



METACOGNITION AS A READING STRATEGY IN INCOMING UNIVERSITY STUDENTS

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ABSTRACT

Reading and reading comprehension is of great importance for students to be able to grasp the main idea of what they are reading, for which reading strategies are needed. The objective of the research is to analyze and describe the perspectives of the reading strategies they use and how to help entering university students to face their professional studies. The methodology used is descriptive and correlational among its elements, it is of cross-sectional and quantitative approach whose sample are university students entering a professional career, 1181 students were surveyed through an online survey.

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1. Introduction

Being a good reader implies decoding the text and its correct understanding, to achieve this it is necessary to apply a strategic reading since the scientific literature indicates that the use of multiple reading strategies generates better results in terms of reading comprehension (Moir et al., 2020), in addition, reading, by nature leads to the understanding of texts and plays a fundamental role during the learning process and the acquisition of knowledge (Deri & Shamsudin, 2018), therefore, it is vitally important to use reading strategies when reviewing academic information (Cogmen & Saracaloglu, 2009). Good reading comprehension is the basis for correct academic performance and yet many students worldwide lack it (Elston et al., 2022), so for some decades it has been believed that primary and secondary school teachers should include reading techniques or strategies within their instruction plans (Wilson-Lopez et al., 2016), given that instruction on reading comprehension strategies by teachers towards students is an effective tool in the learning process (Karizak & Khojasteh, 2016), likewise, the teaching of reading strategies by teachers is a great support for students when developing reading and text comprehension skills (Varga, 2017), additionally, there is solid evidence of the improvement in the grades of students who employ reading strategies (Ulu & Ulusoy, 2019). Instruction in reading strategies is recognized as a fundamental pillar for the development of literacy and reading programs, therefore, in many countries time has been invested in improving the teaching of these strategies at different levels of academic training (Al Khaiyali, 2014), in turn, there are studies that affirm that metacognitive reading strategies are more used than general reading strategies (Rianto, 2022), However, most studies on the subject associate the use of reading strategies with students' high reading comprehension performance (Garcia y Benitez, 2017). The use of reading strategies generates a great difference between good and bad readers (Bulut & Ertem, 2021), and it is believed that the use of reading strategies is closely linked to the self-efficiency of reading in students (Li et al., 2022), since, readers use reading strategies to coherently represent the texts and also when they present reading comprehension problems; So, from these situations is that a large number of reading strategies have been designed that allow us to focus on the correct understanding of texts (Dascalu et al., 2014).

The use of structured reading strategies helps to carry out deeper analyses of what is read, but little is known about the frequency of teaching this type of strategies in the classroom (Brevik, 2019), eventually, teachers play an important role in literacy worldwide, but often inexperience in the application of strategies to improve reading comprehension predominates (Tiba, 2023), Certainly, for educators who actively participate in literacy programs, the use of strategies that improve students' reading comprehension is of vital importance (Hungwe, 2019). At present there are many students who have difficulties in comprehension of texts and it is alarming that they have less and less motivation to read (Van Ammel et al., 2021), so it is recommended that teachers include specific instruction on reading strategies within their classes to counteract one of the most worrying problems of today's society such as the low reading ability of students (Kissau & Hiller, 2013), since for many students it is a skill which they struggle to perfect (Bogaert et al., 2023). Although it is always recommended to use reading strategies, sometimes it is necessary to first address the underlying problems of the student's language (Nippold, 2017), since several studies have shown that difficulties in reading comprehension can be associated with what is known as limited vocabulary or lexical poverty (Miranda et al., 2011), without neglecting that one of the main causes of the low level of reading comprehension of students is the ineffectiveness of the strategies employed by educators (Olifant et al., 23). The use of reading strategies in students and teachers is also of utmost importance when learning languages, however, in some countries the implementation of these strategies has been a challenge (Siew et al., 2022), as well as in the case of Malaysia, where many students do not have English proficiency, for this reason they employ reading strategies to develop reading comprehension skills (Halim et al., 2020), In turn, in the United States, reading comprehension problems cause concern, especially in adolescents with learning disabilities (Ko & Hughes, 2015).

Currently it is sought to know what types of reading strategies are the most used by teachers worldwide, it is estimated that pre-reading strategies are the most used (Asikcan et al., 2018), within the main skills for text comprehension are those of higher order, but in many countries of the world they are not taught to students (Schmidt et al., 2021), At the same time, a technique used to improve reading comprehension is to take note of what has been read (Lloyd et al., 2022), likewise, another strategy that

is frequently taught and has achieved good results in primary education is to think aloud (Sönmez & Sulak, 2018); In turn, in some Asian countries skimming and scanning techniques are used for the development of reading comprehension (Alhumsi et al., 2021); another widely used reading strategy to retain information is the SQ4R (Survey-Question-Rewrite-Review) method (Başar & Gürbüz, 2017); Also, it has sought to demonstrate that the use of narratives and images with movement is a useful reading comprehension strategy (Maine y Shields, 2015), in the same way, peer tutoring is used as a strategy to achieve good reading comprehension (Valdebenito & Duran, 2015), in addition, in some study centers the method of teaching by pairs or reciprocal is used to develop in students mental strategies that lead to correct reading comprehension (Soriano-Ferrer et al., 2013), It should also be mentioned that the use of concept maps or visual organizers is a powerful strategy to develop a good understanding of texts (Soleimani & Nabizadeh, 2012), on the other hand, a good strategy is the correct use of mobile devices since these tools allow access to a large amount of scientific information that can enrich the student reading level (Chang et al., 2021), Moreover, it is emphasized that the best way to promote the use of reading strategies in students is to instruct them from the first years of their academic training (Braojos et al, 2014).

Reading comprehension is currently a competence of vital importance for society and the primary education phase is critical to develop strategies that help improve this competence (Bogaert et al., 2023), and although there is evidence of the effectiveness of reading strategies, very little research describes how these strategies should be used (Magnusson et al., 2019). During a reading class students tend to read the material in its entirety, but the important thing is how much they actually retain (Naidu et al., 2013), it is possible that reading difficulties can influence even the way students write, so it is necessary to employ reading strategies that allow students to develop good reading comprehension and correct writing (Kirmizi, 2009).

It is for this reason that basic or training institutions have to implement the appropriate techniques so that university-level students manage to capture 100% any reading and this helps professional training, otherwise we will continue with this difficulty that concerns year after year without anyone being able to do anything. This problem is more noticeable when they are newly entering students, that is, students of the first cycle, because they are the ones who have the most reading comprehension problems. Therefore, seeing this problem of lack of reading in newly entering university students, it was decided to carry out this research to know what is the level of reading and with what perspectives the incoming university student arrives, so our main objective is to analyze and describe the perspectives of the reading strategies used by incoming university students to face their professional studies, This perspective will let us know how they plan for a reading situation, how they carry out their own monitoring before a reading, how to face a possible supervision and / or follow-up of reading and finally how the university student faces reading evaluations. These dimensions will let us know about the perspectives of reading comprehension which will serve to implement some strategy and academically support university students who have just managed to enter.

2. Development of the investigation

The methodology used is descriptive and correlational between its cross-sectional elements and quantitative approach.

The selection of the population was intentional due to the access they have with university students, so different universities in Peru were selected to conduct a survey. In this research, students of entrants in the 2023-1 semester of the different universities participated, that is, they are students of the first cycle of studies, they applied in the months of March and / or April and achieved an entry quota. Thus, a sample of 1181 incoming students was achieved, of which 50.9% (601) are female and 49.1% (580) are male whose participation was unanimous. The incoming university students were from two types of universities, that is, 81.2% (959) were incoming students from state universities and only 18.8% (222) are incoming students from private universities, noting a great difference due to fear and lack of experience in participating in research work.

The students participating in this research range their ages from 15 to 20 years in 62.8% (742) followed by 31.2% (368) who are students aged 20 to 25 years and the difference of 6% (71) are incoming students over 25 years. It is worth mentioning that the incoming students belong to different

areas of study such as: 5.8% are the professional areas of basic sciences whose professional careers are Mathematics, Physics, Chemistry and Biology; 33.3% belong to the professional areas of engineering whose professional careers are Mining Engineering, Civil Engineering, Systems and Computer Engineering, Industrial Engineering, Agroindustrial Engineering and others; 29.6% are from the professional areas of Humanities and Letters whose professional careers are Law, Language and Literature, Accounting, Administration and others; 18.8% are from the professional areas of Social Sciences whose professional careers are Archaeology, Social Assistance, Education and others; and finally the professional careers of the area of Health Sciences whose careers are Nursing, Obstetrics, Human Medicine, Pharmacy and others.

The research was born when the deficiency in the reading comprehension of students entering the university was observed, so it was decided to select several instruments that manage to measure the level of comprehension in university students, after selecting four instruments found in the SCOPUS base, the measurement instrument of the author Razkane et al. (2023) was selected, which was interpreted with two native specialists from English to Spanish, after reviewing the instrument and being adapted to the Peruvian version, the respective tests were done with 70 students to know the perspectives and statistical data which affirmed three other expert Doctors of the subject from other universities. The instrument, once validated and adapted to the Peruvian version, used the Google form to assemble the online survey, in which the perspectives of incoming students on metacognition as a reading strategy could be measured, which has 19 questions divided into four dimensions.

As a first dimension we have the planning aspects in the reading which has six items (PL1: I activate my previous knowledge on the subject before reading the text; PL2: I pre-read the questions before reading the text; PL3: I try to predict the content of the text from the title or reading instructions; PL4: I define the main points to pay attention to, such as headings, dates, and names; PL5: I pay attention to the structure of the text and the thematic sentences and PL6: I pay attention to the attached image and try to predict the subject of the text) which will measure how it is planned before and during the reading of a text. The second dimension deals with the aspects of monitoring which has six items (M1: First I scan the text to get a general idea; M2: As I read, I activate my previous knowledge about the things mentioned in the text; M3: I try to guess the meaning of unfamiliar words from the sentence or the content of the text, M4: I take notes as I read to help me understand what I read and remember the information, M5: I underline important details in the text to help me remember and find them more easily later and M6: When I answer the questions, I emphasize the answers or words of support in the text), which will measure the way he carries out the reading process and the way he manages to understand the text. The third dimension deals with aspects of supervision and follow-up which has two items (SS1: I know how to handle difficult vocabulary in the text and SS2: When the text is difficult, I pay more attention to what I am reading or re-read it) this dimension will measure the moment when the incoming student encounters difficulties in his reading and finally the dimension of the evaluation aspects which has five items (E1: I evaluate myself whether or not I was successful in this reading task, E2: I review my reading process and think about ways they can improve my reading comprehension; E3: I discuss the difficult points of the text with my classmates and exchange reading experiences to share more effective reading strategies; E4: When I receive the graded test, I try to find the right answers to the tasks that were done wrong and E5: When I receive the graded test, I try to analyze my mistakes and understand what made me give an incorrect answer) which will measure the evaluation that each of the incoming university students will make after having read a text and after having been evaluated.

In this way, with this instrument adapted to the Peruvian version, it will be possible to analyze and describe the perspectives of the reading strategies used by incoming university students to face their professional studies, for which the Likert scale is used (1 = I never do this; 2 = I almost never do this; 3 = I occasionally do this; 4 = I almost always do this and 5 = I always do this) and measure the perception of incoming students. It was also consulted on the sociodemographic data in which different scales were used as the case may be, consulting the age (in intervals of five years), sex (male and female), the type of university in which he studies (private or state) and the area of the professional career in which he studies or in which he entered.

The joy of entering a university is immense at first, then just comes the new experiences whether satisfactory or not in studies, but there is greater concern on the part of teachers because they find that incoming students have a high level of deficiency in reading and even more in reading comprehension

because they capture little or nothing of reading which makes the academic performance of incoming students are very low. It is for this reason that we want to analyze and describe the perspectives of the reading strategies used by incoming university students which will serve to make institutional and professional decisions to be able to face and improve reading skills through strategies that improve the academic performance of incoming students.

Thus, several databases were investigated in order to select a scientific article that could measure the reading strategies of incoming students, and after having selected the article by Razkane et al., (2023) we proceeded to adapt it to the Peruvian version with the help of native translators and then put together the online survey. Where it was programmed to be able to answer only once with institutional mail as personal mail, because the survey would be nationwide with voluntary and anonymous participation, the online survey was shared with known colleagues so that they can disseminate it only in students who recently entered, that is, for students who are in the first academic cycle of a professional career. In the online survey it was informed and requested about the authorization for the completion of the survey and that its answers would be used at the end of the research anonymously always respecting and preserving the ethics of the research and the agreements of the Helsinki convention.

The research begins at the beginning of the semester after performing text comprehension readings on incoming students, approximately the month of April, which is why it was expected to have results of the first evaluations to be able to analyze the academic performance of the incoming students. With very low results in academic performance due to lack of reading comprehension, the online survey is carried out to know the perspectives of reading strategies, after conducting the survey proceeded to download the Excel file of Google Forms for its respective evaluation and review of some missing data, when no incomplete data was found, we proceeded to convert to the format of SPSS version 25 in which the analysis of reliability, reliability and statistical data for the investigation were performed, as well as the respective confirmatory factor analysis where a Cronbach's alpha of 0.940 reliable or very consistent value was very high, the statistical value of the ANOVA with test for non-additivity of Turkey with $gl = 18$, square mean=27.515, $F=49.015$ and $sig=0.00$ between elements and for non-additivity $gl=1$, square mean=2.838, $F=5.056$ and $sig=0.025$. Hotelling's T-square test =788.716, $F=43.186$, $Sig=0.00$.

3. Results

Table 1 shows the statistical values of the dimension of reading planning where the highest average is PL6 (3,675) which corresponds to the fact that the incoming student pays attention to the attached image of the reading and tries to predict the topic of the text, managing to predict the topic he will read and this helps to improve the academic performance of the incoming students. While the lowest average is PL1 (3.303) which corresponds to the student manages to activate their previous knowledge of the subject before reading the text, that is, although it is a value of 3.303 and is high, the way to activate previous knowledge must be improved, although it would be better to teach them reading tactics to overcome this value. But the total average is 3,508 which indicates that they have a good level of planning before a reading, making it known that in any case it is necessary a reinforcement in how to improve the level of reading to raise academic performance.

Table 1. Statistical distribution of reading planning

	PL1	PL2	PL3	PL4	PL5	PL6
Total mean	3.508					
Mean	3,303	3,516	3,546	3,482	3,530	3,675
Standard deviation	1,0183	1,0580	,9927	,9824	,9838	1,0256
Variance	1,037	1,119	,985	,965	,968	1,052
Asymmetry	-,151	-,319	-,381	-,261	-,389	-,470
Asymmetry error	,071	,071	,071	,071	,071	,071
Kurtosis	-,432	-,495	-,282	-,440	-,164	-,361
Kurtosis error	,142	,142	,142	,142	,142	,142

While in figure 1, the perspectives of the incoming students on the dimension of reading planning are shown, where it is shown that the most used perspective is "I almost always do it" (PL3, PL4, PL5 and PL6) making it known that if there is more than an intention when planning a reading, But remembering that incoming students only come with training at a basic level of school, where they learned little or nothing about how to study or how to read a text and it is precisely the problem of students with low academic performance.

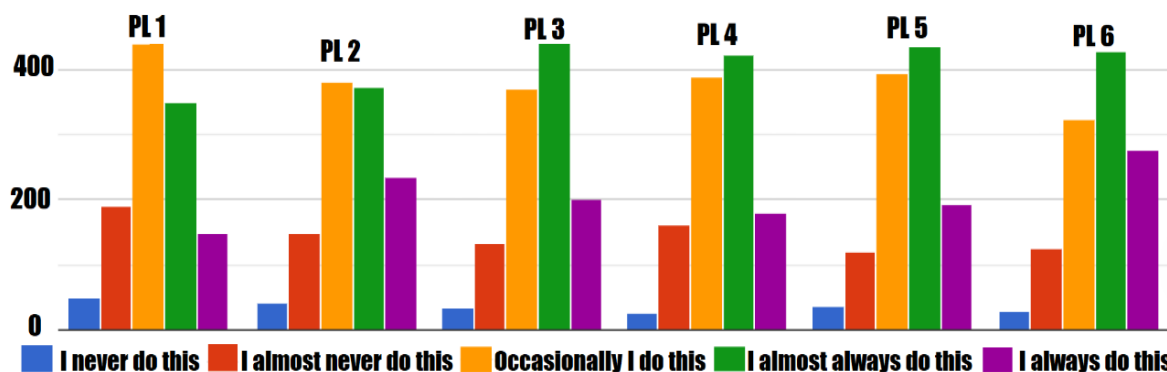


Figure 1. Perspective of planning aspects

Table 2 shows the statistical values of the reading monitoring dimension where the highest mean is M5 (3,633) which corresponds to the fact that the incoming student underlines the important details in the text to help him remember and find the idea provided more easily, that is, the incoming student still makes use of the underscores to highlight the main ideas. While the lowest average is the M1 (3.382) which corresponds to the incoming student first scanning or reviewing the text to get a general idea and can concentrate when reading the text, this will make the student not get lost or is not rambling on other things and is concentrated on the subject of reading, But still this value is high according to our scale of perception; which indicates that this topic should be reinforced more on how to focus on reading after having scanned the topic to achieve better learning and have good results when it comes to evaluations. But the total average is 3,509 which indicates that they have a good level of monitoring before a reading, but this point should be evaluated by a specialist; That is, you should have a companion (only in the research) to better know this point of research and really see what the incoming student does, because the only thing he remembers for a reading is to highlight the most important but without effects when answering questions about reading, it is for that reason that it must be taught to incoming students how to study and thus achieve good performance academician.

Table 2. Statistical distribution of Monitoring

	M1	M2	M3	M4	M5	M6
Total mean	3.509					
Mean	3,382	3,599	3,504	3,405	3,633	3,531
Standard deviation	1,0246	,9449	1,0371	1,1011	1,0854	1,0854
Variance	1,050	,893	1,076	1,212	1,178	1,178
Asymmetry	-,229	-,333	-,369	-,324	-,476	-,394
Asymmetry error	,071	,071	,071	,071	,071	,071
Kurtosis	-,392	-,311	-,395	-,572	-,488	-,489
Kurtosis error	,142	,142	,142	,142	,142	,142

While in figure 2, the perspectives of the incoming students on the dimension of reading monitoring are shown, where it is shown that the most used perspective is "I almost always do it" (M2, M3, M4, M5 and M6) making known that students practice scanning the text, remember some previous knowledge, guess the meaning of some words that they do not know and more than anything underline the important ideas to support themselves. in the best understanding and acquisition of knowledge.

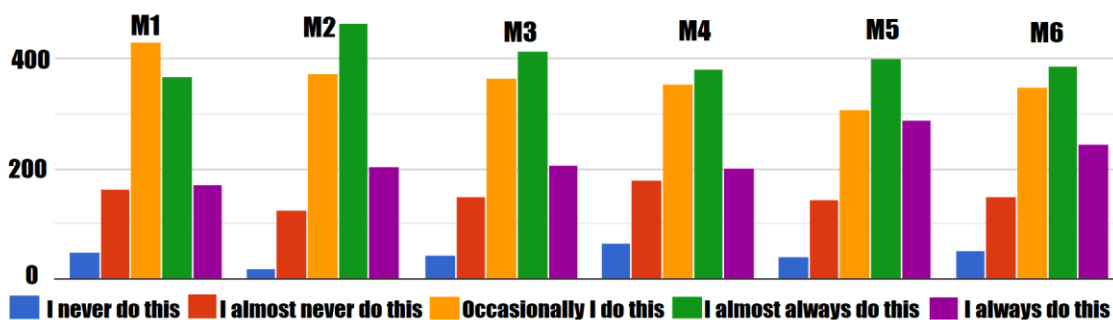


Figure 2. Perspectives on aspects of monitoring

Table 3 shows the two statistical values of the dimension that deals with the aspects of supervision and monitoring where we only have two values SS1 (3.312) that represents the lowest value and deals with how to handle the difficult vocabulary found in the texts when reading. At this point what is wanted for the incoming student is that once an unknown word is detected, he should use a dictionary to better know the meaning and have a broader vision, but because the student wants to finish reading he does not, it is for that reason that he has a low academic performance and the SS2 (3.816) high value that deals with how the student pays attention or re-read the text when you have not understood it, this point if you do it at all times and you notice this difficulty because you do not have a suitable place to study and that is why you do not concentrate, if you study at home you are distracted by a relative, while if you live alone this is distracted by anything either an incoming call, a text message or a friend looking to kill leisure. It is for this reason that good reading practices must be instilled in a suitable place without any interruption and thus capture all the knowledge of the text read. The average of these two values is 3,564 which is an acceptable value, but with deficiencies in its results when putting into practice or when reading a text.

Table 3. Statistical distribution of monitoring and follow-up

	SS1	SS2
Total mean	3,564	
Mean	3,312	3,816
Standard deviation	,9349	,9756
Variance	,874	,952
Asymmetry	-,189	-,542
Asymmetry error	,071	,071
Curtosis	-,032	-,181
Kurtosis error	,142	,142

Figure 3 shows the perspectives of the supervision and monitoring dimension with respect to incoming students when they perform text reading, showing that the perspective of "occasionally I do this" came before all in SS1, while in SS2 it came before "almost always I do this", demonstrating that students do have good perspectives on reading strategies.

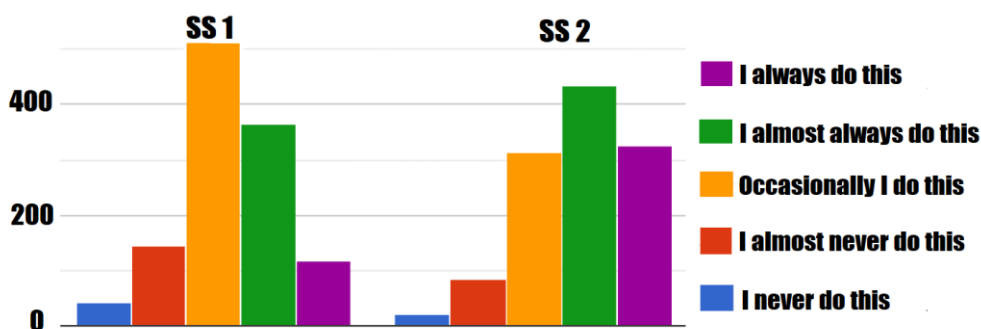


Figure 3. Perspectives of the monitoring and follow-up dimension

Table 4 shows the statistical values of the dimension evaluation of reading where the highest average is E5 (3.841) that corresponds to the moment of analyzing the qualified test, where it tries to recognize the errors and tries to understand what it answered incorrectly, this point is very critical for the university student because this is where he has to know the truth and know the result of his studies, That is, whether or not he managed to understand the subject and if he could answer the questions of the evaluation, most students feel frustration at this time, and therefore in this situation the intervention of the tutor or the teacher himself is essential to make him understand that if he made a mistake, but it is not forever and that for a next evaluation he must prepare well in advance and be ready to be Evaluated. In such a way you also have the lowest average E3 (3.346) that corresponds to exchange ideas and experiences of the difficult points of reading, this point will exist if the reading or study is done in a group, otherwise you will not be able to share your experience or your reading strategy, with this point it should be recommended to study in groups to share your own experiences and be able to improve academic performance. The total average of the evaluation dimension is 3,582 a relatively high average value but with weaknesses that have to be reinforced with university students and more than anything with incoming students who arrive at university with different methodological characteristics or without them and it is the university that has to level These methodologies to train a good professional and demonstrate it in their field of action, but that will always be done when they understand and understand well the text they are reading and can collect all the information from the text.

Table 4. Evaluation dimension distribution

	E1	E2	E3	E4	E5
Total mean	3.582				
Mean	3,480	3,546	3,346	3,697	3,841
Standard deviation	,9815	,9728	1,0290	1,0023	,9847
Variance	,963	,946	1,059	1,005	,970
Asymmetry	-,410	-,302	-,291	-,463	-,573
Asymmetry error	,071	,071	,071	,071	,071
Kurtosis	-,075	-,318	-,338	-,313	-,169
Kurtosis error	,142	,142	,142	,142	,142

Figure 4 shows the perspectives of the evaluation dimension with respect to incoming students when they perform a reading of a text, demonstrating that the most used perspective is the "I almost always do this" (E1, E2, E4 and E5) making it known that students always evaluate themselves to know if they were successful or not, wait for your evaluation to know your mistakes and face them, try to find some good answer to request an increase in points and understand that if you made a mistake when responding.

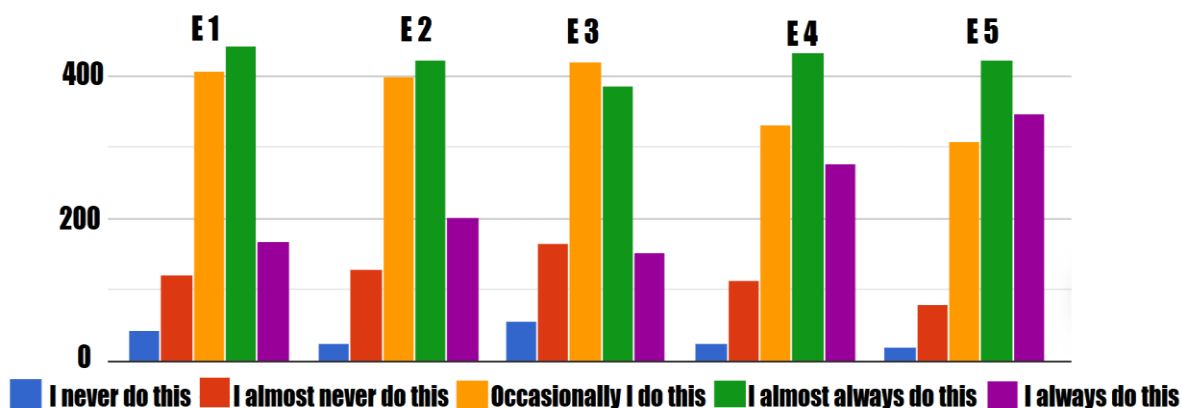


Figure 4. Perspectives of the evaluation dimension

Table 5 shows the correlation between elements of the reading strategies of incoming university students, observing the values all are positive which shows that there is a significant relationship.

Table 5. Correlation between elements of reading strategies

Ítem	PL1	PL2	PL3	PL4	PL5	PL6	M1	M2	M3	M4	M5	M6	SS1	SS2	E1	E2	E3	E4	E5
PL1		,449	,523	,532	,591	,521	,440	,519	,327	,438	,433	,422	,413	,424	,424	,454	,406	,385	,402
PL2			,502	,491	,459	,498	,406	,435	,357	,376	,362	,359	,301	,336	,318	,344	,296	,371	,383
PL3				,525	,530	,617	,410	,471	,428	,354	,399	,370	,364	,419	,372	,400	,371	,386	,406
PL4					,604	,582	,459	,512	,355	,469	,488	,466	,432	,430	,438	,453	,401	,436	,456
PL5						,604	,466	,547	,334	,504	,523	,523	,437	,474	,455	,515	,418	,467	,472
PL6							,435	,479	,436	,406	,469	,432	,396	,456	,418	,451	,389	,416	,447
M1								,590	,458	,450	,465	,451	,408	,447	,462	,442	,372	,440	,436
M2									,476	,540	,530	,517	,449	,516	,497	,528	,457	,512	,529
M3										,321	,353	,346	,329	,371	,317	,282	,316	,364	,349
M4											,688	,660	,374	,401	,485	,502	,498	,472	,452
M5												,733	,362	,455	,495	,517	,450	,524	,500
M6													,389	,428	,476	,520	,444	,481	,470
SS1														,529	,471	,448	,444	,404	,431
SS2															,437	,460	,343	,492	,539
E1																,677	,537	,531	,545
E2																	,545	,567	,545
E3																		,518	,472
E4																			,713
E5																			

4. Conclusions

Significant effects were observed in reading skills and interpretation of keywords, where the student uses the different reading strategies whose effects are increases in academic performance as well as better comprehension of texts (Moir et al., 2020), an analysis of strategies aloud suggests that the reading employed by students is a problem of metacognitive strategies Therefore, it is suggested to look for other ways to teach how to read a text and to fully understand reading (Deri & Shamsudin, 2018), such as the strategy of one-to-one dialogue and the advice of the tutor help to improve the understanding of the text and especially to develop critical thinking and to generate greater self-confidence (Elston et al., 2022), for which feedback is needed to strengthen the text, whose function is exclusive to the teacher (Reynaga-Chávez et al., 2023).

Many studies have shown that the use of reading strategies has a significant effect on students' reading comprehension. In addition, male students use more reading strategies than female students and perform better in reading comprehension (Karizak & Khojasteh, 2016) as well as students optimally use time to read and understand the text better (Ulu & Ulusoy, 2019), and from these results a thought-speech protocol was generated where mental strategies and processes were developed in different ways (Bulut & Ertem, 2021) As they showed a high significant difference in the levels of comprehension of texts by study groups (Li et al., 2022) despite the student deficiencies since when encouraging the use of strategies it should be taught explicitly to find findings that involve teachers and students (Brevik, 2019), it is for this reason that teacher development As a tutor he is very important in guiding reading strategies as the development of skills and critical thinking to transform students into skilled readers (Tiba, 2023).

There are multiple benefits that are achieved by teaching reading strategies because some have a better effect than others and will depend on their application and the environment where it is applied (Kissau & Hiller, 2013) because if the comprehension of reading or texts decreases, students will suffer a deficit of words, deficit of syntactic development as a deficit of lexical development (Nippold, 2017), This could occur if teachers do not have an understanding of reading strategies either explicitly or implicitly, which is why teachers convert entire reading sessions to complete vocabulary sessions and in other cases were typical questions where students are not involved (Olifant et al., 2022). Where more study strategies and techniques are used are in language courses, especially in English where students practice in groups to answer text comprehension questions (Sieo et al., 2022) as well as in mathematics courses where virtuality had made them a bit cybernetic, but the participation of students was

recovered with readings aloud and then make interventions with their own classmates (Silvera-Alarcón et al., 2023).

Metacognitive strategies help to use appropriate strategies to better understand the text with reading comprehension questions and answers (Halim et al., 2020), so teachers performed a variety of reading comprehension exercises to determine the techniques most frequently and observed that reading aloud, asking questions, activating prior knowledge and using graphic organizers. They help efficiently, but at the same time, there was no clear guidance on when and how to use reading comprehension strategies (Ko & Hughes, 2015), but future teachers use almost 50% of the strategies referred to in the literature as reading strategies and within them the most used are those that include riddles by Visual media that stimulate prior knowledge (Schmidt et al., 2021), as well as annotation strategies that improved student performance, reading comprehension and therefore academic performance, this note-taking helped students find key points and dismember complex texts that allowed them to have greater concentration to students, develop their critical thinking and understand complex content (Lloyd et al., 2022).

Most respondents agreed that reading strategies, such as leafing and scanning, were more suitable for online classes, as this e-learning has helped motivate students and create an atmosphere that encourages independent learning (Alhumsi et al. 2021) showing a significant difference in text comprehension skills between students and students. learned to read using different methods (Başar & Gürbüz, 2017) that helped improve students' levels of text comprehension in which they improved significantly after the moving image narration program which has been applied to test techniques and more research is needed since the Results challenge reading comprehension models by oversimplifying the complex relationships between word recognition and comprehension. Notably, the results demonstrate the importance of implementing alternatives to written text in reading curricula (Maine & Shields, 2015); these improvements in reading impacted all students who participated in peer tutoring, but the impact was greater for tutors and participants who assumed both roles (Valdebenito & Duran, 2015).

One of the strategies was also the use of the concept map tool that could be considered as an effective alternative to summary strategies, this to promote reading comprehension (Soriano-Ferrer et al., 2013), although traditional reading strategies seem to be based on vocabulary growth, students in e-learning environments tend to depend of the analysis at the level of sentences to understand academic texts (Chang et al., 2021) and this result speaks of the first year of direct instruction where the results showed an improvement in reading strategies and sentence recall for a large part of the students participating in this method of direct teaching (Braojos et al., 2014) and Some teachers demonstrated knowledge about the strategies, however, in many cases their instruction seemed to be directed to non-practical activities rather than teaching explicit strategies, so teachers focused mainly on the structure of the text and the discussion based on the text (Magnusson et al., 2019), which is why Error rates in reading skills decreased after implementing the strategy of approaching reading through the topic and its main ideas (Naidu et al., 2013) This method is highly recommended to train students of special skills because they grasp the idea with greater capacity through recreational activities (Huamán-Romaní et al., 2023).

The perspectives of the reading strategies used by the students are above the expected, higher than 3 on a scale of 1 to 5, but even so, the students do not put them into practice when reading and that is the reason why they do not have a good academic performance.

It is necessary to support incoming university students in subjects such as propaedeutics or study techniques to obtain better results because despite underlining the main ideas, paying attention or looking at the images of the text so they can have an idea of what they are going to read, despite noting or trying to understand the unknown words and despite rereading the topic they have not understood, the student states that they do not remember and have mental gaps about the text.

The most important points to work on are: the student, in spite of activating everything he has learned about how to read a text, gets distracted with some activity, the same happens when he reviews the text or scans the text to know what it is about; the other problem is the unknown words and these are ignored because he does not know their meaning, and this makes him lose the notion of the reading or the text read; And finally, they recognize their mistakes in the evaluations but still do nothing to improve in their studies and do not form study groups and this point could be because they do not know

each other or they are shy, remember that they are students of the first cycle and have very little interaction among them.

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