus control.

People's knowledge of effective learning and cognitive processes and their use of such processes to enhance learning are collectively known as metacognition. The most successful students are self-regulated learners (Ormrod, 2004, 358) who keep themselves motivated, focus their attention on learning tasks, use effective learning strategies, monitor their progress, evaluate the final outcome of their efforts, and reflect on the overall effectiveness of their approach in order to improve future learning efforts. Ideally, students should be intentional learners. They should be actively and consciously engaged in the learning process, should identify particular goals to accomplish as they study, and should bring a wide variety of learning and self-regulatory strategies to a study session.

As Brown noted, "Metacognitive deficiencies are the problem of the novice, regardless of age. Ignorance is not necessarily age related; rather it is more a function of inexperience in a new (and difficult) problem situation" (1980, 475). Mayer and Wittrock (1996) emphasised that metacognitive skills facilitate the learning activity of students. Ultimately students must discover that, with sufficient effort and appropriate strategies, they can learn and understand challenging learning materials at their own pace.

Research design and methodology

In this research project a snowball sampling technique was used to interview adult learners and the study was conducted in a number of rural communities in the Capricorn district in Limpopo.

The study commenced with a pilot study. From July to August 2006, 25 pilot interviews about educational attitudes and background were conducted as well as a pilot protocol on metacognitive awareness and skill. The revised metacognition protocol was slightly modified and given to 59 adult learners to explore the issue of predicting effort to become literate in English, and extended to include listening aptitude in both English and Sepedi. In addition, these learners were also asked about their experiences with the multilingual literacy tutor software.

Responses to these questions laid the groundwork for further research. A survey instrument (BFI software) based on the work of Wagner (1993) was used to capture more concisely aspects of educational background and attitudes, as well as socio-economic status (SES) indicators and basic demographic information, including a language usage profile. A total of 36 people were interviewed on the BFI software and probed for their attitudes and beliefs about their own education and knowledge. The sample population, except for two men, were females from their mid/late 40s to early 60s. The sample population was taken from ABET level 1 and 2 and Sepedi mother tongue speakers only. It has formerly been established that there is a low population of such learners in Limpopo since most ABET students are at level 3 or 4, and these learners are moreover widely dispersed.

During the second research phase (beginning November-late December 2006), further BFI research was conducted along the lines described above, with a similar sample population profile, using more refined instruments and a higher sample size of 104. The major factor in the higher sample size was that higher levels of ABET learner (levels 3 and 4) participated, whereas in the earlier survey only those from levels 1 and 2 were involved.

Finally, the Beliefs About Language Learning Inventory (BALLI) was administered to obtain data about language learning attitudes (not specifically *literacy* learning), and was modified and adapted for the local South African and Limpopo context. This inventory was

given to 104 participants in the second research phase (November-December). Learners were asked to sit together in a room and each statement was read aloud by a research assistant (RA) in Sepedi. They were provided with pens to mark on an answer sheet a number from one to five indicating disapproval or support for 40 statements about language. The scale and the numbers of the scale (upon which learners' answers would rely) were written on the chalkboard by the RAs, mostly for their own reference but also to give a visual anchor to those who could read slightly (and these constituted at least half of the sample size). The instrument was modified very slightly for localisation purposes. This inventory was added to the research plan based on the hypothesis that a greater understanding of learners' own knowledge and attitudes about language can greatly enhance the development of the BFI software.

Research questions

The above considerations were distilled into the following questions: do female ABET learners understand, by way of their life experience and their multilingualism, what are the requirements to become literate in English? If so, how might this be possible in an environment of low English literacy? How are issues of age and educational attainment pertinent to this inquiry, given the improvement of metacognitive skill over time, the legacy of apartheid, and pre-existing negative cultural attitudes about the education of girls?

Research instruments

The two instruments that were employed were the BFI Software (Wagner, 1993), which was developed by MINDSET and Beliefs About Language Learning Inventory (BALLI), which was developed by Horwitz (1987) and has been used worldwide to gauge attitudes about language learning.

Survey

A straightforward yet comprehensive survey about socioeconomic status, educational attainment and media ecology of the home was administered individually to participants. This survey was developed based on work conducted by Wagner (1993) in Morocco. The purpose of the survey was to generate easily measurable and analysable personal background data which can be compared to and correlated with other data (e.g. the BALLI or metacognitive assessment).

Assessment of knowledge about learning' (metacognition)

The final section was a set of questions on knowledge about the student's own learning or metacognition. 104 people took these questions between July and December of 2006. This section featured twenty-two multi-part questions predicting the student's ability to complete fairly simple but still domain specific mental tasks, as well predict the difficulty of acquiring literacy in English. The survey concluded with a final section on the metacognition of listening comprehension.

The purpose of these metacognitive questions was to probe the degree in which learners are able to understand their own learning processes and their own knowledge and ability, especially related to language learning and literacy acquisition. The results are also regarded as important for the BFI as learners will be expected and encouraged to use the software on their own. Low metacognitive skills found in the sample may indicate a potential problem with a more independent instructional approach and call for ways to categorically increase metacognitive strategies.

Results

Thus far, the BFI data show that status (particularly age and sex) and education predict observed literacy attainment, whereas cognition and metacognition predict self-reported literacy.

Preliminary findings include the following:

- * The average age of the learners/participants is 38.
- * The average grade completed by the learners/participants is 9.
- * The average number of children of each learner/participant is 2.
- * The average number of languages spoken by the learners is 3.
- * The average number of people in a household is 8.
- * 60% of the learners' homes have electricity, 75% have a radio, 60% have a TV.
- * 83% of the learners reported having books in the house.
- * 48% favoured English as the language of TV show, but 69% favoured Sepedi for radio.

It was moreover found that learners have fairly poor metacognitive skill in ABET 1 and 2, with higher skill in levels 3 and 4.

The survey also found that most people would actually prefer not to have to learn English, but nevertheless feel that English is "necessary to get ahead" and for improving their chances of acquiring a better livelihood. Most learners would have preferred to continue their school career but were either forced by parents to leave school or had other adverse circumstances such as pregnancy or a pressing need to start earning an income that forced them to leave school at an early stage

The majority of the learners thought that it would take them more than four years to learn English. Most, if not all, learners were enthusiastic about the possibility of acquiring not only the requisite basic literacy skills but also basic computer skills.

It was observed that the promise of further investment in ICTs, especially computers and printers for schools, was a major motivator for ABET coordinators to mobilise and organise their learners to give interviews for this research.

Conclusions and recommendations

According to the results of the field testing, the prototype of the BFI software showed promise as a useful tool for ABET low-literate learners. The learners' enthusiastic response to the software was remarkable, although some experienced difficulty with its use in the current prototype version. This shows that there is a desire, even among adult learners in deep rural areas, to learn how to use the computer and to have their learning enhanced by educational technology.

With further statistical analysis of the background research, more precise conclusions about how certain attitudinal and/or cognitive factors are related to life circumstances among ABET learners in rural Sepedi-speaking Limpopo province can be drawn. For example, it is possible that the higher the socio-economic background and the greater the number of books the learners have been exposed to in the home, the greater is the interest displayed in computers as well as an enhanced metacognitive ability or literacy level. The value of further research is that it will guide the design and creation of the next BFI prototype.

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