A Rural South African Experience of an ESL Computer Program

doi:10.3991/ijet.v3i1.754

Marius Dieperink Tshwane University of Technology, Pretoria, South Africa

Abstract—This article reports on a case study that explored the effect of an English-as-Second Language (ESL) computer program at Tshwane University of Technology (TUT), South Africa. The case study explored participants' perceptions, attitudes and beliefs regarding the ESL reading enhancement program, Reading Excellence™. The study found that participants experienced the program in a positive light. They experienced improved ESL reading as well as listening and writing proficiency. In addition, they experienced improved affective well-being in the sense that they generally felt more comfortable using ESL. This included feeling more self-confident in their experience of their academic environment. Interviews as well as document review resulted in dissonance, however: data pointed towards poor class attendance as well as a perturbing lack of progress in terms of reading comprehension and speed.

Index Terms—CALL, drill, eMalahleni Campus, ESL, Reading ExcellenceTM, TUT, tutorial

I. INTRODUCTION

Tshwane University of Technology is the largest university of technology in South Africa. It has seven campuses in five of the country's nine provinces. One of its two campuses in the Mpumalanga province is called the eMalahleni or Witbank Campus, and is situated in the small city of eMalahleni, or Witbank. A substantial number of its students are from rural areas in the Mpumalanga and Limpopo provinces.

The eMalahleni Campus of TUT introduced the Media WorksTM ESL computer program in 1998 to help address students' insufficient ESL proficiency. Media WorksTM addressed a comprehensive range of ESL skills. The campus discontinued this computer programme, however, due to the program requiring a facilitator, which had become difficult to sustain. Stakeholders were convinced of the feasibility of supplementing face-to-face classes technology-assisted learning. with The consequently introduced the Reading ExcellenceTM reading comprehension and speed enhancement program in 2006. This article reports on the case study that explored the effect this ESL computer program had on the knowledge base and proficiency of a specific group of ESL students at the eMalahleni Campus. In this context, the word *effect* refers to the perceptions, opinions, beliefs and attitudes of participants regarding the program. This includes reading comprehension and speed, as well as writing and listening skills.

II. BACKGROUND

The purpose of the investigation was to provide valid description of a phenomenon (Huberman & Miles,

2002:48), which could be described in this context as intention, cognition, affect, belief, evaluation and anything else that could be encompassed by the participant's perspective. I endeavoured to obtain data regarding the participants' perspective, viewpoint, perception, understanding and evaluation of this particular computer program, because this would lead to valid interpretation of the data.

At TUT, approximately 80% of students registered in 2006 indicated that English was not their home language (TUT, 2007). The fact that students study in English – not their mother tongue – may act as a barrier to academic success (Ferguson, 2003:46). The South African Department of Education (DoE) expects tertiary institutions to establish additional support structures – especially for black students who, according to the DoE, experience a relatively high level of alienation (Ferguson, 2003:44). Approximately 90% of eMalahleni Campus students belong to this demographic: the students might benefit from developing their English knowledge base and proficiency.

The DoE subsidises TUT primarily on its graduation rate, which refers to any particular cohort of students that pass the minimum number of subjects in the minimum number of years without failing any subject along the way. Therefore, students are only subsidised if they pass all their subjects at the first attempt, in the minimum time allowed to obtain their qualification. A failed subject has a detrimental effect on the institution's graduation rate, which in turn has an adverse effect on the University's subsidy levels and consequently its financial position.

In this article, I refer to a number of Business English subjects and use this term in the context of subjects common to South African universities of technology. These subjects are compulsory and their syllabi contain a number of outcomes that are inextricably intertwined with students' ESL proficiency. Examination reports at TUT (TUT, 2006) indicate poor pass rates for a number of Business English subjects, some as low as 20% in 2006. Many TUT students' mother tongue is not English (TUT, 2007), and it is possible that ESL may be a general problem among many TUT students. As a Business English lecturer for the past fourteen years, I can attest to this unfortunate state of affairs. Students' limited ESL knowledge base and insufficient reading skills may contribute to poor pass rates. Insufficient ESL proficiency has a compound effect on Business English subjects because these subjects' syllabi are biased towards students whose mother tongue is English.

Subjects that consistently perform poorly have a negative effect on timetables, class attendance, student

and staff morale, dwindling subsidies, the institution's financial state and quality of teaching and learning. Consistently poor pass rates in certain subjects have a cumulative effect by compounding problems, which becomes increasingly difficult to control.

Stakeholders at eMalahleni Campus have long been very worried about poor pass rates. One of the technology interventions we implemented to improve pass rates was the Reading Excellence™ program, which focused mainly on improving reading comprehension. It contained a variety of activities: numerical, perceptual, multiple options, reading for reading speeds, reading for comprehension, and scanning (2004). The programme was aimed at supplementing, rather than substituting subject content. It did not require a facilitator, as it was completely computer-based. The program addressed the requirement of enhancing ESL students' reading comprehension and speed. This requirement also exists in the United States (US) for example: according to Manzo (2005:11) ESL is one of the fastest growing areas in some educational spheres in the US. The Reading Excellence™ program automatically tested each student's reading comprehension and speed, after which the program automatically started on the appropriate level. Users could start anywhere on the proficiency scale, from Grade One, or 80 words per minute (WPM) to Grade Twelve or 250-270 WPM. The student then progressed through each of the levels in the hierarchy: the program's reading speed automatically increased by ten WPM if the student attained 70% comprehension (2004:27). Most first year cohorts at eMalahleni Campus attended Reading ExcellenceTM classes in 2006. Each group usually had one Reading Excellence™ hour per week on their timetable, due to timetable constraints.

III. LITTERATURE REVIEW

The Reading ExcellenceTM program focused on certain ESL skills and was an example of computer-aided instruction (CAI) and computer-based learning (CBL). In this article, I use the two terms concurrently, along with the term computer-aided language learning (CALL). CBL programs provide an alternative to more traditional delivery modes like regular classroom activities, saving valuable lecturing time (Dewhurst, Hamish & Norris, 2000:224) and allowing the student to use applicable computer technology (Ma & Kelly, 2006:22). Students may progress at their own pace, which facilitates different learning aptitudes (Chambers & Sprecher, 1980:333). Hannafin and Peck (1988:8-10) mention that CAI leads to increased interaction, student control and enhanced individualisation. In furthermore stimulates motivation, has certain administrative strengths and cost effectiveness, and facilitates recordkeeping.

Kleinmann (1987:267) reports that the CAI method of instruction has been found to produce significant gains in reading prowess, while Chapelle (2001:57) is of the opinion that students develop their metacognitive strategies to enable them to learn beyond the classroom and enhance their communication outside of the classroom. I found these assertions significant, since one of the aims of the case study was exploring whether the Reading Excellence™ program had led to a perceived improvement in students' ESL proficiency as well as a generally more relaxed engagement with the English language. CAI encompasses the use of computers in

language acquisition; CALL resorts under the umbrella term CAI and is widely used to describe the use of computers in language courses (Hardisty & Windeatt, 1989:3) and the applications of computers in language teaching and learning (Lasagabaster & Sierra, 2003:293).

I have taken cognizance of negative sentiments about CALL, including debates regarding the efficiency of CALL (Chapelle & Jamieson, 1989:55). Garrett (1991:xii) and Dunkel (1991:xii-xvi) mention the debate in journals and at conferences regarding the use and application of computers in language learning. Alessi and Trollip (2001:7) and Warschauer (2001:5) also refer to the debate about the contribution of computers to the efficacy of teaching. Garrett (2001:9) alludes to scepticism regarding the value of computer-based language teaching. While I take note of such concerns, they bear no direct relation to this particular case study, as the reason for implementing this particular ESL computer program was to supplement regular classes, as opposed to substituting them.

During the 1990s, stakeholders started reflecting how computers could *best* be used in language teaching (Chapelle, 2001:1). By the year 2000 information and communication technologies (including word processors and tutoring programs) were being applied in all facets of English teaching. These technologies were being implemented in the teaching of reading comprehension, spelling, vocabulary and grammar (Bruce & Levin, 2000). Technology has become an integral part of many educational systems (Higgins, Boone & Williams, 2000). eMalahleni Campus support the notion of integrating useful technologies in their academic offerings. The Reading ExcellenceTM program, whose effect I report in this article, was one such intervention.

Dunkel (1987:368) elucidates on various studies pertaining to the positive effect of CALL on students struggling to master the English language. She mentions, for example, that CAI appears to be more effective when used with either low-achieving or high-achieving groups. This is interesting when one considers that the some of the participants in this study regularly underperformed in their compulsory Business English subject. I was interested in Ma and Kelly's assertion (2006:20) that the efficacy of CALL could be described as the quality of the CALL program - in other words how effective and helpful students found it. According to them, programs can be assessed qualitatively and quantitatively; the former may include recording the student's interaction with the program. This article includes students' perceptions regarding their interaction with the Reading ExcellenceTM program.

Trollip (2001:10) identify eight Alessi and methodologies of interactive multimedia for the facilitation of learning, among them tutorials and drills. Reading ExcellenceTM is a tutorial that also incorporates drills. Tutorials present information on behalf of the instructor and guide the student in initial acquisition, while drills help students to memorise. Chan (1989:110) describes tutorials as programs that present text and questions to students and allow them to switch to another part of the program, depending on their progress. They are some of the oldest and most widely used modes of education and present new information to the student, while allowing the opportunity to master the new information and present new information. Together with drills they have been used extensively in CALL

(Jamieson, 1994:6); this was also the combination of methodologies employed by the proprietors of Reading ExcellenceTM. It is worth mentioning that they relied somewhat extensively on animal themes as a vehicle for introducing new content. I mention this, as this aspect of the program was criticised by a number of users.

Tozcu and Coady (2004:491) found that the study of vocabulary through tutorials resulted in increased vocabulary acquisition, which in turn led to a significant positive effect on reading comprehension and the rate of speed for frequent word recognition. Drills facilitate practice and aid retention (Hardisty, 1987; Alessi & Trollip, 2001:11), address incorrect responses and provide feedback that may be used to gauge performance (Hannafin & Peck, 1988:146-147). Drill applications generally emphasize low-level skills – and good programs offer immediate feedback and error evaluation (Freyd, relevant to factual knowledge comprehension of concepts (Gokhale, 1995). Reading ExcellenceTM facilitated the introduction and repetition of content to enable students to master the content and allow them to progress to the next level. Many studies have investigated the efficacy of applicable initiatives, while others have explored the effect of technology on students as well as their attitude towards technology (Hubbard, 2005:351). Lasagabaster and Sierra (2003:294) mention that the evaluation should focus on students and their attitudes toward CBT; this article reports on the attitudes and beliefs of specific cohorts of students regarding a particular CALL intervention.

IV. RESEARCH METHODOLOGY: DESIGN TYPE, DATA COLLECTION AND PARTICIPANTS

According to Morrison (2002:11), methodological rationale provides researchers with underlying reasons for specific data colection activities. Bush (2002:76) states that the context in which educational research is conducted results in specific interaction between the researcher and participants. This includes the nature of the institution where research is conducted, the nature of the students with whom the researcher engages and the sociopolitical context within which the research is carried out. As I stated above, this article is the result of interaction with specific student cohorts who had been studying at the eMalahleni Campus of TUT.

Although I used a mixed methodology, this case study was predominantly qualitative. Padgett (2004:273) alludes to much support for mixed research methods. Hammond (2005:240) mentions various researchers including Tashakkori and Teddlie (1998), Greene (1994), House (1994), Howe (1998), Murphy (1990), and Rorty (1982), that encourage a pragmatic paradigm in which qualitative and quantitative approaches could be successfully combined.

Babbie (2005:387) describes qualitative analysis as methods that the researcher uses to examine social research data. A qualitative perspective facilitates a first-hand, holistic understanding of a particular phenomenon – reacting to the data collection as the investigation proceeds (De Vos, 1998:358). Qualitative designs are naturalistic – in the sense that research takes place in real-world settings and the researcher does not attempt to manipulate the phenomenon under investigation (Patton, 2002:39). The eMalahleni Campus of TUT (and a specific

cohort of students) formed the real-world setting of the investigation. I set out to understand and document the reality of participants in the program, and abstained from any attempts at manipulating, controlling, or eliminating situational variables.

I selected the case study methodology because it was particularly suitable in terms of exploring this specific phenomenon. Case study research allows the researcher to utilise methods that are as well tested and developed as any other methods in the scientific field (Tellis, 1997). Literature suggests multiple data collection methods (Bush, 2002:263; Huberman & Miles, 2002:13), including qualitative data collecting methods like interviews and observations. The researcher may also collect quantitative data, resulting in triangulation – which provides increased substantiation of results (Huberman & Miles, 2002:14). According to McMillan and Schumacher (2001:37), a case study entails exploring something specific by using specific data collecting sources; the researcher

defines the case and its boundaries. Although several techniques may be used, the researcher usually chooses one particular technique as the central method (McMillan & Schumacher, 2001:41). Researchers can apply case studies either qualitatively or quantitatively or in a combination of both (Luck, Jackson & Usher, 2006:106), as I have done in this study.

A. Sampling

I selected the partipants through purposive sampling (Cohen, Manion & Morrison, 2000:103; McMillan & Schumacher, 2001:400-401; Babbie, 2005:189), which entails selecting desirable participants on the basis of the researcher's knowledge of the phenomenon (Henning, Van Rensburg & Smit, 2004:71). This is also called positive or judgemental sampling (Fogelman, 2002:101), described by Welman and Kruger (2005:63) as the most important kind of non-probability sampling. The size of the study or quantity of the data is relative to the purpose of the particular study (Holliday, 2002:91). Purposive sampling is suitable for the quantitative as well as the qualitative part of this case study; the choice of participants was based on my experience of the issues at hand. My own experiences of the setting resulted in the specific cohorts selected for the study, allowing me to explain and justify certain choices. Throughout the entire research process I took heed of the importance of managing the subjectivity of my work, as described by Holliday (2002:23).

B. Data collection

I used three strategies to uncover the research questions from the data. The primary data source was semi-structured interviews, supplemented by data from questionnaires and document review.

Table I indicates the data collection instruments I used vis á vis the research questions I wanted to explore. It elucidates on the relationship between the research instruments and the research questions employed to obtain data, whilst ensuring the study fulfilled the requirements of triangulation.

Next, I briefly discuss the three data collecting strategies I had used.

TABLE I. DATA COLLECTING INSTRUMENTS

	Research instruments	Questionnaire	Interview	Document analysis
	Research questions	Õ		Docu
1	Did the participants in the Reading Excellence™ program perceive an improvement regarding their reading prowess?	X	X	
2	What has Reading Excellence™ recorded regarding participant progress?			X
3	Did Reading Excellence TM positively influence the ESL knowledge base of certain students at TUT, eMalahleni Campus?			
	Did the participants experience an improvement in their understanding of the English	X	X	
	language? Did the participants experience an improvement in their writing skills?	X	X	
	Did the participants experience an improvement in their listening skills?	X	X	
4	What is the participants' perception regarding the Reading Excellence TM program? How has the program improved their ability to communicate in English?	X	X	
	Has the program positively influenced their confidence to communicate in English?	X	X	
5	Why has class attendance in some cases been relatively low?	X	X	X
6	What actions could be taken to positively affect class attendance?	X	X	

C. Interviews

Interviewing is one of the oldest and most widely used of social science research techniques (Mason, 1996:39; Schurink, 1998:297; Wragg, 2002:143), more frequently used in qualitative than quantitative studies (Tashakkori & Teddlie, 1998:101; Merriam, 2001:71; Lofland, Snow, Anderson & Lofland, 2006:17-18). Interviewing is flexible and allows the researcher to tailor-make each interview (Mason, 1996:40). This is especially relevant when the researcher has to ask numerous open-ended questions that may be followed by verbal probes, and where the researcher has to record verbatim the participants' answers (Oppenheim, 1992), as had been the case here. My focus was data gleaned from the interviews: nine pre-selected interviewees participated in semistructured interviews conducted by an experienced interviewer, who had the benefit of relevant questions, discussed beforehand. The pre-selected questions explored a number of themes, including what participants liked and disliked about the program, their frequency of attendance, suggestions for improvement (including introducing additional delivery modes), whether and how the program had affected their ESL proficiency, and how the program had affected their affective wellbeing in terms of offcampus ESL use. The interviews were fully transcribed and processed with the Atlas.tiTM computer software program, which allowed me to consider all of the major, as well as the minor themes we had encountered during the interviews.

D. Questionnaires

The questionnaire is a quantitative and qualitative data collection method because it also measures the participants' attitudes towards a phenomenon (Guy, Edgley, Arafat & Allen, 1987:229; Bailey, 1994:108; Babbie, 2005:257). I used a Likert-type scale, able to measure attitudes about beliefs, evaluations and actions held by participants (Bradburn, Sudman & Wansink, 2004:126). The scale was rated from one (Strongly agree) to five (Strongly Disagree). I obtained valuable feedback from the pre-test pilot group, subsequently dividing the

questionnaire into five sections and distributing 150 questionnaires to the specific cohorts of students I had selected beforehand.

Each of the five sections of the questionnaire focused on specific themes. Oppenheim (1992:147) contends that the researcher should use sets of questions, which are more reliable. In certain instances, I included overlapping statements as they could help verify the veracity of participants' The questions responses. participants' attitude towards Reading ExcellenceTM: what they appreciated about it, what they disliked about it, whether they thought it had contributed to their experience of their Business English subjects, whether they thought it had had any influence on their experience of their other subjects and whether they had regularly attended Reading Excellence™ classes. I analysed the data obtained from the questionnaire in collaboration with one of the quantitative experts at TUT. The questionnaire explored issues similar to those in the interviews, as I was interested in comparing the data from the two instruments. While I gleaned a modicum of quantitative data from the questionnaires, they did not take the place of the data from the interviews - the primary data collection strategy. However, it added depth to the case study.

E. Document review

The third data collecting method I employed was reviewing relevant documents and records, which Bailey (1994:299) refers to as secondary analysis. Merriam (2001:8) mentions that sample selection in qualitative research usually is non-random and purposeful. This applies to my case study, where I had selected the specific cohorts based on my knowledge of the phenomenon I had explored. Cortazzi (2002:201) mentions that the data for documentary analysis may include official statistics, curriculum documents, manuals and information found on websites. I selected specific, relevant items, which resulted in appropriate data that facilitated valid conclusions. This included written documentation, viz. the instruction booklet that accompanied the Reading ExcellenceTM program. In addition, I analysed the 2006

report from the office of the eMalahleni Campus Student Counsellor, which included information on student attendance and student progress. Attendance records indicated how regularly the students attended their weekly class in the computer room. I also looked at their timetables to get an idea of the obstacles facing students regarding their attendance of regular, as well as Reading Excellence classes TM.

V. DATA ANALYSIS

The following is a synopsis of the findings I had derived from the data analysis, presented by summarising data gleaned from research questions and sub-questions. Question one pertained to participants' reading prowess.

A. Did the participants in the Reading ExcellenceTM program experience an improvement regarding their reading prowess?

This research question pertained to participants' perceptions of their reading prowess. I found that interviewees mostly agreed that the program had improved their reading skills. From their viewpoint, the program had had a positive effect on their reading comprehension. One interviewee stated "... and your comprehension, you can actually read stuff and know what you're reading." This testimony was intriguing, as the statement pointed to a perceived positive effect regarding a matter that lay at the heart of the anxiety experienced by students and lecturers alike. Students' anxiety resulted from their perceived inability to comprehend adequately what they read, while lecturers experienced anxiety because they also perceived this apparent lack of adequate comprehension. In addition, many participants also thought that their grammar and reading speed had improved, while questionnaires indicated that 80% of the participants agreed about a perceived improvement in their reading skills.

B. What has Reading ExcellenceTM recorded regarding participant progress?

The second question referred to data regarding participants' attendance and progress in terms of the Reading ExcellenceTM program. Here I present abbreviated findings pertaining to attendance and progress. I found participant attendance particularly poor: the majority of registered students attended only approximately one-third of the bespoke periods on their timetable. Participants' perception of their attendance was not in line with actual attendance records. While attendance records point towards poor class attendance, the participants perceived their attendance to have been relatively satisfactory. In addition, electronic records showed that a relatively small number of students had progressed satisfactorily by managing to increase their reading speed (with commensurate increase comprehension) to 140 WPM and beyond. The subject Communication 1 (Office Management and Technology), for example, exhibited especially poor progress. Of the 53 students registered for the subject in 2006, a mere thirty participated in the program. Of these, only five progressed to reading more than 110 WPM - disturbing statistics indeed. Data continued in this vein for most cohorts included in the study. It seemed apparent that students had not utilised the Reading Excellence™ program efficiently or effectively, which was one of the phenomena I

explored in the case study. Data from different sources thus indicate divergence concerning participant perception versus recorded data.

The statistics mentioned above contain disconcerting information regarding the number of times participants managed to attend their Reading ExcellenceTM classes. It is even more disconcerting that many registered students had not participated at all, while those that did seldom managed to attend more than half the scheduled classes. Data about student progress also gave reason for much concern, as they indicated that many participants managed to progress only to level C3, or Grade Nine, far below the required level expected of tertiary students.

C. Did Reading ExcellenceTM positively influence the ESL knowledge base of certain students at TUT, eMalahleni Campus?

Next, I present a brief summary of findings regarding the question whether Reading ExcellenceTM had positively influenced the ESL knowledge base of the participants. I discuss this matter in three sub-questions. The first refers to whether participants had experienced an improvement in their understanding of the English language. In terms of this, interviewees unanimously agreed that the program had improved their ability to read and understand the English language. A number of participants mentioned that the female Standard South African English voice used in the program - while difficult to understand at first forced them to become more familiar with this particular accent. According to them, it resulted in improved comprehension of some of their other subjects. They furthermore professed to being more comfortable outside the campus, when they had to communicate with, for example, shop owners who spoke with different English accents. A substantial number of participants perceived an improvement in their understanding of Business English classes. They also mentioned improvements in test results.

I found it interesting that the average pass rate for the participants' Business English subject increased between 5% and 17% between 2005 and 2006. Most questionnaires supported the perception that participants had experienced a positive effect regarding their academic lives: 58% agreed that the program had resulted in improved understanding of Business English subjects, while 48% agreed that there had also been an improvement in their other subjects. In addition, 56% of the participants agreed that they had perceived an improvement in their understanding of Business English lecturers; a further 52% agreed on experiencing an improvement in their other subjects.

The second sub-question referred to participants' opinion of their ESL writing skills. It explored the effect the program had had on their ESL writing prowess, and specifically whether participants had perceived an improvement in their ESL writing prowess. Most interviewees agreed that the program had positively influenced their writing skills. They held the same opinion regarding improved ESL listening skills, which was the third sub-question.

D. What is the participants' perception regarding the Reading ExcellenceTM program?

The fourth question explored participants' perceptions of the Reading Excellence TM program. I divided this question into two sub-questions, viz. whether the program

had improved their ability to communicate in English, and whether it had exerted a positive influence on their confidence to communicate in English. The first question pertained to participants' perception of improved English communication prowess. Some interviewees agreed with this notion. Interviewees also agreed with the second subquestion, viz. whether the program had positively influenced their confidence to communicate in English. They cited aspects such as being more relaxed when speaking English due to their being more au fait with pronunciation – which in turn improved their interaction in all their classes. Others mentioned being less shy to speak in front of their peers. Questionnaires supported these perceptions: 68% felt more relaxed when conversing with lecturers, while 69% agreed that they were more relaxed in class and 71% felt more relaxed when they conversed with other students.

The final two research questions pertained to attendance of Reading ExcellenceTM classes, and explored relatively poor class attendance, and the interventions that might positively affect class attendance. I have already alluded to data that pointed towards poor class attendance. Conversely, participants viewed their attendance in a more positive light. A total of 61% of the questionnaire participants agreed about being able to attend most of the scheduled classes, while 27% agreed that they were only able to attend once a month. In addition, interviewees indicated that they were able to attend between two and four times a month. Most considered one hour per week sufficient, while some preferred more than one hour per week, as well as having a choice between different periods. Interviewees preferred not to attend early on Mondays and relatively late on Fridays. They mentioned that clashing timetables were a problem. Some participants thought that compulsory attendance might solve poor class attendance. Interviewees expressed feeling uninterested in the program. One participant remarked: "I know the intention was to help us to read fast and spell and stuff, so it wasn't that bad, it was just that I felt bored doing it. I wish I didn't get bored as much."

Participants made several suggestions regarding the notion that additional interventions might have led to better class attendance. Some interviewees supported the addition of tutorials; 38% of the questionnaire participants agreed. A number of interviewees were bored by certain aspects of the content; 39% of the questionnaire participants conceded that their thoughts sometimes wandered. Many interviewees were dissatisfied with the recurring animal themes, and felt that these themes had been over-exploited in the program. They found this tedious and some participants definitely experienced the program as boring because of the animal themes. Some interviewees supported the addition of content relevant to Business English classes. The questionnaires revealed that 36% felt that lectures would be a good idea, 38% supported tutorials and 49% the introduction of notes. The content of the program thus proved to be another obstacle in terms of class attendance.

VI. DISCUSSION OF RESULTS

Data from the interviews supported the notion that the Reading ExcellenceTM program had positively influenced the participants. Questionnaire data seemed to support this, as a substantial number of participants had perceived improvements in various aspects of their academic

environment, and on their English communication prowess. Participants perceived an improvement in a various aspects of their ESL proficiency, viz. reading comprehension and speed, writing, speaking and listening prowess. Interviewees, in particular, agreed unanimously about experiencing improved reading prowess and general understanding of English. It was interesting to note that some participants' familiarity with Standard South African English had improved after prolonged exposure to this particular accent, which was used extensively in the program. I found this curious, as I speak with a Standard South African English accent. I have subsequently pondered the implications of this particular finding with regard to the realities of my own lecturing environment.

The learning material seems insufficient, for example the frequent use of animal themes. Document analysis also resulted in a note of discord, however, as statistics recorded by the Reading ExcellenceTM program painted a picture of poor class attendance as well as poor performance, despite the providion of bespoke periods on the timetables of each participating cohort. This contrasted quite sharply with the opinion of the participants, who perceived their attendance as satisfactory. Timetable clashes and other timetable-related issues apparently played a role in participants not attending their Reading ExcellenceTM classes. Poor class attendance is a serious concern as it may have considerably diminished the effect of the program. Certain factors thus seem to have contributed to poor class attendance, which in turn may have led to the potential dilution of certain benefits of the program.

VII. CONCLUSION

The case study focused on exploring the attitudes, beliefs and opinions of specific cohorts of students towards the Reading ExcellenceTM ESL program. Qualitative and quantitative analysis to an extent indicated that the program had had a positive effect on the participants, dissonant data notwithstanding. Participants perceived a variety of benefits from the intervention, inclusing improved English reading, writing, listening and speaking skills. Participants furthermore perceived an improvement in their general English communication prowess. There has furthermore been a perceived improvement in the affective wellbeing of some participants. Divergent data, however, pointed towards dissonance, which require further exploration.

REFERENCES

- [1] 2004. Reading Excellence. User manual. Pretoria.
- [2] Alessi M A & Trollip S R 2001. Multimedia for learning: methods and development. Needham Heights, MA: Allyn & Bacon.
- [3] Babbie E 2005. The basics of social research. Belmont: Thomson Wadsworth.
- [4] Bailey K D 1994. Methods of social research. New York: The Free Press.
- [5] Bradburn N M, Sudman S & Wansink B 2004. Asking questions: the definitive guide to questionnaire design for market research, political polls, and social and health questionnaires, revised edition. San Francisco: Jossev-Bass.
- [6] Bruce C & Levin J 2000. Roles for new technologies in language arts: inquiry, communication, construction, and expression. Available at http://cterntl.ed.uiuc.edu/ipp/paper.cfm?paperID=17. Accessed 27 January 2007.
- [7] Bush H 2002. Authenticity reliability, validity and triangulation. In: Coleman M and Briggs A R (eds). Research methods in educational leadership and management. London: SAGE.

- [8] Chambers J A & Sprecher J W 1980. Computer-assisted instruction: current trends and critical issues. Communications of the ACM, 23: 332-342. (doi:10.1145/358876.358881)
- [9] Chan C 1989. Computer use in the elementary classroom-1. An assessment of CAI software. Computers Education, 13: 109-115. (doi:10.1016/0360-1315(89)90003-1)
- [10] Chapelle C 2001. Computer applications in second language acquisition. Cambridge: Cambridge University Press.
- [11] Chapelle C & Jamieson J 1989. Research trends in computer-assisted language learning. In: Pennington M C (ed). Teaching languages with computers. La Jolla, CA: Athelstan.
- [12] Cohen L, Manion L & Morrison K 2000. Research methods in education. London: RoutledgeFalmer.
- [13] Cortazzi M 2002. Analyzing narratives and documents. In: Coleman M and Briggs A R J (eds). Research methods in educational leadership and management. London: SAGE.
- [14] De Vos A S 1998. Combined quantitative and qualitative approach. In: De Vos A S (ed). Research at grass roots: a primer for the caring professions. Pretoria: Van Schaiks.
- [15] Dewhurst D G, Hamish A M & Norris T A M 2000. Independent student learning aided by computers: an acceptable alternative lectures? Computers and education, 35: 223-241. (doi:10.1016/S0360-1315(00)00033-6)
- [16] Dunkel P 1987. The effectiveness literature on CAI/CALL and computing: implications of the research for limited English proficient learners. TESOL quarterly, 21: 367-372. (doi:10.2307/3586742)
- [17] Dunkel P 1991. Foreword. In: Dunkel P (ed). Computer-assisted language learning and testing: research issues and practice. New York: HarperCollins.
- [18] Ferguson S D 2003. English language proficiency as a likely predictor of academic performance of first year human resources management students at Technikon Natal. D Phil dissertation. Johannesburg: Rand Afrikaans University.
- [19] Fogelman K 2002. Surveys and sampling. In: Coleman M and Briggs A R (eds). Research methods in educational leadership and management. London: SAGE.
- [20] Freyd P 1989. What educators really want in software design. Media and Methods, 25: 44, 46-47.
- [21] Garrett N 2001. Computers in foreign language education: teaching, learning and language acquisition research. Available at http://www.ade.org/adfl/bulletin/V19N3/193006.htm. Accessed 15 January 2001.
- [22] Garrett N 1991. Foreword. In: Dunkel P (ed). Computer-assisted language learning and testing: research issues and practice. New York: HarperCollins.
- [23] Gokhale A A 1995. Collaborative Learning Enhances Critical Thinking. Journal of Technology Education, 7. Available at http://scholar.lib.vt.edu/ejournals/JTE/v7n1/gokhale.jte-v7n1.html. Accessed 1 May 2007.
- [24] Guy R F, Edgley C E, Arafat I & Allen D A 1987. Social research methods: puzzles and solutions. Massachusetts: Allyn and Bacon.
- [25] Hammond C 2005. The wider benefits of adult learning: an illustration of the advantages of multi-method research. International Journal of Social Research Methodology, 8: 239-255. (doi:10.1080/13645570500155037)
- [26] Hannafin J M & Peck K L 1988. The design, development and evaluation of instructional software. New York: Macmillan, Inc.
- [27] Hardisty D & Windeatt S 1989. CALL. Oxford: Oxford University Press.
- [28] Hardisty D H 1987. Towards a communications methodology: natural and artificial language learning and teaching. In: Legenhausen L and Wolff D (eds). Computer-assisted language learning and innovative EFL methodology. Augsburg.
- [29] Henning E, Van Rensburg W & Smit B 2004. Finding your way in qualitative research. Pretoria: Van Schaik.
- [30] Higgins K, Boone R & Williams D L 2000. Evaluating special software for special education. Intervention in School and Clinic, 36: 109-115. (doi:10.1177/105345120003600207)
- [31] Holliday A 2002. Doing and writing qualitative research. London: SAGE.
- [32] Hubbard P 2005. A review of subject characteristics in CALL research. Computer Assisted Language Learning, 18: 351-368. (doi:10.1080/09588220500442632)
- [33] Huberman M A & Miles M B 2002. The qualitative researcher's companion. Thousand Oakes, CA: SAGE.

- [34] Jamieson J 1994. A history of commitment in CALL. Computers in linguistics: Ames, Iowa.
- [35] Kleinmann H H 1987. The effect of computer-assisted instruction on reading achievement. Modern language journal, 71: 267-276. (doi:10.2307/326446)
- [36] Lasagabaster D & Sierra J M 2003. Students' evaluation of CALL software. Educational media international, 40: 293-304. (doi:10.1080/0952398032000113211)
- [37] Lofland J, Snow D A, Anderson L & Lofland L H 2006. Analysing social settings. A guide to qualitative observation and analysis. Belmont, CA: Wadsworth.
- [38] Luck L, Jackson D & Usher K 2006. Case study: a bridge across the paradigms. Nursing Enquiry 2006, 13: 103-109. (doi:10.1111/j.1440-1800.2006.00309.x)
- [39] Ma Q & Kelly P 2006. Computer-assisted vocabulary learning: design and evaluation. Computer-assisted language learning, 19: 15-45. (doi:10.1080/09588220600803998)
- [40] Manzo K K 2005. Report calls for beefed-up ESL programs. Community College Week, 17: 11.
- [41] Mason J 1996. Qualitative researching. London: SAGE.
- [42] McMillan J H & Schumacher S 2001. Research in education: a conceptual introduction. Harrisonburg: Addison Wesley Longman, Inc.
- [43] Merriam S B 2001. Qualitative research and case study applications in education. San Francisco: Jossey-Bass.
- [44] Morrison M 2002. What do we mean by educational research? In: Coleman M and Briggs A R J (eds). Research methods in educational leadership and management. London: SAGE.
- [45] Oppenheim A N 1992. Questionnaire design, interviewing and attitude measurement. London: Pinter Publishers.
- [46] Padgett D K 2004. Mixed methods, serendipity, and concatenation. In: Padgett D K (ed). The qualitative experience. Toronto: Nelson.
- [47] Patton M Q 2002. Qualitative research and evaluation methods. Thousand Oakes, CA: SAGE.
- [48] Schurink E M 1998. The methodology of unstructured face-to-face interviewing. In: De Vos A S (ed). Research at grass roots: a primer for the caring professions. Pretoria: Van Schaiks.
- [49] Tashakkori A & Teddlie C 1998. Mixed method methodology: combining qualitative and quantitative approaches. Thousand Oakes, CA: SAGE.
- [50] Tellis W 1997. Application of a case study methodology. The Qualitative Report, 3. Available at http://www.nova.edu/ssss/QR/QR3-3/tellis2.html. Accessed 21 July 2006.
- [51] Tozcu A & Coady J 2004. Successful Learning of Frequent Vocabulary through CALL also Benefits Reading Comprehension and Speed. Computer Assisted Language Learning, 17: 473–495. (doi:10.1080/0958822042000319674)
- [52] TUT 2006. Examination statistics. Report generated by Management Information System (MIS). Pretoria: Tshwane University of Technology.
- [53] TUT 2007. Number of students registered per ethnic group and gender. Report generated by Management Information System (MIS). Pretoria: Tshwane University of Technology.
- [54] Warschauer M 2001. Technology and second language learning. Available at http://www.lll.hawaii.edu/web/faculty/markw/ts lt.html Accessed 25 January 2007.
- [55] Welman J C & Kruger S J 2005. Research methodology for the business and administrative sciences. Oxford: Oxford University Press.
- [56] Wragg T 2002. Interviewing. In: Coleman M and Briggs A R J (eds). Research methods in educational leadership and management. London: SAGE.

AUTHOR

M Dieperink is with the department of Applied Languages at Tshwane University of Technology, Pretoria, South Africa.

This article was modified from a presentation at the International Conference of Interactive Computer Aided Learning ICL2008, September 24 - 26, 2008 in Villach, Austria. Manuscript received 4 December 2008. Published as submitted by the author.