

## Applying the Cognitive Strategies to Uplift English Language Proficiency Among the University of Rwanda Undergraduates' Students

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### Abstract

*While English has become a medium of instruction in Rwanda, students' abilities to communicate in this language are still limited. This study investigated cognitive strategies that university students use while learning English, the challenges they faced and how they overcame them. The sample was 140 out of 489 undergraduate students, 4 language lecturers and 3 library staff. Using a questionnaire, class observations and interviews, quantitative and qualitative data were collected and respectively analysed using descriptive statistics and thematic analysis. Findings revealed that students moderately read passages in English (Mean=3.16), did not generally read published papers (Mean=1.10) or summarised information from books (M=2.37) and did not normally do activities that could enhance writing and listening skills. Findings also showed the challenges faced including lack of understanding of reading and listening materials and overcrowded classes. To enhance students' proficiency in English, the study recommends promoting independent reading and reducing the student-lecturer ratio in language classes.*

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**Keywords:** Language learning strategies, cognitive strategies, language proficiency

### Background

Rwanda has experienced a changing linguistic background over time. English was introduced as an official language alongside French and Kinyarwanda in 1994 (Sibomana, 2018). French was taught as a subject in upper primary education and as a medium of instruction in secondary and tertiary education since Rwanda's independence in 1962 (Habyarimana, 2017). In 2008, the government formulated a policy according to which English became the medium of instruction (Mol) and which was implemented with immediate effect in January 2009 (Habyarimana, 2015) due to the need for regional, economic and political integration in the East African Community (EAC), and global integration (Ministry of Education [MINEDUC], 2010; Rwanda's Ministry of Cabinet Affairs [MINICAAF], 2008). Until then, a nine-month intensive French and English programme was offered to students at the National University of Rwanda. Since 2009, this programme and mainstream modules were taught concomitantly in students' respective faculties, and first year students had to take General English.

To enhance students' English language skills and align with the government aspirations, the University of Rwanda (UR) Academic Senate discarded General English from undergraduate programmes (University of Rwanda, 2016) with the belief that English for Specific Purposes (ESP) in Year 1 and English for Academic Purposes (EAP) in Year 2 would be more efficient. On 21<sup>st</sup> August, 2019, the University Academic Senate reintroduced English for General Purposes (EGP) in Year 1 and decided that ESP and EAP would respectively be taught in Year 2 and Year 3 (University

of Rwanda, 2019). This extension was meant to help university leavers become conversant in English and meet job requirements after they graduate.

Despite all the above-mentioned efforts, students' levels of English have remained low until to date (Higher Education Council [HEC], 2015; Sibomana, 2014). Most students are challenged when it comes to oral presentations. Indeed, it takes them time to utter a single correct sentence in English and their communication skills in this language seem to be below the government's aspirations (Ndimurugero, 2016). Researchers thus investigated ways in which students' performance in English could be improved (Ndimurugero; Mugirase 2020); however, until recently, no study has explored cognitive strategies that Rwandan university students use to learn English - the medium of instruction especially. Cognitive strategies refer to the behaviours applied by a student in order to learn (Sacks & Leijen, 2018). They involve activities such as sending and receiving messages (Syafryadin, 2020) as well as watching and listening to news in English (Oxford, 1990) to gain linguistic inputs. Therefore, this study-an extracted from a Master's dissertation entitled, "Exploring Students' Cognitive and Social Strategies of Learning English at the University of Rwanda, College of Business and Economics- sought to address this knowledge gap. It built on the Skill Acquisition Theory, according to which language is acquired after a set of practical activities, that is, after doing different tasks (Taie, 2014).

### **Research questions**

The study sought to answer the following research questions:

- (1) To what extent do UR Business and Economics students use cognitive strategies while learning English language skills?
- (2) What challenges do UR Business and Economics students encounter while using cognitive strategies to learn English?
- (3) How do students overcome these challenges related to cognitive strategies application while learning English language?

### **Literature Review**

#### **Overview on Language Learning Strategies (LLSs) applied to English**

While several scholars explored language learning strategies (LSSs) from different perspectives (Pawlak, 2021), this paper opted to focus on cognitive strategies. LSSs are described as "specific actions, behaviours, tactics or techniques learners use to learn a target language" (Adhikary, 2020, p.1). They are "complex, dynamic thoughts and actions, selected and used by learners with some degree of consciousness in specific contexts in order to regulate multiple aspects of themselves" (Oxford 2017, p. 48). The implication from the above definitions is that LLSs are selected according to the learning context.

Language learning strategies fall into direct and indirect strategies (Fernandez-Malpartida, 2017; Tanjung, 2018). Direct strategies are memory, cognitive and compensation strategies for direct language learning (Oxford, 2010) while indirect ones consist of meta-cognitive, affective and social strategies and generally help learners to go beyond classroom instruction (Fernandez-Malpartida, 2017) to learn a language. In contrast, Tanjung (2018) posits that both types of strategies are interdependent. According to him, either strategy may directly or indirectly affect language learning.

### **Theoretical framework**

This paper is guided by the Skill Acquisition Theory. This theory stands for a “gradual transition from effortful use to more automatic use of the target language with the ultimate goal of achieving faster and more accurate processing” (Lyester & Sato, 2013, p.71). It is also viewed as a kind of learning according to which practising skills becomes automatic under appropriate conditions (Dekersey, 2010; Taie, 2014). These definitions imply that language learner’s ability to use a language is a result of practice. In line with this, Taie (2014) argues that adults’ learning starts from explicit to implicit processes through a series of practice and exposure. Obviously, learning a language entail practising linguistic inputs from simple to complex.

Skill Acquisition Theory could be better understood through the concepts of skill, automaticity and practice. According to this theory, skill is learnt and requires content; automaticity refers to the fact that acquired skills become automatic after a series of attentive learning and practice in a certain task is always necessary for learning (Taie, 2014) and reducing errors (DeKeyser, 2010). Practice has to be meaningful to equip second language learners with linguistic inputs necessary for them to use the language. Regarding this matter, the researchers believe that cognitive strategies are one of the most helpful strategies learners could resort to. Their view is supported by Oxford (1990) who contends that cognitive strategies like taking notes and summarising enable learners to use the language orally and in a written form. Note taking, summarising, dictionary use, message sending and receiving, etc. are thus reflected in the Skill Acquisition Theory and engage learners in various activities that enable them to practise the target language.

### **Review of empirical studies on cognitive strategies**

Different studies tackling language learning strategies were carried out. For example, Hayati’s (2015) study on English language learning beliefs, strategies, and English academic achievement of the ESP students in Indonesia-revealed students made use of metacognitive (M=3,35), memory (M=3,28), cognitive (M=3,28), affective (M=3,24), social (M=3,28), and compensation (M=3,18) strategies. Idris et al., (2022)’s study on the use of cognitive and metacognitive strategies in foreign language learning among students in Malaysia also showed that students applied both strategies to learn French. Furthermore, in a correlational study of language learning strategies and English proficiency of university students in English as a foreign language context at one university in Indonesia, Anggarista and Wahyudin (2022) found out that metacognitive strategies were the most frequently used and that they were followed by cognitive,

compensation, memory, affective and social strategies in this order. The study also found out a significant correlation between language learning strategy use and students' English proficiency.

### Methodology

This study applied a quantitative and qualitative mixed approach design which helped to fill the gaps resulting from either method (Jokonya, 2016). It involved 140 out of 489 second year students who were learning English for Specific Purposes at the College of Business and Economics (CBE), University of Rwanda, Huye Campus, 4 language lecturers and 3 library staff. The formula as per Kothari (2004, p.179) was used to calculate the student sample. The number of participants per department was determined proportionally, that is, in accordance with its student population.

The sampling formula is stated as follows:  $n = \frac{z^2 \cdot p \cdot q \cdot N}{e^2(N-1) + z^2 p \cdot q}$

( $n$  stands for the sample size;  $z$  is the area under normal curve for the given confidence level and has a value of 1.96,  $p$  stands for the probability of success with a value of .5 while  $q$  represents the probability of failure with a value of .5,  $e$  stands for 0.07 of margin error out of 93% of the level of confidence and  $N$  is the study population).

$$\begin{aligned} \text{Therefore, with } e \text{ equals to } 0.07: n &= \frac{z^2 \cdot p \cdot q \cdot N}{e^2(N-1) + z^2 p \cdot q} = \frac{(1.96)^2(0.5)(0.5)(489)}{(0.07)^2(489-1) + (1.96)^2(0.5)^2} \\ &= \frac{(3.8416)(0.25)(489)}{(0.0049)(489-1) + (3.8416)(0.25)} = \frac{469.6356}{0.0049(488) + (3.8416)(0.25)} \\ &= \frac{469.6356}{2.312 + 0.9604} = \frac{469.6356}{3.3516} = 140.12 \approx 140 \text{ respondents} \end{aligned}$$

A systematic sampling technique was used to select respondents in order to keep objectivity. To do this, class lists were used and respondents were selected at regular intervals to find the required number. For lecturers and librarians, a purposeful sampling technique was applied to select staff that were likely to provide useful information.

For data collection, varied techniques were applied to generate triangulated data. The study made use of a questionnaire to collect quantitative data on the extent to which students used cognitive strategies while learning whereas class observations and interviews helped to gather qualitative data. Class observations enabled the researcher to have an overview of what happened in classrooms while students were learning English. On the other hand, focus group interviews allowed obtaining various students' views on how they used cognitive strategies. It is worth noting that of 140 questionnaires administered to student participants, 128 were returned, 8 were not and 4 had not been fully filled out.

The collected quantitative data were analysed using the Statistical Package for Social Sciences (SPSS), version 25. The measures of central tendency, which normally include the mean, median and mode and the measures of variability or dispersion that entail the standard deviation, variance, minimum and maximum variables (Cronk, 2018; Selvamuthu & Das, 2018) were considered during the analysis. However, for the sake of conciseness,

only the mean and the standard deviation were presented. According to Selvamuthu and Das (2018, p. 3), “*The mean describes the centre position of a data set while the standard deviation helps in analysing how spread-out the distribution is for a set of data*”. Both the mean and the standard deviation provide considerable information about the data set (Cronk, 2018).

During data analysis, the interpretation of the mean followed Khatib (2013) scales of ‘low’, ‘medium’ and ‘high’ means respectively between 1.0 and 2.4, 2.5 and 3.4, and 3.5 and 5.0. The analysis of the scores was based on Oxford (2003)’s clarification as cited in Yulianti (2018). According to the clarification, the means from 4.5 to 5.0; 3.5 to 4.4; 2.5 to 3.4; 1.5 to 2.4 and 1.0 to 1.4 respectively refer to always or almost always used, usually used, sometimes or moderately used, generally not used, and never or almost never used. In addition, since a measure of central tendency is reported alongside a measure of dispersion (Cronk, 2018), the standard deviations were analysed to supplement the information about the means. Because the standard deviation informs the deviation of the scores from the mean (Cronk, 2018), the explanation of the low and high values of the standard deviation was provided. According to Selvamuthu and Das (2018), a low standard deviation indicates a high concentration of the values around the mean while a high standard deviation shows lower concentration of the value from the mean. As for qualitative data, they were inductively analysed by grouping themes into typologies according to their similarities and differences.

## Results

### Cognitive strategies applied in English classes

A number of reading strategies were used and provided learners with various features of the language such as vocabulary, language structures, etc. Table 1 presents these strategies.

**Table 1**

*Classroom reading activities*

Reading activities	N	Mean	St. Deviation
Checking meanings in dictionaries	128	3.4766	1.27338
Guessing the meanings of words	128	3.4063	1.27011
Reading short passages in English	128	3.1641	1.05575
Reading course notes and analysing them	128	3.1172	1.23353
Others	128	1.2656	0.86475

**Source: Primary data, February 2022**

Table 1 indicates that students most frequently checked the meaning of words in dictionaries during reading activities (mean = 3.47; standard deviation = 1.27), guessed the meaning from context (mean= 3.40, standard deviation = 1.27), read short passages in English (mean =3.16; standard deviation = 1.05), and read and analysed course notes

(mean= 3.11; standard deviation = 1.23). Table 1 also shows that respondents hardly read newspapers and field-related books, and they did not translate words using Google (mean = 1.26; standard deviation=0.86). Furthermore, all reading activities in Table 1 have low standard deviations, which indicates that values were all clustered around the mean. Conversely, all FG members revealed that reading comprehension texts and reading notes were the most common practices in language classes. FG1 members confessed that notes were never summarised whereas FG2 and FG4 members said they were generally asked to read for assignments. With regard to texts, FG3 members reported that they were sometimes tasked to read texts and identify verbs, proverbs, or nouns depending on the lesson they had. The pedagogical implication from the above findings is that the use of the rote learning technique prevailed over high order questions that could have boosted learners' critical reading and thinking skills.

### **Cognitive Strategies applied outside the classroom**

Cognitive strategies applied outside the classroom included reading course notes, comparing English and Kinyarwanda, summarizing course notes, reading texts and passages in English, summarizing information, reading messages in English and reading published papers in English as indicated in Table 2.

**Table 2**

*Reading strategies outside of the classroom*

<b>Reading activities</b>	<b>N</b>	<b>Mean</b>	<b>St. Deviation</b>
Reading course notes	128	3.6875	1.09221
Comparing English and Kinyarwanda	128	3.5703	3.06539 <sup>1</sup>
Summarising course notes	128	2.8672	1.19955
Reading texts and passages in English	128	2.8359	2.99021
Summarising information	128	2.5234	1.30995
Reading messages in English	128	2.4922	1.4308
Reading published papers in English	128	1.6094	1.01356

**Source: Primary data, February 2022**

According to Table 2, reading course notes is the respondents' most frequent activity (mean = 3.68; standard deviation =1.09) followed by the comparison between English and Kinyarwanda (a mean of 3.57 and a standard deviation of 3.06). The table indicates that summarising course notes, reading texts and passages in English, summarising information, reading messages in English and reading published papers in English respectively have a

<sup>1</sup> While answering questions on reading-related activities', the surveyed respondents had to select, for each item, one concept among never, rarely, sometimes, often or always which respectively corresponded to 1, 2, 3, 4 and 5. The majority of them chose either often or always, words with high values, for the comparison between English and Kinyarwanda when other items had low extreme values. Their selection indicates that there was a wide dispersion of the observed data around the mean due to the item with a high standard deviation of 3.06539 as shown in Table 2. This phenomenon of transferring Knowledge from English to Kinyarwanda to understand course contents seems natural in the Rwandan context where Kinyarwanda, the mother tongue, is used in all contexts outside the classroom.

medium means of 2.86 and a standard deviation of 1.19, 2.83 and 2.99, 2.52 and 1.30, 2.49 and 1.43, and 1.60 and 1.01. Obviously, Table 2 demonstrates that reading course notes, summarising course notes, summarising information, reading messages in English and reading published papers in English have low standard deviations whereas comparing English and Kinyarwanda as well as reading texts and passages in English have high standard deviations.

Concerning interviews, respondents were asked whether they were given take home reading activities. All focus group members reported that they only read course notes that they tried to understand; yet two FG2 members respectively confessed that they read novels and scriptures in English at church. When asked whether students sometimes summarised those materials, an FG2 member stated they did not. This respondent also revealed that notes were summaries of summaries that did not need shortening again and students could not fail to respond to their teacher's question at all. In contrast, FG3 members confessed that slides were so many and difficult to understand that students could not recap at all.

Findings from interviews with lecturers revealed that students were given reading materials other than course notes once a week due to limited time. Their assertion was reinforced by librarians who stated that various reading materials were available, but that few students borrowed them probably because of the lack of reading culture, reluctance to spend a lot of time looking for books in the library, and ease of finding reading materials online. One librarian also revealed independent reading was not common, except for students from better schools, and that students only borrowed books when they had research-based assignments. What can be implied from these results is that respondents read more of their course notes than anything else. According to one lecturer, this could not help students develop their vocabulary and reading.

### **Students' writing cognitive strategies**

Writing strategies that helped students to communicate and do different academic tasks are provided in Table 3.

**Table 3**

*Students' classroom writing activities*

<b>Writing activities</b>	<b>N</b>	<b>Mean</b>	<b>St. Deviation</b>
Taking notes in English	128	3.4766	1.45247
Summarising course notes	128	2.6641	1.27531
Writing letters in English	128	2.5625	1.23435
Writing messages in English	128	2.5156	1.13626
Summarising information from the internet	128	2.375	1.17721
Summarising information from books	128	2.2969	1.08939

**Source: Primary data, February 2022**

Table 3 presents six classroom English writing activities: taking notes in English, summarising notes, writing letters, writing messages in English, summarising information from the internet and summarising information from books. Their respective means are 3.47, 2.66, 2.56, 2.51, 2.37 and 2.29 while their standard deviations are 1.45, 1.27, 1.23, 1.13, 1.17 and 1.08. Noticeably, the first four strategies and the last two consecutively have medium means and low means. In addition, all the strategies displayed in Table 3 have low standard deviations, which implies that the values of respondents' replies were not very dispersed from the mean.

However, findings from interviews appeared to be complex as focus group members held diverging views about the writing strategies they used. Concerning note-taking, an FG1 member reported that everything written on the board was copied down. An FG3 respondent stated that students did so because they had to cope with exams. On the other hand, another FG1 respondent and an FG2 one revealed that only the most important points were jotted down. According to a second FG2 member, only teachers' explanations were written down. Findings from interviews with students also revealed that some students could not take notes for a number of reasons including limited English proficiency, teachers' use of PowerPoint slides, recurrence of the same notes and expectancy of notes from teachers.

Summarising is another important skill that was reported. Most lecturers and one FG1 respondent stated that students were given take-home assignments that could help upgrade their summarising skills. However, findings indicated that one lecturer promoted dictations while another boosted sentence, paragraph and essay writing skills. These findings corroborate with views from FG2 members that students never recapped the materials they read. However, an FG4 member believed that the use of this strategy depended on individuals.

### Respondents' listening cognitive activities

Cognitive strategies that were applied to promote students' listening skills are displayed in Table 4.

**Table 4**

*Listening cognitive activities*

<b>Listening activities</b>	<b>N</b>	<b>Mean</b>	<b>St. Deviation</b>
Using YouTube and internet resources to listen to English	128	3.2266	1.20507
Watching TV shows and movies	128	3.1641	1.24089
Listening to radio news	79 <sup>2</sup>	2.3544	1.20934
Listening to pronunciation and repeating	128	2.6875	1.09221
Taking notes from YouTube and internet resources	128	2.0234	1.09735
Summarising or reflecting on the information from TV	128	2.0000	0.94744
Listening to the radio and reflecting on the information from it	128	1.9747	1.10911

**Source: Primary data, February 2022**

<sup>2</sup> Only 79 out of 128 respondents answered the question asking them how often they listened to radio news.



Table 4 indicates the use of YouTube/internet resources to listen to English, watching TV shows/movies, listening to radio news, and listening to word pronunciation and repeating the word respectively have medium means of 3.22, 3.16, 2.70, and 2.68. Their standard derivations are 1.20, 1.24, 3.44, and 1.06. As for the three remaining strategies, Table 4 shows that they have low means of 2.02, 2.00, and 1.97 and standard deviations of 1.09, 0.94, and 1.10. Finally, Table 4 reveals that standard deviations of all cognitive listening activities, except that of listening to radio news which is high, are close to their respective means.

## **Challenges of using cognitive strategies of language learning and solutions**

### **Challenges**

Findings from this study indicated that students faced challenges related to reading, writing and listening. Such challenges in reading were shortage of reading materials, failure to grasp the meaning of reading materials, reception of notes by the end of the module, overcrowded classes and lack of opportunities to read. For example, findings from FGs showed discipline- related books were far more read than stories and that the technical terminologies they embodied were difficult to understand, which resulted in students' loss of interest in reading. Concerning writing, findings revealed students' failure to write words appropriately, misuse of tenses and capital letters, lack of summarising skills and mother tongue interference. As for listening, two lecturers reported that students had limited listening skills.

### **Strategies used to surmount the encountered difficulties**

Results from the questionnaire showed that, to overcome these challenges, students made use of Google translate to understand new vocabulary items, borrowed books from the library, asked for colleagues' support, used dictionaries, reread texts and /or asked for lecturers' scaffold. Some lecturers that were interviewed indicated that they conducted model-reading activities in which they incorporated a section on vocabulary for a better understanding of texts, organised group work and recommended students to use dictionaries whenever they encountered difficult words. In writing, respondents asserted that they searched for the meaning of words, consulted friends, learned how to summarise texts, and cultivated a reading culture. Lecturers reported that they involved students in note-taking activities and provided exposure to different levels and steps of writing. With regard to listening, respondents said they listened to materials at a slow pace and actively used the English language in order to solve listening-related issues.

### **Discussion**

Research findings revealed a number of themes that emerged from qualitative data and which helped to explain the gathered quantitative data. These include moderate reading comprehension activities in and out of the classroom, knowledge transfer from English to Kinyarwanda, and limited writing and listening activities in class.

### **Moderate reading comprehension activities in and outside the classroom**

Reading is seen as a multidimensional activity as it provides information, increases the reader's vocabulary and stimulation without which a person cannot be aware of developments around their field of expertise (Miranda et al., 2023). However, results in Tables 1 indicated that four mentioned reading activities had medium means of 3.47, 3.40, 3.16, 3.11 and 2.85 while reading field-related books and newspapers referred to as others had a very low mean of 1.26. Obviously, none of them had a high mean and their standard deviations were low as they ranged from 0.86 to 1.27. This simply means that the above-mentioned reading activities were rarely conducted and/or resorted to in classroom settings and that the data values were not scattered from the means. However, findings revealed that students normally checked the meaning of difficult words out of dictionaries. These findings comply with Binti Robani and Majid's (2014) results according to which Malaysian students at the German-Malaysian Institute used dictionaries to find out the appropriate meaning of words. The researchers also believe that resorting to dictionaries and guessing meanings could be effective cognitive reading strategies as they helped students understand the context and choose the meaning that would fit it best.

Furthermore, findings indicated that reading comprehension activities were conducted in class or given as take-home assignments and that students were tasked to do research-based assignments prior to presentations. In line with this, research has shown that people who are engaged in reading gain essential information and skills (Suyitno, 2017). However, the findings also showed that students' limited proficiency in English prevented them from reading advanced texts. In fact, such texts would require them to read between and beyond the lines and make inferences. This complies with Arifin's (2020) view that students with limited English proficiency do not display improved abilities in critical thinking activities as their counterparts with a good command of English do. Reversely, Shi (2017) argue that constant use of cognitive learning can help students become successful. Khaleel and Alrefaee (2018) also contend that frequent use cognitive strategies can help learners understand and communicate in a language.

Concerning reading activities that take place outside the classroom, the findings indicated that students spent most of their time reading course notes (see Table 2) and used Kinyarwanda to negotiate meaning and construct knowledge. According to these findings, students also went to the library to read books only when they had assignments. The switch to the mother tongue appears to be a natural phenomenon that helps multilingual learners understand words and communicate easily (Syam et al., 2018). In the same perspective, research has shown that code-switching and code-mixing phenomena enable teachers and students in a second language class to accomplish their tasks smoothly (Ezeh et al., 2022). In addition, it has revealed that code switching contributes to effective learning of a second language (Gao, 2023) and to students' mastery of academic contents and that it helps them communicate with each other easily (Habyarimana, 2017; Mugirase, 2020; Ndimurugero, 2016). Therefore, lecturers should facilitate the understanding of complex words by allowing students to switch from their mother tongue to the target language

and vice versa. However, this practice should not be overused so as not to prevent them from developing proficiency in English.

Finally, findings from Table 2 revealed that reading texts and passages in English and summarising information from books were moderately done while published papers were rarely read probably due to limited reading materials and lack of motivation to read. This situation is likely to be a hindrance to students' understanding of materials written in English and may result from ignorance of the role cognitive strategies play in raising students' awareness of what is said and motivation to use the newly acquired vocabulary (Khaleel & Alrefaee, 2018). Obviously, Khaleel and Alrefaee's (2018) view seems to validate the Skill Acquisition Theory according to which an automatic use of a skill results from conscious efforts learners makes (Kachinske, 2021).

### **Lack of enough writing activities in class**

Results in Table 3 indicated that note-taking was the most common writing activity students did as notes helped them prepare Continuous Assessment Tests (CATs)/examinations and that other activities that could have enhanced their writing skills were not regularly conducted. In Indonesia and Hong Kong, research has also shown that students moderately used cognitive strategies while learning foreign languages (Yulianti, 2018) regardless of their efficiency in upgrading proficiency in English when they are regularly used (Shi, 2017). Constant use of cognitive writing activities seems to align with the Skill Acquisition theory's concept of practice that helps students to learn a language (Taie, 2014).

### **Lack of practice in listening activities**

According to results in Table 4, students did not frequently listen to English via electronic devices and channels, nor did they often use the internet and YouTube to listen to materials in English, watch TV shows and movies in English or listen to radio news. The findings indicated that such an attitude was due to students' lack of familiarity with ways in which words were pronounced and that it resulted in failure to understand messages and in lack of interest in listening activities. These findings imply that there is a need for students' exposure to listening inputs without which they cannot become familiar with English. Discernably, lack of listening practice prevails among students at the University of Rwanda despite its usefulness. Listening practice minimises the amount of time it would take to do an activity (VanPatten & Williams, 2007) and contributes to listening achievement (Ahour & Bargool, 2015). Indeed, effective listening increases speaking skills too (Aminatun, Muliya & Haryant, 2021).

### **Conclusion**

This paper aimed at analysing cognitive strategies students applied while learning English, the challenges they faced and how they overcame those challenges. Data were collected using a questionnaire, interviews and class observations. Qualitative data were thematically analysed while quantitative data were analysed using SPSS, version 25. As far as the extent to which students applied cognitive strategies while learning English is concerned, either

medium or low means were found. This paper also shows that reading notes only prevailed among the researched students, who generally did not look for additional reading materials that would enable them to be conversant with the English language. Consequently, they could not understand the message conveyed in the reading materials. Additionally, students moderately took notes and did not generally make notes from other sources. Similarly, their exposure to listening materials was very little and this resulted in failure to do post listening activities or just recall the information from the materials. In addition, students found it difficult to understand the meanings of words from English materials and grasp the message they conveyed. Concerning challenges students encounter while using cognitive strategies to learn English, it was found out that they studied English in overcrowded classes that did not allow them to do reading and writing activities effectively, and receive feedback from their lecturers. Finally, findings revealed that students overcome these challenges by asking colleagues for explanations about the meaning of difficult words and using Google Translate. Taking into consideration the importance of the mother tongue, it is worth noting that students in the Rwandan context do not use cognitive strategies frequently; yet, with cognitive strategies students could learn, remember and communicate Suyitno (2017).

### **Recommendations**

English is a Mol in Rwanda. It is one of the prerequisites for job attainment and an international lingua franca. Therefore, enough reading and listening materials should be provided to students and respective activities should be monitored for students to effectively learn English. This will help to use cognitive strategies of language learning and cope with the global linguistic trends. Additionally, the student-lecturer ratio in English classes should be reduced in order to allow necessary language feedback to students. Furthermore, the working hours for the library should be increased to allow those interested in reading find ample time for it; and reading competitions and exhibitions should be organised in the university to cultivate the reading culture. Finally, there should be language corners where students can learn the language independently while applying reading and listening strategies. This could enhance the shift from teacher-centred instruction to learner-centred instruction as a modern teaching and learning approach.

### **References**

- Adhikary, P. (2020). English Language Learning Strategies Adopted by Bachelor Level Students (A Case Study of Nepal). *Theory and Practice in Language Studies*, 10(8), 863-872.
- Ahour, T., & Bargoo, S. (2015). A comparative study on the effects of while listening note taking and post listening summary writing on Iranian EFL learners' listening comprehension. *Theory and Practice in Language Studies*, 5(11), 23–27.
- Aminatun, D., Mulyah, P. & Haryanti. (2021). The Effect of Dictogloss on Students' Listening Achievement. *Journal PAJAR (Pendidikan dan Pengajaran)*, 5(2), 262-269.

- Anggarista, S., & Wahyudin, A. Y. (2022). A correlational study of language learning strategies and English proficiency of university students at EFL context. *Journal of Arts and Education*, 1(2), 26-35.
- Arifin, S. (2020). The Role of Critical Reading to Promote Students' Critical Thinking and Reading Comprehension. *Jurnal Pendidikan Dan Pengajaran*, 53(3), 318-326.
- Binti Robani, R., & Majid, F. A. (2014). Vocabulary learning strategies among Malaysian TEVT students in the German-Malaysian Institute (GMI). *Procedia-social and behavioral sciences*, 123, 361-368.
- Cronk, B. C. (2018). How to use SPSS: A step-by-step guide to analysis and interpretation. Tenth Edition. Routledge.
- Daflizar, Salustiyo, U. & Kamil, D. (2022). Language Learning Strategies and Learner Autonomy: The Case of Indonesian Tertiary EFL Students. *LEARN Journal: Language Education and Acquisition Research Network*, 15(1), 257-281.
- DeKeyser, R. (2010). Practice for second language learning: Don't throw out the baby with the bathwater. *International Journal of English Studies*, 10(1), 155-165.
- Ezeh, N. G., Umeh, I. A., & Anywu, E. C. (2022). Code Switching and Code Mixing in Teaching and Learning of English as a Second Language: Building on Knowledge. *English Language Teaching*, 15(9), 106-113.
- Fernandez-Malpartida, W. M. (2017). The role of language learning strategies use, age differences, gender and English achievement in the EFL college context in Peru.
- Gao, W. (2023). The Transfer and Influence of Mother Tongue in Second Language Acquisition-Take Chinese as an Example. *Proceedings of the 2022 4th International Conference on Literature, Art and Human Development (ICLAHD 2022)* (pp. 901-908).
- Habyarimana, H. (2017). *An analysis of the socio-pragmatic motivations for code-switching in Rwanda* (Doctoral dissertation). University of South Africa.
- Hayati, N. (2015). A study of English language learning beliefs, strategies, and English academic achievement of the ESP students of STIENAS Samarinda. *Dinamika Ilmu* 15.2 (2015): 297-323.
- Higher Education Council. (2015). A tracer study of graduates from higher learning institutions (hlis) and employers' satisfaction of graduates' competences.
- Idris, N., Isa, H. M., Zakaria, N. N. N., Taib, N. A. M., Ismail, S., & Rahmat, N. H. (2022). An investigation of the use of cognitive and metacognitive strategies in Foreign language learning. *International Journal of Academic Research in Business and Social Sciences*, 12(2), 70-89.

- Jokonya, O. (2016). The Significance of Mixed Methods Research in Information Systems Research. *Proceedings of the Eleventh Midwest Association for Information Systems Conference*, Milwaukee, Wisconsin (pp. 1-5).
- Kachinske, I. (2021). Skill Acquisition Theory and the Role of Rule and Example Learning. *Journal of Contemporary Philology*, 4(2), 25-41.
- Khaleel, A. Q., & Alrefaee, Y. (2018). The Relationship between Language Learning Strategies and Achievement among EFL University Students in Yemen. *Online Submission*, 3(3), 64-83.
- Khatib, A. Z. (2013). *Language Learning Strategies of EFL Students in the University General Requirements Unit in the United Arab Emirates University (A Masters Thesis)*. United Arab Emirates University.
- Kothari, C.R., 2004. *Research methodology: Methods and Techniques*. 2<sup>nd</sup> ed. New Age International Publishers Ltd. Ansari Road Daryaganj. New Delhi, India.
- Lyster, R. & Sato, M. (2013). Skill Acquisition Theory and the role of practice in L2 development. In María, P. G., María, J.G, María, M. A. (Eds), *Contemporary Approaches to Second Language Acquisition*. (pp. 73-91). John Benjamins Publishing Company.
- MINEDUC. (2010). *Education Sector Strategic Plan 2010-2015*. Retrieved from: <https://planipolis.iiep.unesco.org/sites/default/files/ressources/rwandaessp20102015.pdf> (Accessed 25 August 2021)
- MINICAAF. (2008 October 8). Itangazo ry'ibyemezo By'inama y'Abaminisitiri yateranye ku itariki ya 08 Ukwakira 2008. Kigali. Retrieved from: <http://primature.gov.rw> (Accessed on 24 August 2021).
- Miranda, A. E., Hermansyah, H., & Mortini, A. V. (2023). Reading Habits in the Digital age: Changes Trend and Behavior in Alpha Generation. *Esteem Journal of English Education Study Programme*, 6(1), 100-110.
- Mugirase, G. (2020). *Language of instruction and quality of education in Rwanda: A case study of secondary school third form learners in the Gisagara district*. (A PhD Thesis). University of Western Cape.
- Ndimurugero, S. N. (2016). *Learning English for Academic Purposes in Higher Education In Rwanda: A Case Study of a College of Business and Economics*. (PhD Thesis). University of the Western Cape.
- Oxford, R.L. (2017). *Teaching and researching language learning strategies: Self-regulation in context*. New York / London: Routledge.
- Oxford, R.L. (1990). *Language Learning Strategies: What Every Teacher Should Know*. New York, New bury House Publishers.

- Pawlak, M. (2021). Investigating language learning strategies: Prospects, pitfalls and challenges. *Language Teaching Research*, 25(5), 817-835.
- Sacks, K., & Leijen, Ä. (2018). Cognitive and metacognitive strategies as predictors of language learning outcomes. *Psihologija*, 51(4), 489-505.
- Selvamuthu, D., & Das, D. (2018). *Introduction to statistical methods, design of experiments and statistical quality control* (Vol. 445). Singapore: Springer Singapore.
- Shi, H. (2017). Learning Strategies and Classification in Education. *Institute for Learning Styles Journal*, 1(1), 24–36.
- Sibomana, E. (2018). Unpeeling the language policy and planning onion in Rwanda: Layer roles. *International Journal of Social Sciences and Humanities*, 2(2), 99-114.
- Suyitno, I. (2017). Cognitive Strategies Use in Reading Comprehension and Its Contributions to Students' Achievement. *IAFOR journal of education*, 5(3), 107-121.
- Syafrayadin, S. (2020). Students' strategies in learning speaking: experience of two Indonesian schools. *Vision: Journal for Language and Foreign Language Learning*, 9(1), 34-47.
- Syam, U. K., Sangkala, I., & Syarif, I. (2018). Code mixing and code switching in the classroom interaction at SMA Negeri 2 Takalar. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 23(7), 95-99.
- Taie, M. (2014). Skill acquisition theory and its important concepts in SLA. *Theory and practice in language studies*, 4(9), 1971-1976.
- Tanjung, F. Z. (2018). Language learning strategies in English as a foreign language classroom in Indonesian higher education context. *LLT Journal: A Journal on Language and Language Teaching*, 21(Suppl), 50-68.
- University of Rwanda. (2016, August). Minutes of the academic senate meeting. Kigali.
- University of Rwanda. (2019, August 21). Minutes of the academic senate meeting. Kigali.
- VanPatten, B., & Williams, J. (2014). Skill Acquisition Theory Robert DeKeyser. In *Theories in Second Language Acquisition* (pp. 106-124). Routledge.
- Yulianti, D. B. (2018). Learning strategies applied by the students in writing English text. *Journal on English as a Foreign Language*, 8(1), 19- 38 (doi: 10.23971/jefl.v8i1.583).