



Artigo original

BENEFITS OF READING STRATEGIES INSTRUCTION IN TEXTUAL COMPREHENSION: the case of Eduardo Mondlane University students

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ABSTRACT: Recent studies indicate that reading strategies instruction enables second language learners to use different reading strategies in order to improve their textual comprehension. The current study was conducted in Mozambique, at the Eduardo Mondlane University, aiming at evaluating the impact of a reading strategies instruction program. It involved an experimental group of 25 students majoring in English Language Teaching and a control group of 25 English/Portuguese Translation students. A pre-test, a three-month strategy-based reading instruction program, a post-test and a questionnaire administered at the end of the program were used in the evaluation of the students' progress in terms of strategic reading and reading proficiency. The findings showed that the experimental group improved its reading comprehension as a result of the intervention. The study demonstrates the need of introducing reading strategies instruction programs in order to improve Mozambican learners' academic reading and comprehension skills.

Keywords: English language learners, Mozambican university students, reading comprehension, strategy-based reading instruction.

BENEFÍCIOS DE ENSINO DE ESTRATÉGIAS DE LEITURA NA COMPREENSÃO TEXTUAL: o caso de estudantes da Universidade Eduardo Mondlane

RESUMO: Estudos recentes indicam que o ensino de estratégias de leitura permite que os alunos de língua segunda usem diferentes estratégias de leitura para melhorar a sua compreensão textual. O presente estudo foi realizado em Moçambique, na Universidade Eduardo Mondlane, com o objectivo de avaliar o impacto de um programa de ensino de estratégias de leitura. O mesmo envolveu um grupo experimental de 25 alunos do curso de Ensino de Língua Inglesa e um grupo de controlo de 25 alunos de Tradução Inglês/Português. Um pré-teste, um programa de três meses de instrução de leitura baseada em estratégia, um pós-teste e um questionário aplicado no final do programa foram usados na avaliação do progresso dos alunos em termos de leitura estratégica e proficiência em leitura. Os resultados mostraram que o grupo experimental melhorou a sua compreensão de leitura como resultado da intervenção. O estudo demonstra a necessidade de introduzir programas de instrução em estratégias de leitura para melhorar as habilidades académicas de leitura e de compreensão no seio de estudantes moçambicanos

Palavras-chave: Estudantes moçambicanos de língua inglesa, estudantes universitários, compreensão de leitura, instrução de leitura baseada em estratégias.

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INTRODUCTION

Mozambican students do not have many opportunities to read in their native Bantu languages, in the official Portuguese language and in the foreign English language. Although there are reading programs in Mozambique, such as the National Reading Plan (Plano Nacional de

Leitura) (PNL, in Portuguese), the National Plan for Reading and Writing (Plano Nacional de Leitura e Escrita) (PNALE, in Portuguese) and the Bibliographic Fund of the Portuguese Language (Fundo Bibliográfico da Língua Portuguesa (FBLP, in Portuguese), there are few reading programs targeting university students.

In 2009, the School Libraries' Network and the National Reading Plan started a cooperation in which the main objective was to promote reading in Mozambican schools (Nhapulo, 2016). The cooperation has at least shown that reading skills promotion activities are to be targeted in libraries, but Mozambican schools lack libraries and reading materials. This proved to be a stumbling block for such cooperation, added to the fact that, within the curriculum, reading is not yet considered as an activity conducted outside the classroom, since it is mostly limited to the common practice of intensive reading (Nhapulo, 2016).

In 2012, the United States Agency for International Development (USAID), in collaboration with the Mozambican Ministry of Education and Human Development (MINEDH), launched the USAID/Aprender a Ler (ApaL) (Learn to Read) project with the intention of improving skills reading in early grades in Zambézia and Nampula provinces. In spite of this effort, ApaL was not sufficient to overcome many of the recognized problems underlying quality education that exist in Mozambique - high rates of absenteeism among students, teachers and school directors, teachers with limited training in teaching reading, the school shift with few hours and the constant lack of teaching/learning materials.

In 2017, the MINEDH launched the National Plan for Reading and Writing (PNALE), which also involved the ability to deal with calculations. PNALE is a guiding instrument that aims to contribute to the promotion of reading habits at school, at home, in communities, libraries and other places, thus training autonomous and competent people in these areas (MINEDH, 2017).

There is also the Fundo Bibliográfico da Língua Portuguesa (Bibliographic Fund of the Portuguese Language) (FBLP, in Portuguese), a national institution which, since 1998, has been developing a Reading

Program in Mozambique. This institution has two goals: to increase the reading rate among students, and to gather information regarding what Mozambican people (especially students) read. The second goal is to analyse general issues related to reading in Mozambique. The program has the National Institute for the Development of Education (INDE), the national TV and Radio as its partners. The FBLP has projects in the areas of the Portuguese Language, Books, Reading and Libraries, in the components of encouraging their correct use and respective promotion. The fact that we still have students with reading problems at primary, secondary and university level shows that the FBLP is still far from achieving its stated goals (NHAPULO, 2016).

It is in this context that Ernesto (2020: 274) notes that "regulations on encouraging reading cannot be confined to the creation of spaces for contact with books such as book fairs... libraries and reading spaces. The most important thing is in the training... teachers with knowledge that makes it possible to promote the habit of reading" among students. That is, for promoting reading at the national level, it is necessary to make sure we have trained teachers who know the benefits of engaging themselves in reading activities. As Ernesto (2020: 276) underlines it, "the teacher must have strategies for reading comprehension if he intends to get closer to his student and invite him to learn about the reading process". This indicates that the teacher is a mediator of the teaching-learning process that will mediate knowledge so that the student develops his reading ability. So, generally speaking, the fact that students reach university with weak strategic reading skills and without the habit of reading for pleasure, indicates that the abovementioned reading programs still need to be effectively implemented throughout the country, and teacher training programs need to deeply consider graduating good readers/teachers. Lack of role models in the family, school,

community and university settings are the main reasons for the double-edged problem: the reading problem and the language problem (CABINDA, 2014; NHAPULO, 2016).

Most of the existing reading programs are still targeting more primary schools than secondary and university levels. However, at UEM, we do have an Extensive Reading (ER) program which is conducted within the FBLP principle of promoting the reading habit among students, but the majority of students does not partake in the referred ER program. Lack of formal information, time and resources are always presented as some of the excuses.

Regarding RSI at UEM, the Department of Languages, through the Portuguese Section, is undertaking efforts in order to promote strategic reading, though its focus is on the Portuguese language (ERNESTO, 2020). The current study was also conducted in the same Department, but its focus is on the English language.

It is believed that with the introduction of RSI, both ER and Intensive Reading (IR) will be directly and positively enhanced, since in both reading types students need strategic reading competence for successful textual comprehension. However, different from IR (i.e. reading short texts with the purpose of learning from texts), ER is an enjoyable reading practice which increases the readers' reading rate and comprehension through easy-to-read texts, and students choose what, when and where they individually read their large number of texts, and comprehension is checked through summaries and reports or other means (NHAPULO *et al.*, 2017).

It is important to note that IR activities are also necessary for academic purposes because they enable students to become aware of many linguistic and communicative features of the language. Students deal with the intensive reading activities in the classroom and outside the

classroom but, according to our experience as university teachers, most Mozambican students do not read their academic books even when they are told to do so.

In addition, the idea that university students and even some librarians are not used to reading, and neither is the majority of the literate adults, is also supported by Rosário (2009) and Issak (2009). Nowadays, public libraries are turning into private offices and shops, since people have lost the habit of reading for pleasure. It is in this context that Buendía (2010), when talking about reading challenges in Mozambique, stated that there is need to define policies and strategies which take into consideration the promotion of reading materials, the empowerment of the existing libraries and the creation of new libraries. Issak (2009), a Mozambican librarian, has noted that school libraries are important in the promotion of reading habits, since reading is also part of enculturation and readers need to be used to it from the primary level. However, in Mozambique schools with school libraries are the exception rather than the rule.

To the best of our knowledge, only few studies (CABINDA, 2014; NHAPULO, 2016; ERNESTO, 2020) have been conducted at UEM regarding strategic reading. Cabinda (2014) has dealt with reading strategies at UEM, but instead of setting up an instructional program, he has identified the existing practice of strategy use among Mozambican university students. Cabinda (2014) recognizes the existing difference in terms of methodological approaches to reading strategies when he states that:

learners at a tertiary level, i.e. university readers of texts in L1 and FL, must be able to apply most of the skills (...) effectively when reading academic texts. It is crucial to point out, however, that, without *adequate reading instruction*, such readers will not be able to develop their ability to use these skills adequately or effectively, thus making it difficult for them to

comprehend a text (CABINDA, 2014, p. 72).

This statement is congruent with his findings regarding the generally weak strategy use ability among Mozambican university students. It was following from this citation that we have dealt with “*adequate reading instruction*” in RSI program at UEM in order to instruct the experimental group students regarding the use of reading strategies to improve their reading comprehension.

The current study focuses on reading strategies among Mozambican students, to whom English is a foreign language. Generally, the study aims to:

- find out if a strategy-based reading program can enable students to improve their self-efficacy, especially through reading activities.

The study will also *provide some recommendations on aspects to be included in RSI program in Mozambique, setting the ground for strategic classrooms* which, according to Cohen & Macaro (2007, p. 92), “foster the development of strategies which will help learners to manage the contextual complexities and achieve successful outcome given their personal language learning goals”. Since RSI has been shown to be effective in reading comprehension in several L1 and L2 contexts (e.g. Greenfell & Macaro, 2007; Zhang, 2008), introducing RSI programs in the Mozambican context will be important for *enhancing the English language teaching and learning process in general*. For achieving these general and specific goals, the study will include a design and practical trial of a reading strategies instruction manual, as well as the evaluation of its impact through pre- and post-test.

Therefore, in order to overcome the reading problem among Mozambican university students in general, and UEM students in particular, there is need to introduce RSI programs that will function

as a compensatory teaching/learning strategy, for facing poor reading comprehension skills.

Reading Strategy Instruction

RSI programs are generally aimed at building strategic reading skills among students by training them in the use of pre-reading, while-reading and post-reading strategies, in order to improve their textual/reading comprehension. Reading comprehension is understood as “a complex, interactive and strategic cognitive process which involves not only a specific purpose of reading, but also... the interaction between L1 literacy, L2 proficiency and several variables which include comprehension strategies” (NHAPULO, 2016: 55).

Although reading effectively in a foreign language is a challenge for many learners, using reading strategies has been argued to facilitate the reading process and ultimately the use of the learned language (MACARO & ERLER, 2008; AKKAKOSON, 2013). This means that a reader who uses a given strategy has an advantage in terms of reading comprehension and language proficiency over a reader who does not use any strategy. In this context, a strategy can be defined as “a specific plan, action, behaviour, step, or technique that individual learners use, with some degree of consciousness, to improve their progress in developing skills in a second or foreign language” (OXFORD & SCHRAMM, 2007, p. 48).

Strategy training has been conducted both in L1 settings (e.g. PRESSLEY & AFFLERBACH, 1995; LORANGER, 1997), and in L2 settings (e.g. ANDERSON, 1999; ZHANG, 2008; AKKAKOSON, 2013) as a means of improving learners’ reading competence. These L1 and L2 studies have shown that strategy instruction indeed enables readers to improve their reading comprehension through the use of reading strategies. These

studies suggest that strategy instruction leads to autonomous learning and provides readers with metacognitive competence.

A study conducted in Thailand by Akkakoson (2013) during 16 weeks and applying a pre-test/post-test design investigated the relationship between strategic reading instruction, the process of learning reading strategies and English reading achievement among 82 Thai university students of science and technology. The study concluded that the experimental group outperformed the control group in the standardised English post-test regarding the use of second language-based reading strategies.

Another study conducted by Ernesto (2020) among UEM students majoring in Portuguese Teaching, showed that teaching reading comprehension strategies in the classroom has an influence on students' performance. This author noted that for students to get and use strategic reading knowledge, they need instruction from skilled teachers who have knowledge of reading comprehension strategies. Therefore, RSI is an effective way of promoting strategic reading among EFL students and, by doing so, enabling them to become fluent, strategic and autonomous readers.

English Language Teaching at UEM

At UEM, there is a Language Centre with the mission of providing language teaching, linguistic revision, translation and interpretation services. The Center organizes courses at various levels and modalities. For example, the Center offers courses for general and specific and/or technical-professional proficiency; collective, personalised and small group courses; courses focused on certain techniques of oral and written expression, language proficiency tests, preparation for international exams, among others. Its working languages include Arabic, Italian, French, English, Portuguese, Spanish and Mozambican languages. It offers

Portuguese for Academic Purposes (PAP) and English for Academic Purposes (EAP) courses. PAP courses are offered to non-native speakers of Portuguese who not only want to use Portuguese for academic purposes, but also for daily social interactions and professional purposes. Just like in many countries and universities, EAP courses at UEM are generally targeted to non-native speakers of English who would like to carry on with their studies at graduate, master and doctoral levels in and outside Mozambique. Therefore, EAP courses are organised to enable English language learners to face and overcome possible linguistic difficulties they may encounter in their academic learning process. In general, EAP courses mainly focus on improving reading, listening, speaking and writing skills.

At UEM, English language classes are divided into 6 semesters, from English 1 to 6 (1-2 Intermediate; 3-4 Upper-Intermediate; 5-6 Advanced) in a 4-year-course. This is common in ELT and English/Portuguese Translation courses, while the rest of the courses throughout the university have technical English in the form of English for Specific Purposes (ESP). The only problem which still needs to be tackled in future studies is related to syllabus design in the different courses offered by the university, taking into account the learners need in their different fields of knowledge. Similar issues can be found in Cabinda (2013), where he summarizes the needs of university students to gain insights into the current status of ELT at UEM regarding (i) what textbooks are used in the different faculties to provide ESP-EAP within this EFL environment, (ii) how appropriate or dated these textbooks are, and (iii) if the content of the textbooks cater for the teaching of adequate reading skills and strategies to enable EFL learners/readers to cope with authentic texts written in English and to construct meaning adequately for their learning process. The study has also

included a reading comprehension test in order to check students reading comprehension skills. Drawing from his experience as a lecturer at UEM and from the reading comprehension test results, Cabinda (2013) concluded that the type of student who joins UEM does not possess the skills needed to access information adequately and the used reading strategies are not oriented to the optimal construction of meaning. This situation is worsened because the course design has been virtually untouched, unchanged, stagnant for so many years and this has perpetuated the use of very outdated textbooks. Fortunately, there is an ongoing curriculum reform or innovation applied to ELT at UEM, with its implementation expected to start in 2024. Currently, English language practitioners at UEM - English Section are using *Cutting-Edge – Third Edition* (Pearson Education) books as a remedial step to avoid outdated books. This shows that a level of formal needs analysis is necessary to arrive at informed and sound decisions about the goals of an ESP-EAP course trajectory and the materials used in it. When conducting further needs analysis studies, there is a need to look at UEM courses as a whole, since compulsory English language was introduced throughout the university courses at UEM. This was due to the fact that apart from being the language in which most university books used for academic purposes are written, English is also the language of science and technology worldwide. In many societies, as well as in Mozambique, English is also used for normal social interaction and not to show a higher social status as such (NHAPULO, 2011).

Due to the importance of reading strategies in the academic setting, RSI programs are needed at UEM and in other universities in order to enable Mozambican students to become good readers of general and academic/technical readings. Moreover, given that the use of reading strategies contributes to the improvement of

students' reading proficiency, knowledge of reading strategies may lead to more positive learning outcomes in several university courses. That is, since the majority of academic literature in Mozambican libraries is in English (LOPES, 2004), involving students in strategic reading programs is a way of enabling them to improve their learning outcomes not only in English language classes, but also in other subjects (NHAPULO, 2016).

The students involved in the current study still struggle with IELTS and TOEFL exams whenever they want to study abroad where English is used as the medium of instruction. The reading problem faced by these students may be traced from their secondary school background. In fact, reading proficiency objectives in the *Currículo de 12^a Classe (Grade 12 Curriculum)* (2010, p. 10), underline that at the end of grade 12, students should be able to “read articles and reports concerned with contemporary problems in which the writers adopt particular attitudes or viewpoints. Understand contemporary literary prose and narrative”. What students are supposed to master does not always match their learning outcomes, because students entering university programs still have a lack of the English language skills required to understand contemporary prose and narrative.

Essential in developing effective reading strategies is that students are able to plan, monitor and evaluate their reading process, which means that they need to develop metacognitive skills (e.g. BIMMEL, 2001; WENDEN, 1998; ZHANG, 2008). As pointed out in these previous studies, this will lead to strategic learning, which has also been termed autonomous language learning, self-directed learning, self-regulation, self-management, independent language learning and individual language learning. Here, the term autonomous language learning will be used

“to refer to learning which has as its

ultimate goal to produce self-motivated students who take control of the ‘what, when, and how’ of language learning and learn successfully, independent of a teacher, and possibly outside of the classroom without any external influence” (GRENFELL & MACARO, 2007, p. 40).

Stimulating autonomous language learning is really important, given that independent students use cognitive and metacognitive strategies without the immediate presence of the teacher and are less dependent on the classroom learning environment. They also have autonomy of choice, because they now play an important role in determining the language goals and their learning purposes.

In sum, learning is better when it reaches the point where the learner is independent, but it is also important to note that “there is language material that is best learnt independently, [and] there is also material which certain learners best learn in an interactive social context” (GRENFELL & MACARO, 2007, p. 42). In fact, Flowerdew & Peacock (2001) have noted that learners who appropriately use a wide range of strategies are self-confident and able to develop as autonomous learners. It is important to note that not only classroom activities are efficient, but also extra-mural social activities are relevant. Furthermore, effective reading not only deals with background knowledge the reader brings or new input s/he gets from the text, but also with the way in which each reader uses reading strategies before, during and after reading a given text. The ultimate goal of this RSI program was for the students involved to be capable of working independently on their reading tasks. The RSI program focussed on the ability to think in an independent way, to reflect critically on a given issue, to analyse and synthesise ideas, and to develop creative skills (GILLET, 1996). This means that the strategies students used needed to be effective for their reading tasks. As there are many reading strategies, it was

important to select the strategies to be instructed and to see whether instruction itself had any effect on students’ strategy use. One main research question can hence be formulated:

Does RSI facilitate effective English L2 reading among Mozambican university students?

In order to answer this question, data were collected from a group of Mozambican students who received an extensive period of RSI, as discussed in the next section.

METHODOLOGY

Study Setting and Participants

The study was conducted at the largest and oldest university in Mozambique, the UEM. It involved 50 students taking English 5, i.e., an Advanced Level course for students majoring in English Language Teaching (ELT) and English-Portuguese Translation. The later course was called Translation and Interpretation (T/I) before 2009. It was renamed as Translation in 2012, following the implementation of Bologna process, from 2009 to 2011 (in which university degrees took 3 and not the current 4 years).

Two classes were involved, i.e., an experimental group composed of 25 ELT male students, and a control group composed of 25 (17 male and 8 female) Translation students. Note that the ELT students are randomly considered as the experimental group and Portuguese/English Translation as the control group, since both groups were similar in terms of number and language proficiency level. The participants’ ages ranged from 18 to 30, with a mean age of 25, and they were from all ten Mozambican provinces. The majority of students entering ELT and Translation courses have a good mastery of the English language and deal with it in their daily professional work, and 10 of them were already English language teachers outside the university.

The current RSI Program

The program was conducted during four months and it was integrated into normal EFL classes. There were four classroom contact hours per week, but only two hours per week were reserved for the research program.

The current RSI program was framed in the Cognitive Academic Language Learning Approach - CALLA Model (CHAMOT & O'MALLEY, 1994; CHAMOT *et al.*, 1999; CHAMOT, 2005). The model has six steps: *preparation* (teacher identifies students' current learning strategies for familiar tasks), *presentation* (teacher models, names, explains if and how a new strategy is used), *practice* (students practice new strategy), *self-evaluation* (students evaluate their own strategy use immediately after practice), *expansion* (students transfer strategies to new tasks, combine strategies into clusters, develop repertoire of preferred strategies) and *assessment* (teacher assesses students' use of strategies and impact on performance). This model was used in all stages, i.e., from prompting reflections on reading strategies to a final performance evaluation.

Practical activities focused on variety, enjoyment, prediction, preparation, creativity, atmosphere involvement, coherence and integrated methodology (HUTCHINSON & WATERS, 1987) as well as orientation, awareness-raising and positive feedback (BIMMEL, 2001). For monitoring their strategy use, students sometimes had to work in pairs, helping one another in terms of better strategy choice and implementation. In each pair there was always one student who had more effectively acquired the reading strategies and who could tutor his/her buddy. At the end of any given reading task, positive feedback was required in groups and in the whole classroom, in order to motivate and reinforce strategic reading. This learner-centred and individualized approach to language

learning was used to provide learners with the opportunity to learn not only from the teacher, but also from each other.

Moreover, since university students have to read many texts, it was also important to teach them how to be selective and purposeful, so as to become flexible and critical readers (PRESSLEY, 2000).

Therefore, knowledge of the language and that of the real world outside the text, the ability to use this knowledge for questioning the text, as well as the ability to make predictions and inferences enables students to become active readers. All of these aspects of reading were targeted in the current RSI program.

Instruments and Procedures

The following instruments were used in this study so as to assess the steps or techniques employed by learners to assist their L2 learning: a pre-test, the Reading Strategy Instruction manual designed by the lecturer, a post-test, a questionnaire in the beginning and at the end of the program, as well as researcher's field notes. All of these instruments are indicated in Cohen (2000) as effective tools in researching reading strategies. At the beginning of the study both the control group and the experimental group were given a reading pre-test, using an authentic text entitled "The Key" written by Durrel (2000). This 700-word-text was selected because it is from an authentic British source, that is, it is a text that is meaningful, relevant, and useful for the readers. It is aimed at teaching general proficiency to advanced learners of English. The twenty-question test was divided into four sections: the first section comprised 8 comprehension questions, the second and the third sections had vocabulary (5) and gap-filling (5) questions, respectively, and finally two summaries on text passages were required. One mark was assigned to each of the twenty questions, and hence the maximum score was 20. For interpreting the test,

finding vocabulary meanings and summarising, students were supposed to use reading strategies. After doing the pre-test, the whole class orally shared the strategies they had used. It was noted that students already used some strategies and could describe them, but did not know how to name them as such. This aspect was then taken up in the researcher's field notes. Then, the experimental group had a three-month Reading Strategy Instruction through which they were familiarized with different reading strategies, while the control group was only given the list of strategies they should use in their readings, but received no instructions on how to apply them.

At the end of the RSI, both groups were given a reading post-test, based on a single reading text taken from an IELTS exam and entitled "Lessons from the Titanic". This post-test was not administered according to the IELTS forty-question testing system. It was adapted to the twenty-question test system used in the Mozambican scoring system. The test was divided into three sections: the first section comprised 10 comprehension questions, the second and the third sections had vocabulary (5) and gap-filling (5) questions, respectively. For each question there was one mark. This 1,401-word-text was selected because it is from an authentic British source and it was suitable for the post-test, as the experimental group had already practiced reading strategies and had dealt with long texts aimed at teaching general proficiency to advanced English language learners. A comparison between the post-test scores and the pre-test scores would enable us to observe any progress made by the experimental group.

Finally, for reflecting on their own progress at the end of the RSI, students were given a questionnaire consisting of 13 mixed open-ended and closed-ended questions, in which students from both the control and the experimental groups gave their feedback regarding their experience

in strategy use. The 13-item questionnaire employs a five-point Likert frequency scale where 1=never, 3=seldom, 2=sometimes, 4=often and 5=always. Here, the students had to indicate how they applied the learned strategies and which strategies they thought they had mastered during the course. Students also shared their experiences in language learning, the strategies they use when they are given tasks and the difficulties they encounter in reading.

Note that for the purpose of this study, we considered all the strategies which are commonly used by 'good' readers, found in Grabe & Stoller (2002) and which can be subdivided into three categories: pre-reading, while-reading and post reading strategies as described below:

Pre-reading Strategies

1. *Previewing or surveying*: advance looking at text to see its layout, illustrations, etc.
2. *Activating schema knowledge*: getting ready to read by using what is already known
3. *Predicting content*: anticipating possible content of text
4. *Scanning for highlighted words or expressions*: looking for highlighted words.
5. *Skimming*: quickly reading a passage to get the main ideas, then go back to read.

While-reading Strategies

1. *Self-questioning*: asking questions about text
2. *Self-monitoring*: self-checking comprehension
3. *Focusing on meaning, not form*: paying attention to meaning, rather than form
4. *Relating meaning to what is already known*: connecting what is read with what is known
5. *Word recognition*: associating words with their synonyms and antonyms;

associating new word sounds with known word sounds.

6. *Reviewing main ideas after each “chunk” of reading: summarizing main ideas.*
7. *Asking how the main idea is related to previous paragraph: logical relationships between paragraphs*
8. *Using context to make inferences of the unknown words/expressions: guessing the meaning of unfamiliar vocabulary items through contextual clues*
9. *Identifying main ideas and supporting details: relationships between main ideas and details*
10. *Identifying organizational patterns of text: organizational aspects of text in terms of its typical structure (e.g. cause-effect, compare/contrast, etc).*

Post-reading Strategies

1. *Evaluating reading: examining how well the text is understood*
2. *Giving personal response: making critical/personal comments on the text*
3. *Reviewing to summarize text meanings: reading again to summarize text meanings*
4. *Checking effectiveness in strategy use: reflecting on how a strategy was used*
5. *Review notes, glosses, text markings: checking notes as all sorts of marks made while reading.*

Data Analysis

Quantitative analysis (SPSS statistical calculations) was used with pre-test and post-test data for both the experimental group and the control group, in order to

find out how far learners had improved in their reading strategy use and reading comprehension during the three-month reading strategy training program. Field notes and the exit questionnaire were analysed in a qualitative way, in order to capture and refer to reflections on students' personal and group strategy applications as well as their perceptions on reading strategy improvement.

RESULTS

The results are discussed in two separate subsections: the pre-test and post-test feedback from both the experimental group and the control group and the exit questionnaire results

Pre-test and Post-test Results

The first instruments used for checking progress in reading strategy use were the pre-test and the post-test. The pre-test was used to examine reading performance among both groups before the experimental group was involved in the RSI. After this program, both groups were given a post-test. It was expected that the experimental group would use the reading skills acquired during the three-month RSI. Using pre-test and post-test results (marks, grading from 0-20) we looked at Kurtosis, Skewness and QQ-plots, and we found a normal distribution in both tests. We could therefore use paired samples t-tests for our statistical analysis of the data, as can be seen in Table 2 below.

Table 1 presents the descriptive statistics of the pre- and post-test scores of the experimental and control groups. The same results in percentages are visually presented in a bar chart in Figure 1.

TABLE 1: Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean	Min	Max
Pair 1	Pretestexp	11,72	25	1,56	,31	10	15
	Posttestexp	14,36	25	1,28	,25	12	17
Pair 2	Pretestcontr	12,00	25	1,35	,27	10	14
	Posttestcontr	12,52	25	1,50	,30	10	15

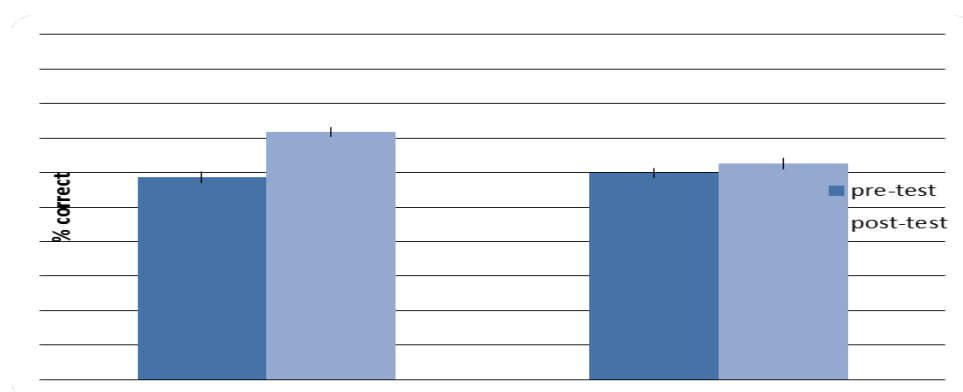


FIGURE 1: Results (in %) of the pre-test and the post-test

The results presented in Table 1 and Figure 1 reveal pre-test and post-test scores differences. Looking at the pre-test means of both groups, we can see that the experimental group’s mean of 1172 (58.6%; see Figure 1) is highly similar to the control’s mean of 1200 (60%). However, this situation changes quite drastically in the post-test, where the control group’s mean is 1252 (62.6%) and that of the experimental group 1436 (71.8%). In other words, both groups showed an increase in their means but, while this is modest for the control group (+ 0.52), it is quite striking for the experimental group (+2.64).

In the pre-test of both the experimental group and the control group, we can see that the latter group’s standard deviation (SD) of

1.35 is smaller than the former’s SD of 1.56. This is the opposite if

we look at the post-test SDs of both groups: for the experimental group 1.28 and for the control group 1.50. Since a smaller SD suggests that the group is more homogenous in terms of strategy use, the experimental group seems to show more homogeneity in test scores and thus in reading comprehension after the reading instruction program.

As Table 2 shows, a paired-samples t-test revealed that the difference between the pre-test results of the experimental group and the post-test results of this group was highly significant ($p < 0.001$). However, the difference between the pre-test and the post-test results of the control group proved not to be significant ($p > 0.1$).

TABLE 2: Paired Samples Test							
Paired Differences							
95% Confidence Interval of the Difference							
			Lower	Upper	T	Df	
Pair 1	pretestexp - posttestexp	-	-3,26918	-2,01082	-8,660	24	,000
Pair 2	Pretestcontr - posttestcontr	-	-1,38847	,34847	-1,236	24	,229

Exit Questionnaire Results

Figures 2 and 3 present the mean (M) number of students in the Control and the Experimental groups who selected one of

the five response options on the Likert scale to questions probing their use of pre-reading and while-reading strategies. Note that the graph visualising self-reported use

of post-reading strategies, is similar to the graphs presented in Figures 2 and 3, but is not presented here as it is less relevant to the study's aim.

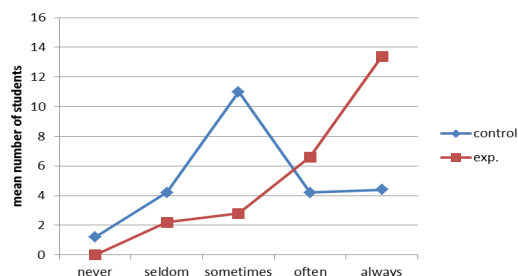


FIGURE 2: Self-reported use of pre-reading strategies by the Control and the Experimental groups.

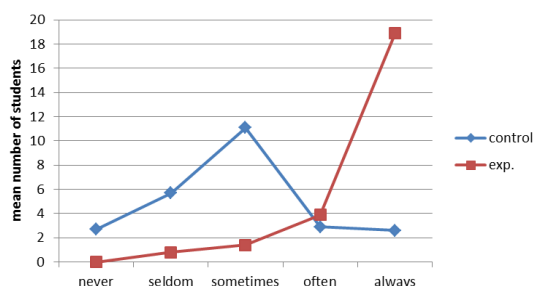


FIGURE 3: Self-reported use of while-reading strategies by the Control and the Experimental groups.

Regarding the use of pre-reading strategies (Figure 2), the most frequently chosen response given by the control group students was *sometimes* (on average 11 students picked this response). *Seldom* and *often* and *always* were less frequently picked ($M = 4.2$). These observations for the Control group students stand in sharp contrast with the results of the Experimental group students, who most frequently reported to *always* use the pre-reading strategies under investigation ($M = 13.4$). Concerning while-reading strategies, the most frequently chosen response by the Control group students was again *sometimes* ($M=11$), followed by *seldom* ($M = 5.7$), *often* ($M = 2.9$), *never* ($M = 2.7$) and *always* ($M = 2.6$).

The experimental group's frequency rocketed above 18 in the mean number of students who reported to *always* use the examined while-reading strategies. The

responses *seldom*, *sometimes* and *often* were on average chosen by 1, 1 and 6.2 students. None of the Experimental group students reported to *never* use any of the while-reading strategies.

DISCUSSION

The main purpose of the study was to find out if a strategy training program could have an effect on Mozambican university English language learners. Throughout the training program, the experimental group was instructed not only to use the pre-reading, while-reading and post reading strategies according to Chamot's (2005) Cognitive Academic Language Learning Approach (CALLA), but the group also had to do a pre-test and post-test, since test scores were needed to evaluate students' progress in strategic reading and general reading comprehension.

Looking at the reading comprehension pre-test and post-test scores, we can see that the experimental group, but not the control group, has shown an improvement from pre-test to post-test. That is, the study shows statistically significant differences between the pre- and post- test reading scores in the experimental group. We can therefore assume that the treatment group has benefited from the conducted RSI and reading performance was enhanced through strategy use. The results of this study confirm previous research findings on reading strategies which sustain that strategy instruction improves students' reading performance (MACARO & ERLER, 2008; AKKAKOSON, 2013).

Moreover, regarding strategy use, the exit questionnaire showed that there was an improvement in students' awareness and use of reading strategies, although both the experimental group and the control group showed considerable differences. Looking at the pre-reading and while-reading results, we can see that the experimental group has achieved higher reading comprehension abilities in comparison to the control group. While the control group

reports to have used most of the pre-reading and while-reading strategies only *sometimes*, the experimental group has used most of them *always*. Among the strategies *sometimes* used by the control group, 15 out of 25 students reported that they *scanned for highlighted words or expressions* and they also *associated words in their synonyms and antonyms as well as associating new word sounds with known word sounds*. These strategies are effectively feasible as they work across the English and Portuguese languages, since we have English-Portuguese word pairs such as, among others, “*normal=normal*”, “*crucial=crucial*”, “*intelligent=inteligente*”, and “*cognitive=cognitivo*”, which are different in pronunciation, but the same or similar in their written forms and which have the same meanings in both languages.

As for the experimental group, among several strategies they have successfully mastered, we find that all 25 students report to have *reviewed main ideas after each “chunk” of reading*. All students reported to have used this strategy because students nearly always had to write summaries of their readings. All of them also reported to have *evaluated their reading*, which is one of the cognitive strategies they used for checking their comprehension and for being able to write summaries. Here, the fact that the control group had access to the strategies but did not receive training on its use may explain why they have tried to use most of the strategies ‘sometimes’ and not ‘always’ as it happened with the experimental group which had training in strategy use.

Considering that the experimental group outperformed the control group in reading strategy use, we can see that the former group has benefited from the RSI and this proves that strategy-based instruction is effective in promoting reading skills, as a result of great awareness and monitoring of the reading task itself by students involved in the RSI program. In fact, previous

studies have also reported that apart from tending to be less dependent on the classroom learning environment, students involved in RSI programs improve their reading competence and they also develop cognitive and metacognitive strategies (GRENFELL & MACARO, 2007; KHEZRLOU, 2012). Indeed, data from the questionnaire and field notes show that strategy training and use was effective, since the conclusion is that the considerable progress in test scores among the experimental group is directly related to strategy training and effective use of reading strategies. This clearly shows that RSI was an effective tool in improving reading strategies among the Mozambican students involved in this study.

Furthermore, it is important to note that during the RSI, cooperation was important among Mozambican learners, since both groups reported that “asking a classmate/friend” was one of the strategies used apart from using a dictionary or guessing the meaning of new words from the context. During the RSI, students were therefore encouraged to learn through participation and interaction, using the skills of the group and valuing peer cooperation (WARRING & HUBER-WARRING, 2006). Here, cooperation enabled less skilled students to overcome difficult aspects they encountered in reading strategy use. Questionnaire data indicate that most students in both the control and the experimental groups prefer asking a friend to looking up the word meaning in a dictionary, although it became obvious that this was not the result of the treatment, since it is a common strategy used by both groups even before the RSI was conducted. This shows that in the Mozambican context, learning is an individual and a social activity, where peer tutoring is effective, since students are both individualistic and collectivist (WARRING & HUBER-WARRING, 2006). In fact, previous studies have shown that there is language material which is best learnt in an

interactive social context (GRENFELL & MACARO, 2007), and using a wide range of strategies in order to become self-confident (FLOWERDEW & PEACOCK, 2001).

Moreover, in situations where peer tutoring and cooperation was not effective, in spite of using one strategy in a given exercise, field notes data showed that students tried to use as many strategies as possible. So, it is not just a wide range of known strategies, but their combination in given tasks that turns a reader into an active reader. According to Paiva (1998), this autonomous stage can be effectively achieved only with the previous guidance of a teacher, which is what happened in the current RSI. Here, it is important to note that what is more relevant is not only the total number or variety of strategies they knew (cf. COHEN, 1998), but also the way in which these strategies were applied in reading tasks, with or without the guidance of the teacher.

The fact that students had problems with identifying main ideas from supporting ideas shows that reading instruction is also effective when intertwined with writing instruction and vice-versa (ELDOUMA, 2005; PLAKANS, 2009), since within a writing-based instruction program students can learn the notions of topic sentences, supporting sentences and concluding sentences in a paragraph, and this knowledge can help them in identifying a text's main ideas.

Although the treatment positively influenced the reading skills and attitudes towards reading in general among the experimental group, there are aspects which could have been explored more if the study had taken more than three months. This means that there is a need of replicating this study in the Mozambican context, involving a larger number of learners and a longer period of time. Such future studies should also consider learners' individual differences (e.g.

anxiety, personality factors, learning styles, etc.) that may influence strategy use.

Finally, researchers need to find out more about the relation between extensive reading, both in readers' L1 and their L2 (or in the case of Mozambique, the language in which students first learnt to read, which is usually Portuguese) and academic reading, so as to enable learners to use more effective reading strategies which are suitable to their academic learning environment.

LIMITATIONS

Although the current study showed positive results, there are aspects which we think that could have contributed to considerably different and more thorough results. We are aware that mere answers to a questionnaire may depend not only on students' actual use of the strategies, but also on how aware they are of their reading behaviour. In order to avoid basing our conclusions on possibly biased answers, we have involved both qualitative and quantitative questions. Apart from this double aspect of the questionnaire, in order to guarantee reliability of the questionnaire answers, we have also given a post-test to the students involved in the RSI.

Another limitation has to do with the considerable differences between the pre- and the post-tests with regard to length and items. The post-test was so designed as to make sure there were differences in terms of difficulty level from the pre-test. However, even though the post-test was considered harder than the pre-test, there were similarities in terms of strategies that were required in order to answer the questions. So, the aim was that a post-test with slightly much harder questions than the pre-test was better for assessing strategy use.

Even though the treatment positively influenced students' reading skills in this study, there is still a need to conduct similar studies involving a higher number

of students and during a longer period of time. Such future studies should also consider learners' individual differences (e.g. gender, anxiety, personality factors, learning styles, etc.) that may influence strategy use, especially in multilingual contexts.

CONCLUSIONS AND RECOMMENDATIONS

The current study dealt with reading strategies among Mozambican university students at UEM. It aimed at clarifying whether a strategy-based reading instruction program could have a positive effect in enabling learners to become active, strategic and autonomous readers. After the RSI was conducted, experimental group students reported a better mastery of reading strategies, which was confirmed by considerable improvement between pre-test and post-test scores among this group, compared to the results of the control group. This generally means that the intervention had a positive effect among Mozambican university students.

Therefore, raising awareness in terms of strategy use so that students can be able to monitor their reading process has shown that mastery of reading strategies has an influence in general reading comprehension, as it was observed from the experimental group's post-test scores. From these results we can infer that knowledge of pre-reading, while-reading and post-reading strategies in general has a direct impact on language proficiency, since a strategic reader is also a good reader in terms of reading comprehension and, as was shown by previous studies, this entails an improvement in speaking, listening and writing skills.

These findings have practical implications not only in the Mozambican ELT context, but also in other similar situations, since reading strategies are relevant for learners to become active readers. Firstly, they suggest that similar studies should be conducted in more Mozambican

universities and even within the UEM, where this study was conducted, considering that this was a time-limited study which we believe could have shown deeper results if longer time and larger number of students had been involved. Here, future ELT studies in this EFL context should look not only at strategic reading competence, but also at the different target and learning needs students have throughout the different courses offered at UEM, where issues of ESP-EAP syllabus design need a special attention in order to guarantee curriculum innovation in which intellectual quality, quality learning environment and relevance are thoroughly considered.

Secondly, the current study suggests that an implementation of a strategy-based reading curriculum for Mozambican university students, which will develop their strategic competence and consolidate their linguistic knowledge, in and outside the classroom learning environment, would have positive effects. The need for a new curriculum is within the need of incorporating new challenges "as curriculum renewal is an ongoing and never-ending process, adaptations and alteration will certainly be considered as time and needs change" (YUREKLI, 2012, p. 66). A curriculum that involves RSI would not replace intensive reading, as may be wrongly interpreted by local EFL/ESL practitioners, but would reinforce the sole practice of intensive reading for academic purposes, which has shown some limitations in terms of providing learners with strategic and cognitive reading skills so far. That is, with strategic reading awareness, students will not need much teacher's guidance, but they will develop an autonomous ability of evaluating their reading, monitoring their actions and gaining more language proficiency from continuously self-rewarding reading activities.

In addition, since UEM university students do not have informal incentives to reading

at the family setting, the school setting should fill the gap as early as possible. RSI and ER programs should be promoted using the English language and targeting Mozambican secondary school and university students, with special incidence at the secondary level, so that when students enter university, they will bring the habit of reading for pleasure and the strategic reading skills needed in their daily academic lives.

Finally, it is important to tackle the reading problem straight from the teacher development perspective (Ernesto, 2020). Looking at instruction in L2 reading, the situation is even worse because in our Mozambican context, there are insufficient materials (books, network, etc.) and reading programs for preservice and in-service teachers to knowledgeably and technically deal with second-language readers. Linked to this is what half of the teachers (50%) involved in a study on learner beliefs and expectations in language learning and teaching believe (NHAPULO, 2013). They agree that most Mozambican teachers are not good readers, and they reckon that they did not acquire reading habits as students. In fact, Lopes (2001), a Mozambican professor and researcher has stated that a lack of qualified English teachers is among the stumbling blocks in the Mozambican education system. As a result, it becomes obvious that most current teachers do not have reading habits (not even reading strategies), and that is the same among some librarians (ISSAK, 2009). An important aspect to bear in mind is that the fact that teachers do not engage themselves in reading activities may be the result of not having had RSI programs throughout their academic lives and, now that they are teachers, with the busy timetables and crowded classrooms they have, it becomes even much more difficult for them to engage in free, voluntary and strategic reading. This seems to show that the problems university students have are the

result of weaknesses in their previous academic training at the primary and especially at the secondary level. In this regard, research by Milanowski *et al.* (2004) and Rowan *et al.* (2002) show there is a relation between teacher performance and students' academic results.

Therefore, in spite of showing the gaps regarding the reading problem in the Mozambican education system, the current study suggests that there is a need to involve RSI (and ER) programs in future teacher training programs at the primary, secondary and university level, in order to promote reading comprehension skills among English language students in Mozambique and elsewhere.

Finally, there is a need of conducting research in Bantu and Portuguese languages, since the reading programs mentioned in the introductory section of this study are more focused on the primary level than on secondary and university levels.

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