

Información Importante

La Universidad de La Sabana informa que el(los) autor(es) ha(n) autorizado a usuarios internos y externos de la institución a consultar el contenido de este documento a través del Catálogo en línea de la Biblioteca y el Repositorio Institucional en la página Web de la Biblioteca, así como en las redes de información del país y del exterior con las cuales tenga convenio la Universidad de La Sabana.

Se permite la consulta a los usuarios interesados en el contenido de este documento para todos los usos que tengan finalidad académica, nunca para usos comerciales, siempre y cuando mediante la correspondiente cita bibliográfica se le de crédito al documento y a su autor.

De conformidad con lo establecido en el artículo 30 de la Ley 23 de 1982 y el artículo 11 de la Decisión Andina 351 de 1993, La Universidad de La Sabana informa que los derechos sobre los documentos son propiedad de los autores y tienen sobre su obra, entre otros, los derechos morales a que hacen referencia los mencionados artículos.

BIBLIOTECA OCTAVIO ARIZMENDI POSADA
UNIVERSIDAD DE LA SABANA
Chía - Cundinamarca

UNIVERSIDAD DE LA SABANA		
INSTITUTO DE POSTGRADOS- FORUM		
RESUMEN ANALÍTICO DE INVESTIGACIÓN (R.A.I)		
ORIENTACIONES PARA SU ELABORACIÓN:		
N o.	VARIABLES	DESCRIPCIÓN DE LA VARIABLE
1	NOMBRE DEL POSTGRADO	Master in English Language for Self-directed Learning (Online Program)
2	TÍTULO DEL PROYECTO	Improving reading comprehension through metacognitive self-directed reading strategies
3	AUTOR(es)	Veronica Ortiz Alvaran, Elsa Patricia Méndez, Edwin Sánchez Hernández
4	AÑO Y MES	Julio, 2014
5	NOMBRE DEL ASESOR(a)	Alethia Bogoya
6	DESCRIPCIÓN O ABSTRACT	This paper aims at showing the results of a research study about the effects of metacognitive self-directed strategies on English Foreign Language EFL students' reading comprehension proficiency. The research was carried out in three different contexts: "Ciudadela del Sur High School" (context 1), University of Ibague (context 2) and Institution "Educativa Juvenil Nuevo Futuro" (context 3). The participants were ninth grade students in the public schools and young adults in the university, among 14 and 19 years old whose English levels correspond to A1 according to the Common European Framework.
7	PALABRAS CLAVES	Reading, comprehension skills, metacognitive reading strategies, self-directed learning.
8	SECTOR ECONÓMICO AL QUE PERTENECE EL PROYECTO	Educación
9	TIPO DE ESTUDIO	Investigación
10	OBJETIVO GENERAL	Exploring the effects of direct instructions of metacognitive reading strategies on students' self-direct learning.
11	OBJETIVOS ESPECÍFICOS	Investigating the use of metacognitive reading strategies in EFL Colombian classrooms. Examining the effects on students reading comprehension

		proficiency. Promoting the use of these strategies so that students become self-direct learners and improve their reading skills.
12	RESUMEN GENERAL	The goals of this study were achieved, the quantitative and qualitative data results, promoting the metacognitive strategies help the target students become self-directed learners, allowed them be aware of metacognitive reading strategies they should use based on their reading needs; despite all the differences of the three contexts regarding students' age, language level, and academic situations; this was one of the common positive results after carrying out this work. The subjects also showed important improvements related to their attitudes towards their own second language learning process. The analysis of the results that were obtained by the students in the three different contexts before, during and after applying the metacognitive strategies on this project, allowed the researchers confirmed that they improved their reading comprehension proficiency. Information found in the teachers' journals described that a remarkable majority of learners in the three contexts went through processes involving features which are linked to autonomous learning.
13	CONCLUSIONES	Results of the data collection instruments pointed out that after students explored, and implemented the metacognitive reading strategies; they became more aware of the way they were learning. The obtained data also shows that the learners' awareness affected positively their achievement in their reading comprehension in the three different contexts in which this study was carried out. Therefore, teaching metacognitive strategies proved to be a key element for success. The results of this study add validity to those found in other local and international studies since it was demonstrated that students were benefited from receiving a direct instruction of metacognitive strategies that facilitated their reading outcome

14	FUENTES BIBLIOGRÁFICA	<p>Abdullah, M. H. (2001). Self-directed learning. Bloomington, IN: ERIC Clearinghouse on Reading, English, and Communication. (ERIC Document Reproduction Service No. ED459458).</p> <p>Alderson, J. C. (2000). Assessing Reading. Cambridge: Cambridge University Press</p> <p>Anderson, N. J. (2002). "The role of metacognition in L2 teaching and learning," ERIC Digest. Retrieved December 6, 2013 from http://www/-ericdigests.org/</p> <p>Atehortua, J. (2010). Cognitive Styles: an Approach to Autonomous Learning in I2 Adult Students . Revista Universidad Pontificia Bolivariana, Vol. 4 No. 8 page 11.</p> <p>Benson, P. (2001). Teaching and researching autonomy in language learning. Harlow: Longman/ Pearson Education.</p> <p>Best, J.W. and Kahn J.V. (2006). Research in education. United state of America: Pearson.</p> <p>Biehler, R. and Snowman, J. (1993). Psychology Applied to Teaching. Boston: Houghton Mifflin Company.</p> <p>Bonds, C., Grant Bonds, L., and Peach, W. (1992). Metacognition: Developing independence in learning. Clearing House, 66(1), 56-59.</p> <p>Boud, D. (1998) Moving towards autonomy in Boud. D. ed. Developing student autonomy in learning. 2nd edition. London: Kogan</p> <p>Brophy, J. (1986, October). On motivating students. East Lansing, Michigan: Institute for Research on Teaching, Michigan State University, (ERIC Document Reproduction Service No. ED276724).</p> <p>Brown, J.D. (2001). Using surveys in language programs. Cambridge: Cambridge University Press.</p> <p>Bryman, A. & Burgess, R. (1999). Qualitative research. In Hollstein, B. (n.d.). Qualitative</p>
----	----------------------------------	---

		<p>approaches. Sage Handbook of Social Network Analysis. London, New Delhi. Vol. 4.</p> <p>Cain, K., Oakhill, J. V., & Bryant, P. E. (2000). Investigating the causes of Reading comprehension failure: The comprehension-age match design. Reading and Writing.</p> <p>Carvalho, S. & White, H. (1997). Combining the Quantitative and Qualitative Approaches to Poverty Measurements and Analysis. The practice and the Potential. Washington: The International Bank for Reconstruction and Development</p> <p>Creswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five traditions. Thousand Oaks, CA: Sage.</p> <p>Creswell, J. W. & Miller, D. L. (2000). Determining validity in qualitative inquiry. Theory into Practice, 39(3), 124-131.</p> <p>ÇubukÇu, F. (2008). How to Enhance Reading Comprehension through Metacognitive Strategies.</p> <p>Day, R., and J. (1998). Bamford. Extensive reading in the second language classroom. Cambridge: Cambridge University Press.</p> <p>Denzin, N. K. (1978). The research act: A theoretical introduction to sociological methods. New York: McGraw-Hill.</p> <p>Devine, J. (1993). The role of metacognition in second language reading and writing. In J. Carson and I. Leki (Eds.), Reading in the Composition Classroom: Second Language Perspectives (pp. 105-127). Boston: Heinle and Heinle.</p> <p>Dörnyei, Z. (2007). Research methods in applied linguistics. Oxford: Oxford University Press.</p> <p>Eggen, P. and Kauchak, D. (1995). Strategies for Teachers: Teaching Content and Thinking Skills. Boston: Allyn and Bacon.</p>
--	--	--

		<p>Freeman, D. (1998). <i>Doing teaching research: From inquiry to understanding</i>. Canada: Heinle and Heinle publishers.</p> <p>Fung, I. Y. Y., Wilkinson, I. A. G., & Moore, D. W. (2003). L1-assisted reciprocal teaching to improve ESL students' comprehension of English expository text. <i>Learning and Instruction</i>, 13, 1-31.</p> <p>Garb, E. (2000). Maximizing the potential of young adults with visual impairments: The metacognitive element. <i>Journal of Visual Impairment and Blindness</i>, 94 (9), 574 – 583.</p> <p>Gough, P.B., & Hillinger, M.L. (1980). Learning to read: An unnatural act. <i>Bulletin of the Orton Society</i>.</p> <p>Griffiths, C. (2008). Strategies and good language learners. In C. Griffiths (Ed). <i>Lessons from good language learners</i> (pp. 83-98). Cambridge: Cambridge</p> <p>Guba, E. & Lincoln, Y. (1985). <i>Naturalistic Inquiry</i>. United States of America: SAGE publications.</p> <p>Harvey, S. & Goudvis, A. (2000). <i>Strategies that work</i>. Portland, Maine: Stenhouse Publishers.</p> <p>Hammond, M and Collins, R. (1991). <i>Self-Directed Learning: Critical Practice</i>. London: Kogan.</p> <p>Janopoulos, M. (1986). The relationship of pleasure reading and second language writing proficiency. <i>TESOL Quarterly</i>, 20 (4).</p> <p>Jones, W.P. & Kottler, J.A. (2006). <i>Understanding research: Becoming a competent and critical consumer</i>. Upper Saddle River, NJ: Pearson</p> <p>Joppe, M. (2000). <i>The Research Process</i>. Retrieved February 25, 2014, from</p>
--	--	---

		<p>http://www.ryerson.ca/~mjoppe/rp.htm</p> <p>Kenning, M-M. (1996). Creating an infrastructure for autonomous learning: The resource center. <i>System</i>, 24, 223-231</p> <p>Krashen, S. (1993). <i>The power of reading. Insights from the research.</i> Englewood, Co.: Libraries Unlimited.</p> <p>Lepper, M.R. (1998). Motivational considerations in the study of instruction. <i>Cognition and instruction</i>, 5 (4), 289 – 309.</p> <p>Lonergan, J. (1994). Self-access language centers: Implications for managers, teachers and learners. In E. Esch (Ed.) <i>Self-access and the adult language learner</i> (pp. 119 – 125). London: CILT</p> <p>Lopez, A.& Giraldo, M. (2011). The English Reading Strategies of Two Colombian English Pre-service Teachers <i>Íkala, revista de lenguaje y cultura</i>, vol. 16, núm. 28, , pp. 45-76. Universidad de Antioquia. Colombia</p> <p>Mathison, S. (1988). Why triangulate? <i>Educational Researcher</i>, 17(2), 13-19.</p> <p>McNamara, D. S. (2004). SERT: Self-explanation Reading Training. <i>Discourse Processes</i>, 38, 1– 30</p> <p>Mertler, C. (2009). <i>Action Research. Teachers as researchers in the classroom.</i> SAGE Publications. Inc.</p> <p>Mishler, E. (1990). Validation in inquiry-guided research: The role of exemplars in narrative.</p> <p>Moore, C. (1992). <i>Self-access : Appropriate technology.</i> Manchester: British Council.</p> <p>O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., & Russo, R. (1985). Learning strategies used by beginning and intermediate ESL students. <i>Language Learning</i>, 35, 21-</p>
--	--	--

46.

O'Malley, J. M., Russo, R. P., Chamot, A. U., & Stewner-Manzanares, G. (1998).

Applications of learning strategies by students learning English as a second language.

In C. E. Weinstein, E. T. Goetz, & P. A. Alexander (Eds.), *Learning and study strategies: Issues in assessment instruction and evaluation* (pp. 215-231). San Diego: Academic Press.

Oxford, R. (1992). *Research on Second Language Learning Strategies*. Annual

Review of Applied Linguistics, 13, pp 174-187. doi:10.1017/S0267190500002452.

Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Pearson, J. (1998). 'Teaching terminology using electronic resources' in S. Botley, A.

McEnery and A. Wilson (eds.) *Multilingual Corpora in Teaching and Research*. Amsterdam: Rodopi.

Peirce, W. (2003). *Metacognition: Study strategies, monitoring, and motivation*. Retrieved February 14, 2014, from

<http://academic.pg.cc.md.us/~wpeirce/MCCCTR/metacognition.htm>

Piano, C. (2010). The adoption and practice of mixed methods: U.S. trends in federally funded health related research. *Qualitative inquiry*, 6 (6), 428 – 440

Quiroga, C. (2010). Promoting tenth Graders' Reading Comprehension of Academic Texts in the English Class. *PROFILE*, 12 (2), 11 – 32. Retrieved from:

<http://www.scielo.org.co/pdf/prf/v12n2/v12n2a02.pdf>

Roberts, L. W., Geppert, C. M., Coverdale, J., Louie, A., & Edenharder, K. (2005). *Ethical*

		<p>and regulatory considerations in educational research. Acad. Psychiatry.</p> <p>Salataci, R., & Akyel, A. (2002). Possible effects of strategy instruction on L1 and L2 reading. Reading in a Foreign Language 14(1), 1-17.</p> <p>Sale, C. (1999). The Quality of Qualitative Research. Introducing Qualitative Methods. Great Britain: SAGE publications Ltd.</p> <p>Samad, A. A. (2011). Structure to Facilitate Reading Comprehension. The Reading Teacher, 64: 368-372. doi: 10.1598/RT.64.5. How to Teach Expository Text</p> <p>Smith, F. (1971). Understanding reading: A psycholinguistic analysis of reading and learning to read. New York: Holt, Rinehart and Winston.</p> <p>Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory. Thousand Oaks, CA: Sage.</p> <p>Tsang, W. (1996). Comparing the effects of reading and writing on writing performance. Applied Linguistics.</p> <p>Tudor, I. and F. Hafiz. (1989). Extensive reading as a means of input to L2 learning. Journal of Research in Reading.12 (2).</p> <p>Vygostsky, L. (1978). Interaction Between Learning and Development. From Mind and Society (pp. 79 – 91) Cambridge, MA: Harvard University Press.</p> <p>Wren, S. (2002). Ten myths of reading instruction. SEDL. Letter</p>
		Vo Bo Asesor y Coordinador de Investigación:
		CRISANTO QUIROGA OTÁLORA

**Improving reading comprehension through metacognitive self-directed reading
strategies**

Verónica Ortiz Alvarán
Elsa Patricia Méndez Guzmán
Edwin Sánchez Hernandez

Research report submitted
in partial fulfillment of the requirements for the degree of
Master in English Language for Self-directed Learning (Online Program)

Directed by: Mg. Alethia Bogoya

Department of Foreign Languages and Cultures

Universidad de La Sabana

Chía, 2014

Acknowledgements

We would like to thank God and all the people who have helped us to make this research project a success, giving us support through this process.

First, our particular thanks to God for guiding us during this journey. Our thanks and appreciation to our counselor, Mg. Alethia Bogoya, who has given us an extremely positive support and guidance right from the first moment we started to work.

We are grateful to our colleagues in the Master's program, the principals and coordinators from the places we work at for allowing us to make research at their institutions as well as to all the students for letting us work and learn with them.

Last but not least, thanks to our families for their constant encouragement and patience during these years of hard work.

Abstract

This paper aims at showing the results of a research study about the effects of metacognitive self-directed strategies on English Foreign Language EFL students' reading comprehension proficiency. The research was carried out in three different contexts: "Ciudadela del Sur High School" (context 1), University of Ibagué (context 2) and Institution "Educativa Juvenil Nuevo Futuro" (context 3). The participants were ninth grade students in the public schools and young adults in the university, among 14 and 19 years old whose English levels correspond to A1 according to the Common European Framework.

The mixed method approach was used to analyze data from both the quantitative and qualitative perspective. Different data collection instruments, i.e. pre and posttests, semi-structured interviews, teachers' journals and results from students' products (reading comprehension exercises and practice of the particular strategy) were used to answer the research question.

The project expected that the use of metacognitive strategies and self-directed learning could engage learners more in reading and will help them achieve better reading comprehension abilities. Results indicate that using metacognitive strategies positively affects learners' reading comprehension since students' reading achievement improved after four weeks of metacognitive strategy instruction.

Keywords: Reading, comprehension skills, metacognitive reading strategies, self-directed learning.

Resumen

El objetivo de este documento es mostrar resultados de la investigación efectos de las estrategias metacognitivas en la comprensión lectora de estudiantes de inglés como lengua extranjera. La investigación fue llevada a cabo en tres entornos diferentes: “I E. Ciudadela del Sur” (entorno 1), Universidad de Ibagué (entorno 2) e Institución “Educativa Juvenil Nuevo Futuro” (entorno 3). Los participantes fueron estudiantes de noveno grado en dos escuelas públicas y jóvenes-adultos universitarios; todos ellos entre los 14 y 19 años de edad y con un nivel de inglés A1 según el Marco Común Europeo.

El enfoque método-mixto se usó para analizar la información desde una perspectiva cuantitativa y cualitativa. Se recolectó la información durante el proceso de la investigación por medio de los instrumentos aplicados: un cuestionario, un pre-examen, un post-examen, una entrevista semiestructurada, un diario de docentes y resultados de las actividades hechas por los estudiantes (ejercicios específicos de comprensión de lectura). Los estudiantes de las mencionadas instituciones educativas no estaban acostumbrados a trabajar de manera auto-dirigida y su participación en actividades de lectura propuestas por los profesores era demasiado baja.

Este estudio esperaba que el uso de estrategias metacognitivas y el autoaprendizaje pudieran involucrar aún más a los estudiantes en las actividades de lectura, así como también podrían ayudarlos a alcanzar mejores niveles de comprensión. Los resultados indicaron que el uso de estrategias metacognitivas afectó positivamente la comprensión

lectora de los estudiantes, ya que mejoraron su desempeño en comprensión de lectura después de cuatro semanas de instrucción en dichas estrategias.

Palabras clave: Lectura, Habilidades de comprensión, estrategias metacognitivas de comprensión, auto aprendizaje.

Table of contents

Introduction	11
Statement of the problem	13
Research Question	14
Research Objectives	14
Rationale	15
Theoretical framework	17
Reading	17
Metacognition	18
Self-Directed Learning	19
Metacognitive strategies	20
Planning strategies	21
Monitoring strategies	22
State of the art	23
Research Design	27
Type of study	27
Context and Participants	28
Researcher's role	30
Ethical considerations	31
Procedures and Data Collection Instruments	32
Instrument 1: Questionnaire	34
Instrument 2: Pre- test and post – test	34
Instrument 3: Semi-structured interview	35
Instrument 4: Teacher's journal	35
Instrument 5 : Students' products	36
Validation Process	36
Design and Validation of the Instruments and Procedures	38
Pedagogical intervention and implementation	39
Instructional Design	39
Pre-stage	40
While-stage	40

Post-stage	42
Procedures of data analysis	43
Quantitative analysis	44
Questionnaire	44
Students' reading proficiency	45
Qualitative analysis	49
Open coding	51
Axial coding	53
Conclusions and pedagogical implications	58
Pedagogical implications	60
Limitations	61
Further research	61
References	62
Appendices	68

List of figures

Figure 1 Pretest and posttest in Context 1	47
Figure 2 Pretest and posttest in Context 2	47
Figure 3 Pretest and posttest in Context 3	47
Figure 4 Axial Coding	55

List of tables

	27
Table 1 Research Design Framework	33
Table 2 Triangulation Matrix	45
Table 3 Collecting and Analyzing Data	46
Table 4 Percentages of students who never used reading strategies	46
Table 5 Results of Reading Comprehension tasks for each implementation	49
Table 6 Statistical Measurements	50
Table 7 T-tests for the three contexts	52
Table 8 Categories, codes and samples	55
Table 9 Categories, sub categories and codes related to constructs and research Questions	56

Appendices

Appendix A	ICFES results from 2010 to 2013	71
Appendix B	Principal's Consent Letter	72
Appendix C	Parents' Consent letter	75
Appendix D	Needs Analysis Questionnaire	78
Appendix E	Pre and post test	79
Appendix F	Semi-structured interview	81
Appendix G	Summary of students' interview	81
Appendix H	Teacher's journal	82
Appendix I	Students 'work	83
Appendix J	Lesson Plan Sample	85
Appendix K	Timeline	90
Appendix L	Results of tasks development for Context 1, 2 and 3	91
Appendix M	Results of pre and post tests	93

Introduction

Current education in the field of second language teaching requires some changes in the way people think and work on reading comprehension. These changes would involve the implementation of new strategies for students, as well as for teachers. Nowadays, our students play more active roles in the classroom, they are more involved in their own process, and teachers need to be aware of how important it is to help learners to identify and use proper learning strategies, so that they can make their own decisions regarding what to learn and how and become self-directed learners. In this sense this research was designed to encourage students to become self-directed learners as well as improve their reading comprehension through the direct instruction of metacognitive reading strategies such as prediction, text structure and visualization.

There is a very important governmental bilingual project in Colombia, called “Colombia Bilingüe”. Its main goal is that students reach B2 level according to the Common European Framework by the year 2019; however, the expected level proposed in the project is far to be reached for contexts 1 and 3 which is evident from the results of SABER 11, the Colombia High School Standardized Test (Appendix A).

Therefore, the development of reading skills is a vital starting point that requires to be explored, since reading may certainly influence the other skills. Hence, it is necessary to provide students with strategies that help them overcome reading comprehension difficulties and improve their reading comprehension through the appropriate application of these strategies.

Reading comprehension is a dynamic, variable, and complex activity that depends on many different automatic and strategic cognitive processes (Cain, Oakhill, & Bryant, 2004). At the places where this research was carried out, students had shown low reading comprehension levels, according to the results of a reading comprehension mock class at “Ciudadela del Sur High School” (context 1), University of Ibague (context 2) and Institution “Educativa Juvenil Nuevo Futuro” (context 3). Considering how crucial it is for students to have outstanding English reading comprehension proficiency to face present and future academic and professional challenges, it was our interest to strengthen it.

According to Alderson (2000), research in reading comprehension is difficult because of its silent, internal, and private nature; for this reason, an alternative approximation to the phenomenon is the study of its products. These products (tasks developed by students after using the strategy) would help us to identify changes in their attitudes toward reading as well as in their reading comprehension, even if learners use different metacognitive strategies.

Another important issue is encouraging students to become self-directed learners. Self-directed learning involves the idea of learners as responsible owners and managers of their own learning process integrating self-management and self-monitoring. The use of metacognitive strategies help students to become self-directed learners since they learn to evaluate how well they are prepared to do the tasks by providing opportunities for self-assessment which enables students to better understand what the tasks requires. During the implementation of this research the students had the opportunity to learn three different strategies (prediction, text structure and/or visualization) which provided them with the chance to understand that there are multiple ways of tackling the reading tasks so that they

could select the strategies they prefer to use. Consequently, they make their own decisions as well as monitor their progress by doing self-assessments.

Finally, this research also attempts to offer a new possibility to language teachers, in terms of giving them some pedagogical ideas to motivate students and help them to become more skillful at reading.

Statement of the Problem

Common aspects related to students' motivation, interests and attitudes found in this study allowed us to identify factors that needed to be improved. Some of them have affected students' attitudes towards reading in English. Firstly, due to the students' economic status, learners in contexts 1 and 3 did not consider important to learn English; according to their beliefs, this was not a language they will need in the future. In context 2, students knew they needed English to enroll in some subjects, graduate from university, and take the "Saber Pro" test; however, they did not want to make any effort to improve their English abilities. Secondly, students from the three contexts had had a poor experience with the language as the input received in previous years at school was not enough for effectively learning the language and being really motivated towards the acquisition and use of it. Thirdly, as a consequence of this situation, students lacked vocabulary to communicate effectively.

In regards to reading comprehension, before the implementation, it was observed that students had problems identifying the general idea and supporting details of a text, understanding the general meaning of the given text, and answering inferential questions;

but above all the mentioned problems, they did not use any strategy pre, while or after reading.

Considering that students' performance was very poor, they felt frustrated and it was evident in their attitudes and the poor understanding of readings in English. To overcome the difficulty, it was first necessary to familiarize students with some relevant reading strategies in order to improve their reading comprehension proficiency and at the same time increase their motivation.

Research Question

The research question to be addressed by the research circle is the following:

What are the effects of teaching planning and monitoring metacognitive strategies on the reading comprehension proficiency of basic users of the language in three different academic contexts?

Research Objectives

This study aims at: (1) Investigating the use of metacognitive reading strategies in EFL Colombian classrooms. (2) Examining the effects on students reading comprehension proficiency. (3) Exploring the effects of direct instructions of metacognitive reading strategies on students' self-direct learning. (4) Promoting the use of these strategies so that students become self-direct learners and improve their reading skills.

Rationale

Reading comprehension represents a huge challenge for students and the low proficiency level of students' reading comprehension is evident in both external test results and academic performance in class (Quiroga, 2010). Therefore, it is necessary to provide students with a range of strategies that help them overcome reading comprehension problems so that they can acquire the abilities they need to analyze, infer, and predict information as efficiently as possible. The development of the reading skill is a good starting point that will, without doubt, positively influence the other language skills. One type of these learning strategies is metacognitive strategies such as prediction, visualization and text structure. The present study aimed at examining the effect of metacognitive strategy instruction on EFL learners' reading comprehension performance and their metacognitive awareness as well as to reinforce students' reading comprehension ability that improves and motivates them to successfully carry out reading comprehension tasks. Consequently, this intervention might provide valuable information regarding how to improve reading comprehension teaching practices in Colombian public schools.

Many teachers think that just having learners exposed to reading exercises would be enough for learners to develop this skill; however, according to Gough & Hillinger (1980) and Wren (2002), scientific research has proven that learners do not develop reading comprehension as naturally as developing the oral skill. Reading must be taught through formal education since learners need instruction to know how to decode words, for instance.

Considering that our institutions are interested in fostering higher reading comprehension skills, i.e. three compulsory semesters of reading comprehension in English in context 2, and the improvement of “Saber 11” results in contexts 1 and 3, this study aims to reinforce the low proficiency students’ results with the use of metacognitive reading strategies that foster and encourage them to successfully carry out reading comprehension tasks, as well as to help them to be self-directed learners.

In short, this research might benefit foreign language teachers and researchers since it will provide a better understanding about the effects of metacognitive strategies on EFL learners’ reading comprehension while promoting self-directed learning. By doing this, students will feel more motivated towards reading, and as a result, they will take control of their learning process.

Theoretical Framework

This chapter explains the constructs that arose from the research question: Reading, Metacognition and Metacognitive Strategies; it also refers to some global and local researches that support this study.

Reading

Literature concerning reading helps to explain the foundations of this study. Academic and scientific research shows that reading is useful in the development of the other language skills (Janopolous, 1986; Tudor & Hafiz, 1989; Krashen, 1993; Tsang, 1996; Day & Bamford, 1998). According to these authors, reading also provides a good starting point to develop several active self-language learning activities. Well prepared reading comprehension activities can meet the main linguistic, psychological, cognitive, social, and cultural components that are involved in acquiring a second language. Learners acquire a second language most effectively from messages that are just slightly beyond their current competence and then readings can expose learners to natural language, which is meaningful and just above their level of comprehension and production. According to Vygotsky's zone of proximal development (Vygotsky, 1978), the range of suitable texts that a learner can manage without help is very small. Texts that do not challenge the students easily lead to boredom, while overly complex language might lead to frustration when no tutoring is available.

A way to help students to scaffold the process and become more involved in it is through themes which are interesting to them, keeping their intrinsic motivation up and emphasizing their immediate needs and likes. Regarding motivational aspects, we observed

that in our contexts, very often, some of the topics were not connected with the learners' personal needs and interests, which could have led students to boredom. In this sense, Oxford, R. (1990) states that many students in a corporate setting who are forced to complete training programs are motivated only to pass the test, thus the motivation can easily disappear. However, through self-directed reading, learners can have different choices of what to read, making students more comfortable with the reading as they choose the topics they are really interested in.

Metacognition

In the literature, some theoreticians argue that metacognition can simply be defined as thinking about thinking (Anderson, 2000). In this sense, Snowman & Biehler (1993) define cognition as the term used to describe the ways in which information is processed – i.e. the ways it is attended to, recognized, encoded, stored in memory for various lengths of time, retrieved from storage and used for one purpose or another; and metacognition as the knowledge about these operations and how they might best be used to achieve a learning goal.

Metacognition is indispensable for effective language learning. It has received a significant attention by language teaching researchers; according to Eggen & Kauchak (1995), Bonds et al. (1992) and Garb (2000), learners who take charge of their own learning process become good thinkers and lifelong learners due to the control they acquire on what and how to learn.

On the other hand, Devine (1993) defines a self-directed learner as one who has ample metacognitive knowledge about the self as learner, about the nature of the cognitive task at hand, and about appropriate strategies for achieving cognitive goals.

According to Anderson (2002), understanding and controlling cognitive processes is one of the most essential skills. Research on metacognition has shown that poor readers do not recognize the purpose of reading and tend to focus on words rather than on meaning. On the contrary, good readers automatically employ metacognitive strategies to focus their attention on meaning. Thus, rather than focusing students' attention only on learning a language, teachers should teach metacognitive strategies to help students plan, control, and evaluate their learning. McNamara (2004) states that strategies are essential, not only to successful comprehension, but to overcome reading problems and become a better reader. Students are aware of the strategies and how can they control their use to achieve goals and become self-directed learners.

Self-directed learning

Boud (1988) states that a fundamental purpose to education is assumed to develop in individuals the ability to make their own decisions about what they think and do. It is also supported from outside language teaching by a general educational concern to help students become more independent in how they think, learn and behave (Hammond and Collins, 1991). Even though this construct is not explicitly mentioned in the research question, offering students the possibility to decide which strategy to use to manage a text and providing them with opportunities to make those decisions promote autonomy and self-directness.

According to Moore, (1992); Lonergan, (1994); and Kenning, (1996); self-reading through practice-based approaches can encourage and increase learners' autonomy, due to the fact that learners are aware of the nature of the tasks and make their own decision on how to achieve them. Griffiths (2008) states that self-directed learning is associated with successful language learning. According to him, self-directed learning strategies help learners become more independent and active. From this point of view, self-reading strategies can motivate learners to make their own decisions on how to learn.

Metacognitive strategies

As it was mentioned before, learners need to learn how to decode words and learning to do it is half of the way to achieve reading comprehension. After learning the meaning of words, instruction to comprehend the ideas of what students are reading is required; for this reason, metacognitive reading strategies play an important role in reading comprehension and educational processes, since these strategies can help students understand how to read in a very efficient way.

Metacognitive strategies help students to take control over their own learning because they enable students to know what to do when they do not understand. Many research studies have been conducted on reading strategies. In most cases, the results indicate the positive effects of metacognitive reading strategies in the process of reading.

O'Malley, Russo, Chamot, & Stewner-Manzanares (1998), conducted a research in the USA in order to identify strategies used by basic and intermediate ESL learners, and to examine the relationship between the task and the proficiency level of these two groups of learners. 70 high school students from Vietnam, Puerto Rico, and Central and South

America participated in this study. The participants were interviewed regarding their English learning experiences, particularly in reading. These results revealed that participants in the beginning stage employed metacognitive strategies 27.4% of the time, while participants in the intermediate stage used them 34.9% of the time. Furthermore, the findings showed that the metacognitive strategy, planning, was the most applied in both groups of ESL students, compared to other metacognitive strategies such as monitoring and evaluating. This kind of studies helped us to decide which strategies we should implement in our research to help our students.

Among the numerous metacognitive strategies, two planning strategies (predicting, text structure) and a monitoring strategy (visualizing) were chosen to be applied and analyzed in this research. The metacognitive strategies were selected and applied trying to promote consciously learning. The studies mentioned above represent a point of reference for the choice of strategies. Visualizing was selected to help learners draw images and conclusions of the target readings. Text structure was implemented to help learners understand the different ways to connect or relate information. And prediction was selected to help them use their schemata and previous knowledge in order to facilitate comprehension of situations that happen within a text.

Planning strategies

Planning strategies are used before the reading. They help students to get a better understanding of a text by activating knowledge, grasp the overview of the text, and identify the structure of the text among others.

- Predicting is a way of thinking. According to Pearson (1998), this strategy allows readers to use what they know about the text structure, the characters, the gender, the author or common previous experiences to predict what might happen in the text. Readers can make predictions before and during reading.
- Text structure. Samad (2011) reports that identifying and analyzing text structures help readers to comprehend information more easily and retain it longer. Understanding the elements of a text and how it is organized, help readers to analyze, think critically about meaning, and read in a more purposeful way. Learners are sensitive to the narrative structure of a story (characters, setting, problem, etc.)

Monitoring strategies

The use of monitoring strategies offers the possibility to check comprehension during reading. Smith (1967) found that more skillful readers initiated their own goal setting to facilitate comprehension.

- Visualizing. According to Harvey, S. & Goudvis, G. (2000), visualizing strengthens reading comprehension skills since students gain a deeper understanding of the text by consciously using the words to create mental images. When readers visualize, or draw pictures in their minds, they create an image generated by the text, but attached to the reader's background knowledge. Moreover, research suggests that the use of images or graphs during reading creates a visual memory representation of a text, which increases both the enjoyment of reading and the text understanding.

State of the art

This study was carried out with three groups of students who had never made a conscious use of metacognitive strategies and that were not motivated to use them, which was evident in the classes and reported in the questionnaire about the use of strategies given at the beginning of the implementations. Having this fact in mind, the teacher's attitude and contribution to the development of these strategies in students is of outmost importance, due to their role model. Cubukcu (2008) studied the effectiveness of systematic direct instruction of multiple metacognitive strategies to assist students in reading comprehension. She taught metacognitive strategies for reading in a five weeks program. The study investigated the reading comprehension and vocabulary achievement of 130 Taiwanese third year university students to establish whether instruction incorporating metacognitive strategies led to an increase in the reading comprehension of expository tests. The results showed a strong achievement level on the reading comprehension outcomes.

This specific study drove us to the conclusion that in order to help our students to acquire the learning strategies we wanted to teach them, we had to work with them in a very dynamic, inductive, and cooperative way as to engage them in the process.

Likewise, Fung, Wilkinson & Moore (2003) studied whether or not learning metacognitive strategies in the mother and second languages of ESL students would make a difference for their English reading comprehension. The participants were twelve sixth- and seventh-grade Chinese ESL students in New Zealand. During the process, teachers explicitly taught how to monitor reading progress, summarize, question, clarify, and draw inferences. Each intervention was around thirty-five minutes long every day for fifteen to

twenty days. After implementing the lessons, students' performance in the think-aloud protocols showed that their use of metacognitive strategies when reading passages in both languages increased significantly. The researchers concluded that ESL students benefited from managing metacognitive reading strategies in their first and second language as learners appropriately used these strategies.

Similarly, Salataci and Akyel (2002) explored the effectiveness of metacognitive strategies instruction; the researchers wanted to know whether or not an explicit training for metacognitive strategies would make a difference in reading comprehension for EFL learners. The participants were twenty EFL learners at a university in Turkey. The learners took a pre- and post-test in both languages (their first language and their foreign one). In addition, observations and interviews were also part of the research instruments. The interventions were implemented during four weeks, in which participants had three-hours-per-week of class. During the lessons the participants were taught how to use metacognitive strategies. At the end of the research, the changes in the students' performance after using reading strategies were evident. For example, strategies such as using a dictionary and focusing on grammar were less used after the training than before. On the other hand, the use of strategies such as predicting, skimming for main ideas, and summarizing increased. In short, the explicit training of these strategies had a significant impact on learners' reading comprehension. This specific study drove us to the conclusion that in order to help our students to acquire the learning strategies we wanted to teach them, we had to work with them in a very dynamic, inductive, and cooperative way as to engage them in the process.

There are also some important local studies that were analyzed to get some understanding of what have been investigated in Colombia. Among these studies there are two that are worth to be mentioned here : There is a study regarding the use of metacognition and reading carried out in Pereira, Colombia by Lopez, A. & Giraldo, M. (2011). According to them, there is an urgent need to increase the reading skills of school-age Colombian students. In this study, the authors report that the ICFES (Instituto Colombiano para el Fomento de la Educación Superior) showed that Colombian high school students do not reach high levels of English reading comprehension. This study analyzes some possible causes for students' poor performance in reading. One of the main findings points out high school students' lack of awareness of reading strategies as one of the main causes. This situation is also common and supports the situation found in the contexts studied in this research.

Likewise, Atheortua, N. (2011) did a study in Medellin Colombia, and based on that, he states that many students can read fluently but have difficulties when dealing with effective comprehension. This has many implications at school, in particular, because problems related to understanding texts interfere with studying and learning from them. This study also states that reading comprehension has improved in the last 20 years focusing on intervention programs that work with strategies in which metacognition plays a crucial role.

The previous studies that are mentioned in this paper have something in common with this research; the subjects presented a lack of learning strategies which affected their performance at the target language. Additionally they were not well aware of strategy use regarding the kind of tasks that they were to work on. There are also some commonalities

regarding the results; the subjects started having better performance after implementing metacognitive strategies for their tasks. These previous researches worked as a guide to help the researchers visualize some expected results after implementing the target strategies. These theorized relations provide sense to the results that were obtained in this work.

Research Design

This chapter gives an overview of the research methodology that oriented this study, describes the type of research, the context, the researchers' role, participants, the instruments used to collect data and the validation process.

Table 1
Research Design Framework

RESEARCH TYPE	CONTEXTS	PARTICIPANTS	DATA COLLECION INSTRUMENTS
Mixed Method Design	Ciudadela del Sur High School	20 ninth-grade students from a public school in Armenia. Ages ranging from 14 to 17. Level of proficiency A1	Questionnaire
			Pre-test
	University of Ibague	11 students of a private university of Ibague. Level 4. Ages 15 – 19. Level of proficiency A1	Post-test
			A semi- structured interview
	Institución Educativa Nuevo Futuro	24 ninth-grade students from a public school in Medellin. Ages 13 – 15. Level of proficiency A1.	Teachers' journals, Students' works

This table summarizes some characteristics of this research such as type of study, context, participants and data collection instruments.

Type of study

A mixed method design was used for collecting and analyzing data. Dörney (2007) defines a mixed method study as “one that involves the collection or analysis of both qualitative

and quantitative data in a single study with some attempt to integrate the two approaches at one or more stages of the research process” (p.163). Therefore, different types of data were combined in this research study. Quantitative tools such as questionnaires, results of students’ works and reading comprehension tests were applied. In addition, qualitative tools such as teachers’ journals and a semi-structured interview were implemented to help the researchers answer their research question.

“Producing a combination of both data can improve the analysis by ensuring that the limitations of one type of data are balanced by the strengths of another, since some information cannot be obtained by one single method”(Carvalho & White; 1997) . This is better explained by Creswell & Piano Clark (2007) when refer to this method as the one that focuses on collecting, analyzing and mixing both quantitative and qualitative data in a single study, to have a better understanding of research problems than either approach alone.

From the qualitative perspective, Mishler (1990, p. 52) proposed that qualitative studies help to describe and identify patterns of relationships. On the other hand, quantitative research helps the researcher to present statistical results.

Context and Participants

This research project was carried out in three different contexts: “Ciudadela del Sur High School” (context 1), University of Ibague (context 2), and “The Juvenil Nuevo Futuro High School” (context 3). Ninth graders were chosen as the group population in the two high schools and students of the fourth level of English at the University of Ibague. All the three chosen groups have similar English level, which corresponds to A1+ according to the Common European Framework.

“Ciudadela del Sur High School” is a public school located in Armenia. The target population is 20 students from ninth grade studying English as a foreign language, whose ages are between 14 and 17 years old. In regards to social and financial conditions, these students bear a lot of difficulties because not all of them live with their parents. In terms of social status, they are settled in the low socio-economical strata. At the school, they have five hours of English Class per week in which they receive instruction in the productive and receptive skills. However, the main focus in class is reading comprehension and grammar structures as the school main goal is to improve the score in “Pruebas Saber”. The students at Ciudadela del Sur are not self-directed learners; on the contrary, they highly depend on the teacher. They enjoy activities which involve games and music. Regarding their reading, they do not use any reading strategies; consequently they find reading as a boring activity.

University of Ibague is a private university located in Ibague, a city in the center of Colombia. The students who take part of the study are 11 students of level 4 of Communicative English. A vast part of these students come from private schools in the city, a smaller number from schools administered by the government, and few of them from small towns near the city. Students are about 15 - 19 years old and they study different engineering careers (civil, electronic, mechanic, and environmental). Most of them belong to strata 3 or 4. All of them have taken English classes at school but their English level is very low. As the other groups that are part of the population for this study, students are not self-directed. They like working when they find the activity to be done very interesting and funny. Students know they need to improve reading comprehension because they will have to face three compulsory semesters of reading comprehension.

“The Juvenil Nuevo Futuro” High School is a public educational institution located in Medellin. This research project was carried out with a group of 24 ninth graders, whose ages were between 13 and 15 years old. They share the same social strata mentioned in the previous context. At the school, they have four hours of English class each week. Currently, the emphasis is on reading because the institution wants to improve the results of the ECAES tests. Students love reading magazines and articles about sports, and famous people. They get more excited when those readings include some related pictures.

Researchers’ role

In a study, the researchers might be active participants in the classroom, as well as observers of the learning process, analyzers of information, and planners of future actions (Mertler, 2009). Throughout this project, the researchers worked as facilitators empowering students with relevant resources that provide learners with information related to the metacognitive strategies to be used. Researchers were also models who showed the students how to use the strategies in a very efficient way and motivators that helped them to get engaged in the activities and in the development of their own learning process.

In addition, researchers were encouragers when making students to use the metacognitive strategies and checking their learning process. Furthermore, the researchers were in charge of designing the lesson plans which provided information and practice for the students, created the questionnaire, the pre-tests and post-tests, delivered the lesson plans, and analyzed the data.

Ethical Considerations

In order to comply with the ethical considerations, it is important to respect the participants, other researchers and those who will use this research. Thus, the researchers should guarantee that participants have a complete understanding of the purpose and methods to be used in the research (Best & Kahn, 2006; Jones & Kottler, 2006). Therefore, as part of the ethical considerations, the participants were informed and described the kind of research they were to take part in, its purposes and implications. They had clear that no decisions would affect them. In the same way, they were assured that their identities would be kept secret.

In the same way, substitute consent may be obtained when it is determined that the participants do not have the capacity to make decisions or dependent on others for their welfare, such as children under the age of 18 (Roberts, Geppert, Coverdale, Louie, & Edenharder, 2005). Since most of the participants were under age, their parents were asked to sign a consent letter clarifying that participation in this study was voluntary (Appendix C). Equally, the coordinators of the schools were informed about the processes and topics to be used during the research project and they were given a consent letter (Appendix B). The pedagogical interventions were implemented as a normal part of the class and the results of the study were used only for research purposes.

Procedures and Data Collection Instruments

The researchers agreed on the strategies that would be taught as well as on the pedagogy to be used in class. Some materials were designed to present the strategies and to offer students the possibility to work on them. The instruments used to measure every single objective are described below (Table 2). All three contexts used the same materials and the same methodology to work the strategies in the same number of interventions; however, the teachers and learners were different. The aim of the project was to determine the effect of the implementation on these three different settings. To accomplish this goal and considering that this is a mixed method study, and to add validity to the study, triangulation was done in order to analyze the data gathered through the instruments already mentioned.

Triangulation is defined by Denzin (1978) as the combination of methodologies in the study of the same phenomenon. This triangulation adds reliability to the results and also allows the researchers to establish some categories that can be really useful to arrive to the answers and conclusions of this work.

Table 2
Triangulation Matrix

Research question	Research Objectives	Research Instruments				
		Reading Strategy Questionnaire	Pre-test and Post-test	Students Works	Teacher's Journal	Semi-Structured interview
What are the effects of teaching planning and monitoring metacognitive strategies on the reading comprehension process of basic users of the language in three different academic contexts?	Investigating the use of metacognitive reading strategies in three EFL Colombian classrooms. Examining the effects on students reading comprehension proficiency. Exploring the effects of direct instructions of metacognitive reading strategies on students' self-direct learning Promoting the use of specific metacognitive strategies so that students become self-direct learners and improve their reading skills.	√		√	√	√
			√	√	√	√
			√	√	√	√
				√		

This table describes the quantitative and qualitative research methods used to gathered information in order to answer the research question.

During this research, some instruments were selected to collect the data in order to obtain relevant and meaningful information. Students' reading skills were measured before, during, and after they started using metacognitive strategies in the English class. The analysis of data required both, quantitative and qualitative interpretation.

The following are the instruments used to collect data during the research:

1. Questionnaire

According to Brown, J. (2001), questionnaires are defined as “any written instruments that present the respondent a series of questions or statements to which they are to react, either by writing their answers or selecting from among existing answers” (p.6). Students were given a questionnaire (Appendix D) with the purpose of knowing their level of awareness regarding metacognitive strategies. This questionnaire was really useful to discover what strategies learners used when reading a text in English. Moreover, it helped to discover students' weakness regarding reading comprehension strategies.

2. Pre- test and post - test

It is stated by Mertler (2009), that reading tests are specifically designed to measure the students' reading ability. Having in mind validity purposes, the same 10 questions test (Appendix E) that intended to measure learners' abilities on reading comprehension was applied at the beginning and at the end of the interventions. The students had one hour to answer each test. The tests were piloted with three different teachers and a group of students before applying it to the experimental group.

3. Semi-structured interview

Freeman (1998) defines an interview as a face-to-face verbal section conducted by the researcher as unplanned, planned, or structured interaction. The researcher can use previously planned questions; semi-structured interview schedules or aloud protocols. The interview applied in this study consisted of eight open-ended questions (Appendix F).

In the interview, there were some guided questions but the researchers were able to ask more following up ones, when necessary, to reach their purpose.

The researchers conducted this interview at the middle of the process and in the students' mother tongue, Spanish, to guarantee a complete understanding of the questions. The purpose was to identify students' perceptions about the reading strategies they were working in class, students' opinions, and the difficulties they were experiencing. It also allowed the researchers to identify the weaknesses and make adjustments during the process.

4. Teacher's journal

A journal is a regular dating account of teaching/learning plans, activities of class occurrences, including personal philosophy, feelings, reactions, reflections, observations, and explanations (Freeman, 1998). For this research, the teachers kept a journal (Appendix H) in which the most important details were considered, i.e. information about learners' behavior, reactions during the implementations, and beliefs. Also, teachers-researchers reported events such as students' participation, class development, strategies, and students' weaknesses and strengths during the process. All this information was written down after each intervention in order to reflect about the teaching and learning process.

The information contained here was very useful because it provided additional perspectives about the research process as well as evidence of changes in students' behavior and attitudes.

5. Students' products

Students' products provided valuable information about the students' process during the interventions. During the different reading comprehension activities they should put into practice the metacognitive strategies introduced and practiced during the interventions. Authentic readings were slightly modified taking into account learners' language level. The information gathered from students' work was useful to collect qualitative data about students' understanding and application of the metacognitive strategies. Moreover, researchers were able to identify students' strengths and weaknesses regarding vocabulary, self-confidence, concentration, and motivation while using the strategies (Appendix I).

Validation Process

The mixed method research involves collecting, analyzing, and mixing quantitative and qualitative data in a single study which allows validating the finding and results through the triangulation of data sources. Some researchers such as Lincoln & Guba, 1985; Seale, 1999 agreed that triangulation is typically a strategy for improving the validity and reliability of a research.

Triangulation is typically a strategy for improving the validity and reliability of a research. Mathison (1988) expands this by saying: "Triangulation has risen an important methodological issue in naturalistic and qualitative approaches to evaluation in order to

control bias and establishing valid propositions because traditional scientific techniques are incompatible with this alternate epistemology. (p. 13). In other words, establishing whether findings from qualitative analyses are corroborated with those from the quantitative method. Patton (2001) advocates the use of triangulation by stating “triangulation strengthens a study by combining methods. This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches” (p. 247).

In this sense, data triangulation involves using different sources of information in order to increase the validity of a study since triangulation provides the researcher with a greater degree of confidence in reporting findings. Creswell (2003) states that by triangulate it means that use different data sources of information by examining evidence from the sources and using it to build a coherent answer and justification for research question. Engaging multiple methods, such as, observation, interviews and recordings lead to more valid and reliable construction of the findings. For that reason, some of the instruments used in this research involve teachers’ journals and a semi structure interview.

In short, reliability and validity are conceptualized as trustworthiness which is to eliminate bias and increase the researcher’s credibility of a proposition about some social phenomenon using triangulation (Denzin, 1978). Triangulation is “a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study” (Creswell & Miller, 2000, p. 126).

Validity and reliability are two important quality indicators that govern any research. Joppe (2000) defines reliability as: “The extent to which results are consistent over time and an accurate representation of the total population under study is referred to as

reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable. (p. 1). In the same way, Joppe (2000) provides the following explanation of what validity is: “Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. Researchers generally determine validity by asking a series of questions, and will often look for the answers in the research of others”. (p. 1)

In order to guarantee validity in the quantitative instruments, the pre and posttest and the questionnaire of this research project were piloted with two teachers and two groups different from the participants before its implementation. Regarding reliability, the same quantitative instruments were used before and after the intervention and the results of descriptive statistics (mean, confidence intervals, median, and standard deviation) were correlated with inferential tests such as the t-test. On the other hand, the validation of qualitative data was based on triangulating it with quantitative one. Additionally, teachers' reflections in journals were validated with the students' answers in the interview.

Pedagogical intervention and implementation

This chapter explains step by step how the pedagogical intervention and implementation processes were carried out and describes the analytic procedures used to collect and analyze the data.

Instructional Design

Researchers created seven lessons plans in order to instruct learners on metacognitive reading strategies (Appendix J). These lesson plans contained a class objective, language goal, learning to learn goal, and their corresponding sequences of activities to accomplish the lesson goal. Teachers identified a topic for each lesson and mentioned the materials required in each session with their rationale. Also, assumed knowledge was considered in order to help as a basis for new language / skill input. Anticipated problems were named with the appropriate solutions. Furthermore, the teacher's role such as challenger, model, facilitator, guider and mentor was assumed for all the researchers.

The lessons were divided in the following stages: introduction/explanation, presentation/modeling, expansion, and learner self- evaluation. Stages of the lesson plans. There is a specific goal within each stage of the lessons. The introduction, which is the topic presentation stage. It provides all the information required by the learners in order to know what they were to do. The second stage (while stage), involved instructions and activities where the learners practiced the target metacognitive reading strategies. At this stage, learners were encouraged to practice the metacognitive reading strategies they had learned and perform the reading tasks. And the post-stage is a space provided for learners to

get some feedback on their performance during the target activities and practice they had during the while stage. The teachers provided students with the appropriate vocabulary and resources, such as readings and worksheets to help them succeed in their learning process.

The researchers also designed a timeline for the implementations, which included all the stages mentioned in the research design (Appendix K). The implementation was organized into pre-stage, while-stage and post-stage.

Pre- Stage

The purpose in this stage was to understand students' point of view about reading, and their abilities. First, a questionnaire was given to the students to identify their awareness of metacognitive reading strategies. The information helped the researchers to know the learners' background knowledge and establish their familiarity with strategies, which was later on used to scaffold the learners' self-directed reading process. Then, the pretest was applied in order to know the students skills in reading comprehension before the interventions. It is important to mention that the pre-test was piloted before with some other groups.

While- Stage

During this stage, teachers from the three different contexts used the same lesson plan and provided students with the same content to read and work on. Learners received instruction in three different metacognitive reading strategies: predicting, text structure, and visualizing. Students had the opportunity to learn, practice, and apply these strategies by means of the activities offered by the teachers in order to introduce the strategy and provide controlled and freer practice. Learners' works and five self-reading materials

(comprehension tests) helped to measure learners' performance. These readings tried to encourage learners to reflect on what they did as they were reading. The interventions were structured in the following way:

- Learners were provided with a preparation stage which introduced them to the main topic through the use of different activities such as visual aids, the activation of previous knowledge, and the presentation and practice of the metacognitive strategy. For instance, the learners participated in a predicting activity in which students just saw a small part of a picture and they had to predict what the whole picture was about.
- After the topic was introduced by the teachers-researchers, learners developed a series of activities aimed to increase reading comprehension by the use of the worked strategy. At all times, learners' active participation was promoted.
- Students socialized their work first with their peers and second with the whole class. Then, teachers provided feedback with the purpose of clarifying not only students' answers but also the actual use of the strategy.
- Learners were able to use what they had learnt by means of an independent exercise. (Appendix I).
- Finally, learners went through a self-evaluation process aimed at analyzing if they understood the topic and recording their reaction towards the strategy by the use of a check list. (Appendix I)

Teachers' journals happened along the study, and were kept for seven weeks after observing two classes every week. The data were collected in order to find out if students liked and felt comfortable with some strategies and activities that were proposed in order to

increase learners' performance at reading. After a negotiation between the teacher and the students, it was possible to establish that learners were to choose the content they wanted to read about. They normally chose themes they were familiar with or topics they would like to know better, and this might have helped since it made reading and content meaningful to them. In this second stage of data collection, results showed they were interested in the proposed elements.

A semi-structured interview was given in the middle of the interventions, which provided information about the way learners manage to work on their limitations, the strategies they effectively used when reading, and how the learners evaluated their own process. In this way, it was possible to have information about how students perceived their classmates and themselves.

Post-stage

This final stage included two focuses: assessment and reflection. On one hand, researchers assessed learners' reading comprehension skills, as well as learners' self-directed learning skills. On the other hand, learners and teachers reflected on how students experienced the self-directed learning process and the use of metacognitive reading comprehension strategies. The goal was to evaluate the self-learning outcomes.

Procedures of Data Analysis

Considering that this study follows a mixed method and to add validity to it, the data collection was administered using quantitative and qualitative tools. The quantitative data analysis was based on scores, statistics and a t-test, which allow the researcher to measure significant differences before and after the intervention (Table 3). On the other hand, the qualitative analysis was conducted following the open coding and axial coding of grounded theory.

The quantitative information allowed establishing percentages of learners showing improvement in their performance at reading comprehension activities. On the other hand, the qualitative information helped the researchers to find that after learners started implementing the metacognitive reading strategies, they also started having better test grades. Additionally, learners improved their ability to decide what kind of strategy they were to select regarding their goal when reading. Before implementing the metacognitive skills, learners used to read trying to connect words. However, during the learners' interviews, students stated that after thinking and reflecting on how to become better readers, they started to think of reading as contextualizing the written information, which according to them was really helpful to process information and to comprehend reading in general.

Table 3
Collecting and Analyzing Data

Data Collection Instruments	Participants	Nature of data	Data Analysis Methods
Questionnaire	Student	Quantitative	Descriptive Statistics
Pre-test	Student	Quantitative	Descriptive and Inferential Statistics (T-Test)
Post-test	Student	Quantitative	Descriptive and Inferential Statistics (T-Test)
Students' products	Student	Quantitative	Descriptive Statistics
Semi- structured Interview	Student Teachers	Qualitative	Grounded theory
Teachers` journal	Teachers	Qualitative	Grounded theory

This table summarizes the data collection instruments used in this research as well as the participants, the nature of data and the methods used to analyze the collected information.

Quantitative analysis

The quantitative data were analyzed to identify changes in students' performance and to measure significant differences before and after the intervention therefore the data analysis was based on scores, statistics and a t-test.

Questionnaire

The first quantitative data instrument applied was the questionnaire. Students from all three contexts were not aware of the possibility to use reading strategies and most of

them recognized that never used any strategy when reading, as it is shown in Table 4.

Table 4.
Percentages of students who never used reading strategies

CONTEXT	PERCENTAGE OF STUDENTS WHO NEVER USED READING STRATEGIES
Context 1	93%
Context 2	90%
Context 3	92%

This table shows the percentages of students who never used reading strategies in each context.

Students' reading proficiency

In every implementation, the strategy was explained and modeled by the teacher. Then, controlled practice was provided and some tasks were given to students in order to measure the acquisition of the strategy as well as some comprehension questions. The task was considered successful if the student answered more than 60% of the questions correctly. This percentage was established as a measurement because it represents the passing grade in each of the contexts.

Table 5.
Results of reading comprehension tasks for each implementation

CONTEXTS	FIRST TASK	SECOND TASK	THIRD TASK	FOURTH TASK
1	10%	45%	70%	70%
2	0%	45%	54%	65%
3	15%	54%	70%	79%

This table shows the percentages of students who accomplished more than the 60% of the tasks assigned after the presentation and practice of every single strategy.

As it is shown in the table above, the percentage of students who had 60% or more correct answers increased throughout the implementation. Comparing the number of correct answers in the fourth task in relation to the first task, context 1 shows a 60 points rise; context 2, a 65 points rise, and context 3 a 64 points rise. With regards to the third and fourth tasks, students' performance in context 1 remained the same, above the goal that was prior established. On the other hand, and referring to the information offered by the students' works, it is evident that there were some easier strategies for students as it is shown in appendix L. Each table describes the students' performance in each reading task accordingly to the context. Each task required students to use of a different strategy each time. The effectiveness of each strategy is observed in Appendix I.

There is also evidence of changes in students' proficiency, which can be seen in the results from the pre and post-tests. These changes are shown below for each context.

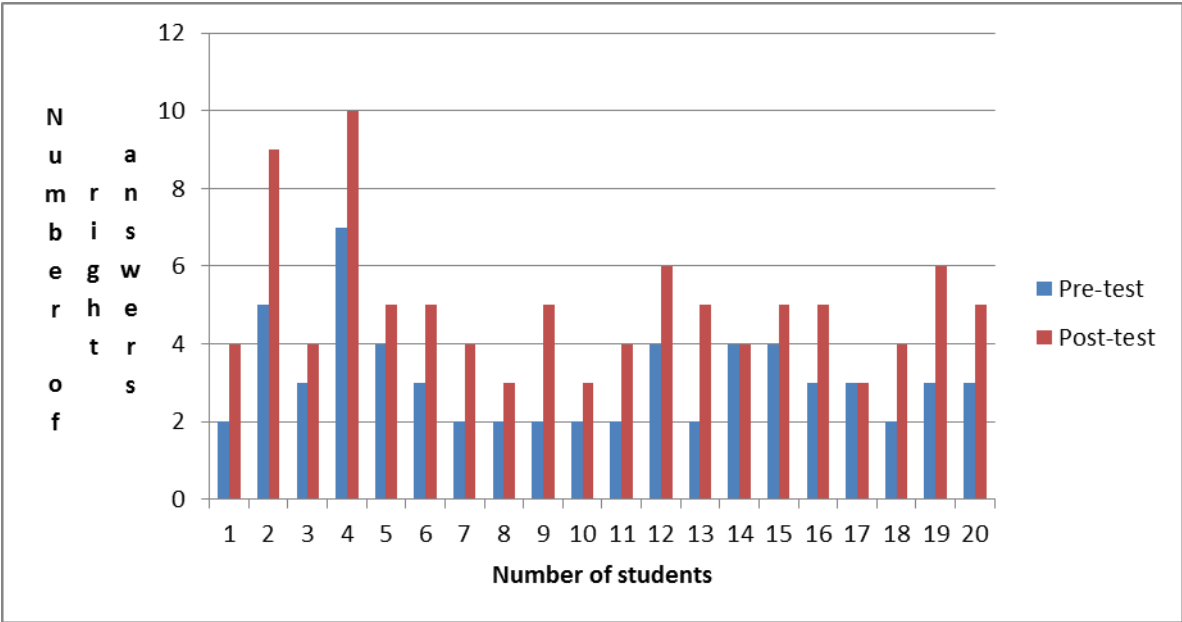


Figure 1. Results of the pre and posttests in Context 1

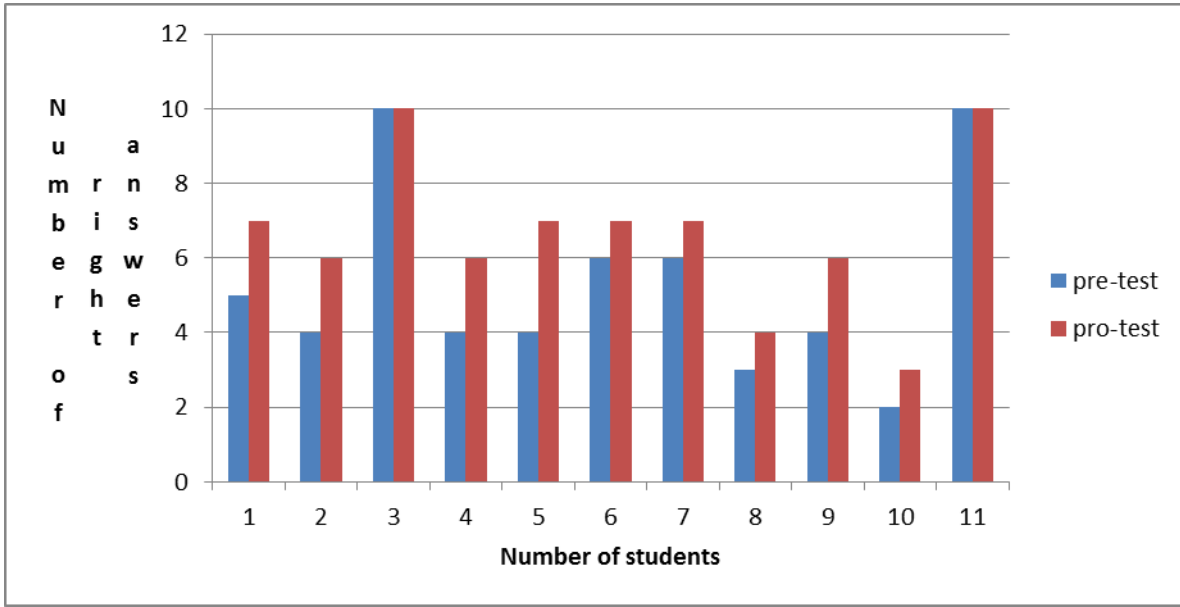


Figure 2. Results of the pre and posttests in Context 2

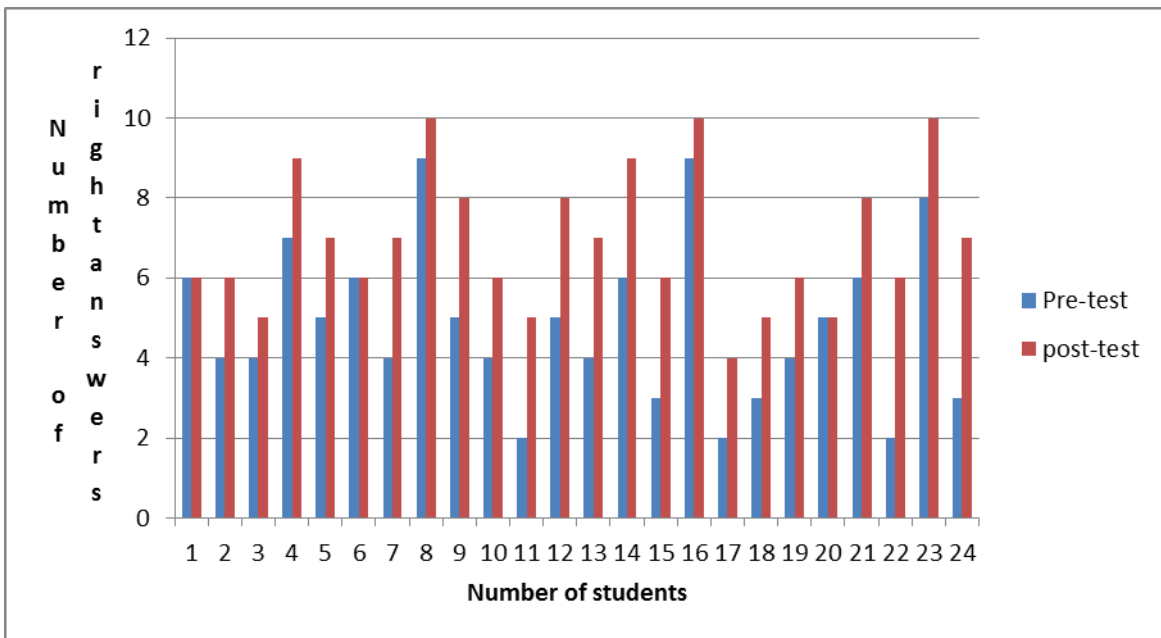


Figure 3. Results of the pre and posttests in Context 3

After analyzing all the three graphs, it is evident that in all of the contexts there was a significant increment in the number of right answers for each student in the post test in comparison to the pre- test, as follows: from 0% of students with more than 60% of right

answers in the pretest to 20% students in the post-test in context 1; 36.4% to 81.8% in context 2, and 33.3% to 79.2% en context 3. These results clearly show that the interventions positively affect students' reading comprehension. In addition, the results obtained after developing every single task also show students' improvement and effective use of strategies.

In order to summarize all the information provided by the analysis of the quantitative data provided by the pretest and post-test, the data central tendency and dispersion indicators for all three contexts were calculated as it is shown in Table 6.

Table 6.
Statistical Measurements

Statistical Measurements	Context 1		Context 2		Context 3	
	pre test	post test	pre test	post test	pre test	post test
Mean Value	3.1	4.9	5.3	6.6	4.8	6.9
Confidence interval	(0.57)	(0.78)	(1.54)	(1.25)	(0.80)	(0.70)
Upper limit	3.67	5.68	6.84	7.85	4.88	7.6
Lower limit	2.53	4.12	3.76	5.35	4.0	6.2
Median	3	5	4	6	4	7
Standard deviation	1.29	1.79	2.6	2.1	2.01	1.74
Variance	1.01	1.09	2.49	2.02	1.97	1.70

These results show that the average score for all three contexts went up, which means that there was a positive impact on the students' reading comprehension after implementing the strategies, due to the fact that the mean for the post test in every single context is higher than that of the pre-test, which also means that the dependent variable was positively affected by the independent variable.

To statistically demonstrate the fact that students' reading comprehension improved, t-tests calculated in excel, were carried out for each context. The t-test was conducted to compare students' reading comprehension proficiency in the pre-test and the post-test and reveal a statistically reliable difference between the two means as shown in table 7.

Table 7.
T-Test for the three contexts

CONTEXT 1	CONTEXT 2	CONTEXT 3
0,00000076	0,00063015	0,000000058

The value obtained indicates that the mean difference stated above is statistically significant because the p-values are very low, below 0.05; this allows us to say that after the implementations, there was a significant improvement on learners' performance related to the use of reading strategies and reading comprehension in general.

Qualitative Analysis

As it was mentioned before, this study follows the principles of qualitative and quantitative research to collect and analyze data. Considering Brysman and Burgues (1999), the use of mixed methods gives advantages because of the differences between both qualitative and quantitative approaches. These approaches allow the teacher to have different perspectives of the research. For this research, the qualitative method is based on a semi-structured interview and some teachers' journals. Mishler (1990) proposed that qualitative studies help to describe and identify patterns of relationships.

Qualitative analysis.

In order to analyze the qualitative data collected from the semi-structured interview and observations written by the teachers in their journals, the qualitative analysis technique of coding was used. Multiple codes for recognizing, articulating, and refining emergent ideas about patterns, themes, and explanations were developed.

Open coding and axial coding of grounded theory were used. Analysis began with open coding; the data were examined line by line to conceptualize and label data. This coding analysis is an “analytic process through which concepts are identified and their properties and dimensions are discovered in the data” Strauss & Corbin (1998, p. 101). Next, axial coding analysis was carried out; this coding is defined by Strauss & Corbin (1998, p.123) as “the act of relating categories to subcategories along the lines of their properties and dimensions”.

Open coding.

Open is the initial phase of the coding process in the grounded theory approach to qualitative research. The process of open coding begins with the collection of raw data (interviews and teachers’ journals); data is broken down into segments in order to interpret them. The researchers conducted a detailed word-by-word and line-by-line analysis through the interviews and teachers’ journals in order to conceptualize and label data. Table 8 shows the preliminary categories for this analysis.

Table 8.
Categories, codes and samples

Sub-Categories	Codes	Samples	Descriptions
Reading Comprehension	<ul style="list-style-type: none"> Understanding a text. Identifying places, characters. Asking questions about the reading. Identifying general and detailed information. 	<p>Context 1: “I realized that it easier to understand a text when I make predictions” (Interview ss5).</p> <p>Context 2: It is easier for me to understand a text if there are pictures or titles I can understand before reading (comment from a student in teacher’s journal)</p> <p>Context 3: “Now I understand what happens in the story”. (Interview ss1).</p>	<p>Learners can read and understand the main and secondary ideas of a text. They can also answer comprehension questions.</p>
	<ul style="list-style-type: none"> Reading faster and more efficiently Reducing the level of difficulty of readings. 	<p>Context 1: “I did not like to read longer texts because I thought that if I was not able to read a short text, it would be impossible to read a longer text, but by using prediction helps me to understand the text and now I feel more motivate to read.”</p> <p>Context 2: “I like reading when I understand at least a little of what I am reading and the texts don’t seem too long and boring (Interview ss9)</p> <p>Context 3: “Now I feel more confident about reading longer texts” (Interview ss3).</p>	
Metacognitive strategies	<ul style="list-style-type: none"> Predicting Text structure Visualizing. 	<p>Context 1: “I like to make diagrams when I read a text since that way I can organized the ideas” (Interview ss3).</p> <p>Context 1: “It is evident that students enjoy making diagrams since by using this strategy they find and organize the information easier” (Teacher`s journal)</p> <p>Context 2: If I organize the text in a mind map I can understand the text and how it is organized. (comment ss5)</p> <p>Context 3: Students explaining to the teacher how to apply the metacognitive reading strategies. “Predicting is about using key parts</p>	<p>Learners use the strategy properly and according to what they need from the text. Teachers’ journal excerpts describe how learners mention the strategy they are using while working on the reading activities.</p>

		<p>of the text as the title, headings and pictures to foretell what a text is going to be about". (Interview s3)</p>	
<p>Understanding how to learn</p>	<ul style="list-style-type: none"> • Understanding how to use the strategy • Choice of strategy. 	<p>Context 1:" I prefer to use predicting since that way I have some ideas about the text before starting to read" (Interview ss1).</p> <p>Context 2: For me predicting is the easiest because we know the topic and if we don't understand exactly we can guess (Interview students 3,4)</p> <p>Context 3: "I prefer organizing the ideas in my mind or in a sheet of paper to be able to understand the text". (interview ss 5)</p>	<p>Learners realize which strategies they should use to achieve a better understanding. They share their knowledge and explain each other what they are learning. Teachers' journal evidence the accuracy students have when sharing with their partners what they understood regarding the use of strategies.</p>
<p>Vocabulary learning.</p>	<ul style="list-style-type: none"> • Meaning • Correct choice of words. • Use of dictionary. • Contextualizing meaning. • Recognizing 	<p>Context 1:"One positive aspect about the process so far is the fact that students have learned to use a dictionary and can recognize the function of words in a text, therefore they are able to get the meaning of the unknown words whether from the dictionary or by guessing from the context" (Teacher's journal)</p> <p>Context 2: Students are now better able to identify the function of words and based on that they guess the meaning of a word before looking it up in the dictionary. Sometimes they don't even do it. They answer the questions without using dictionary. (teacher's journal page 10)</p> <p>Context 3: Students are answering reading comprehension questions without using dictionary. They said "we are now more familiar with English words than before, plus we try to get the meaning of unknown words according to the context where they are being used" . (Interview ss4).</p>	<p>Learners get more familiar with words from the target language and they understand those words in context when doing reading activities. Teachers' journals, students' works and students' statements during the interviews' contain evidence of this. Even learners who got low grades proved to have a certain improvement at their vocabulary knowledge.</p>
<p>Direct teaching</p>	<ul style="list-style-type: none"> • Explaining the strategy. • Providing examples. • Giving Instructions • Modelling the strategy 	<p>Context 1:" I like when the teacher explains the strategies and gives..... since that way I learn how to use the different strategies" (Interview ss4).</p> <p>Context 2:When you (the teacher) explained the strategy by giving examples is easier to understand and then understanding the text is also</p>	<p>Explaining the strategy to be used, and providing some examples about it.</p>

		easier (interview ss2)	
		Context 3: "I understand how to use the strategies when reading a text" (Interview ss2).	
Self –directed learning	<ul style="list-style-type: none"> • Self-learning • Self-awareness 	<p>Context 1: "Now I like to look for different readings at home to practice the different strategies I have learned in class". (Interview ss5)</p> <p>Context 2: Students stated "we used a specific metacognitive strategy according to what we need or want to know from the text" (Interview ss1).</p> <p>Context 3: "Now I can read texts at home without teachers help" (Interview ss1).</p>	Students are more aware of the strategies they could use and they are better able to control them to achieve their reading goals.
Motivation	Attitudes	<p>Context 1: "three weeks after starting the implementations It is evident that students motivation has increased, they are more active in the class and their desire of participating promotes an environment of self-confidence" (Teacher`s journal)</p> <p>Context 2: It is evident now that boredom and lack of interest students had at the beginning has changed. They read the text, share opinions with peers, come to the board to show their graphs, they really seem to enjoy the activity. (teacher`s journal)</p> <p>Context 3: "Students feel more motivated to work as they have a clear idea about the text they are going to read" (Teacher`s journal)</p>	Students feel more motivated to read since they know what strategies to use when reading a text.

Axial coding

According to Creswell (1998), axial coding allows identifying a central phenomenon, exploring causal conditions, specifying strategies, identifying the context and intervening conditions, and delineating the consequences for the central phenomenon identified. The analysis of *axial coding* aims to sort a large number of codes into some sort of order or into groups. (Figure 4).

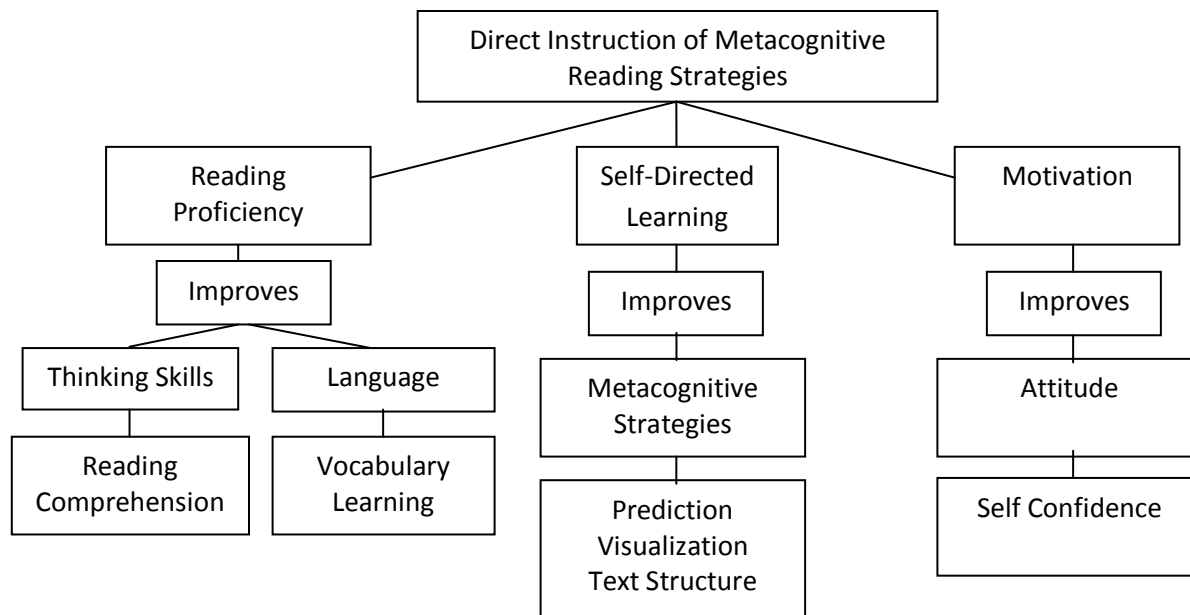


Figure 4. Axial coding

By comparing the three context sub-categories, many commonalities were found. The sub-categories were grouped into three main groups: Reading proficiency improvement, self-directed learning, and motivation. Table 9 provides the relationships between categories, sub-categories and the research question.

Table 9.
Categories, sub-categories and codes related to constructs and research questions

QUESTION	CATEGORIES	SUB-CATEGORIES	CODES
What are the effects of teaching planning and monitoring metacognitive strategies on the reading comprehension proficiency of basic	Reading Proficiency	Reading Comprehension Vocabulary learning.	<ul style="list-style-type: none"> • Understanding a text. • Identifying places, characters. • Asking questions about the reading. • Identifying general information and detailed information. • Reading faster and more efficiently • Reducing the level of difficulty of readings. • Meaning • Correct choice of words. • Use of dictionary. • Contextualizing meaning. • Recognizing

users of the language in three different academic contexts?	Self-directed Learning	Metacognitive strategies	<ul style="list-style-type: none"> • Predicting • Text structure • Visualizing
		Understand how to learn	<ul style="list-style-type: none"> • Understanding how to use the strategy • Choice of strategy. • Awareness of learning.
	Motivation	Attitude	<ul style="list-style-type: none"> • Self-learning • Self confidence

In general, the results of the qualitative data analysis give evidences that the direct instruction of metacognitive strategies improved students’ reading comprehension, students’ self-directed learning, and increased students’ motivation. In addition, the direct instruction of metacognitive strategies helped students to increase their awareness of using reading strategies.

- Reading proficiency: According to the analysis results, the metacognitive strategies improve students’ reading comprehension. First of all, the use of metacognitive strategies help students to develop thinking skills since by using prediction, visualization and text structure strategies, learners can predict, organize information, and sequence events. In addition, they can infer meaning of words from context. In short, applying metacognitive strategies while reading make reading easier for students; consequently, they feel self-confident and motivated to read not only in the classroom but also at home. Moreover during the process students learnt new vocabulary.
- Students’ self-directed learning: Direct instruction on metacognitive strategies helps students to understand and monitor their own cognition.

“Metacognition is an appreciation of what one already knows, together with a correct apprehension of the learning task and what knowledge and

skills it requires, combined with the ability to make correct inferences about how to apply one's strategic knowledge to a particular situation, and to do so efficiently and reliably" (Peirce, 2003, p. 2).

During this research, students acquired some self-directed learning skills by deciding which kind of metacognitive strategies to use when reading a text; that way, students became more independent since they used the metacognitive strategies that best fit with their learning styles. As stated by Abdullah (2001), self-directed learners are responsible owners and managers of their own learning process.

- Metacognitive processes include concepts such as motivation, and self-esteem. Motivation deals with a student's desire to actively participate in the learning process (Brophy, 1986). It was evident that students got involved in the academic activities during the implementation of the lesson plans since they found the activities meaningful and worthwhile. Therefore, learners started to enjoy the process "for its own sake, for the enjoyment it provides, the learning it permits, or the feelings of accomplishment it evokes" (Lepper, 1988, p. 292).

In general, the results of the qualitative data analysis give evidence that the direct instruction of metacognitive reading strategies improved students' reading comprehension, increased their awareness, maximized students' reading proficiency and students' self-directed learning. One of the main causes we found is that students develop thinking skills through the use of prediction, text structure, and visualizing strategies, making easier for them to understand the text. Consequently, students felt more motivated to learn which led

them increase their participation in class. In addition, the results showed that students also improved their vocabulary acquisition.

Another important finding was that the direct instruction of metacognitive reading strategies promoted self-directed learning since students learned how to understand a text by themselves. The strategies learners acquired gave them the tools to take control of their reading process. As a result, they became more confident about their reading skills. If we refer to the results of the pre-test and posttest (see figures 1, 2 & 3), it is evident that participants' reading comprehension was poor when presenting the pretest, but after the interventions there was a significant increment in the numbers of right answers in comparison with the posttest.

Conclusions and pedagogical implications

This chapter lays out the results of this research after applying, collecting, and analyzing all the instruments and considering the research question, which addresses the effects of teaching planning and monitoring metacognitive strategies on the reading comprehension proficiency of basic users of the language in three different academic contexts.

The goals of this study were achieved, since as it is observed in Table 5, Table 6, Table 8, Table 9, the quantitative and qualitative data results, promoting the metacognitive strategies help the target students become self-directed learners, allowed them be aware of metacognitive reading strategies they should use based on their reading needs; despite all the differences of the three contexts regarding students' age, language level, and academic situations; this was one of the common positive results after carrying out this work. The subjects also showed important improvements related to their attitudes towards their own second language learning process. The analysis of the results that were obtained by the students in the three different contexts before, during and after applying the metacognitive strategies on this project, allowed the researchers confirmed that they improved their reading comprehension proficiency. Information found in the teachers' journals described that a remarkable majority of learners in the three contexts went through processes involving features which are linked to autonomous learning.

In brief, results of the data collection instruments pointed out that after students explored, and implemented the metacognitive reading strategies; they became more aware of the way they were learning. The obtained data also shows that the learners' awareness affected positively their achievement in their reading comprehension in the three different contexts in

which this study was carried out. Therefore, teaching metacognitive strategies proved to be a key element for success. The results of this study add validity to those found in other local and international studies since it was demonstrated that students were benefited from receiving a direct instruction of metacognitive strategies that facilitated their reading outcome (Anderson & Roit, 1993).

Eventually, the results of this study might be used as a reference for language teachers, learners, book writers, and even material designers to keep evolving, rethinking and rediscovering the multiple ways a language can be taught or learned, taking into account self-learning and students' use of metacognitive strategies in order to improve their performance at reading. However, this study might also be limited in terms of having only three metacognitive strategies for instruction. For this reason, the results from this study can become stronger and more influent if reinforced or complemented with other replications or further studies.

Additionally, this study proved that metacognition is vital for reading comprehension. Therefore, it is convenient to teach metacognitive strategies since they facilitate students' learning and help them become independent learners and effective readers. Learners integrate their prior knowledge with information from the text, reflect upon and process information before, during and after reading as they use metacognitive strategies. The positive effects of metacognition on the subjects' reading comprehension proficiency makes the findings important for the teachers-researchers who carried out this study and for other education practitioners like EFL/ESL teachers, who can implement these strategies in similar contexts.

Pedagogical implications

Metacognitive strategies are important and valuable for enhancing students' reading comprehension skills, since they generate not only improvement, but also increase motivation and good attitudes toward learning the target language. The results of this research show that metacognitive strategies help students to increase their reading comprehension. Looking back to the scores of the pre-test and post- test (table 6), it is clear how students improved their reading comprehension performance.

The skills that the learners gained along this study will help them achieve better results in internal tests within the different university and school subjects. Additionally, the students from the University of Ibague, as well as the students from Ciudadela del Sur and Nuevo Futuro high schools improved their reading comprehension in the target language which will be really useful for external tests that are intended to measure the quality of education that takes place in these teaching contexts. From this point of view the target contexts also benefit from this study.

In short, in EFL teaching, it is essential to teach students to be aware and use metacognitive reading strategies since that way, they will maximize their learning process and will take any opportunity to practice not only in the classroom but also at home. In addition, when students select the strategies, they not only become independent, strategic learners, but also use them effectively to accomplish tasks or meet goals.

Limitations

Although metacognitive strategies help learners to improve their reading comprehension levels; our research was limited to only three metacognitive strategies, which can limit students' choices since they must be able to think and make conscious decisions about the appropriate strategies to be used when solving reading tasks. For that reason, it is recommended that future researchers use diverse metacognitive strategies so that students can have more opportunities to use different strategies. In this sense, it is also important to consider the class time to apply the interventions since using more strategies requires more time so that students can have more opportunities to understand, explore and apply the different strategies.

Further research

This project investigated the effects of metacognitive strategies on reading comprehension proficiency. The groups involved were from ninth grade in two public schools and students from the university with A1 level. It would be interesting to carry out this research with students having a higher proficiency English level, including at least five metacognitive strategies and a longer period of implementation. Moreover, further research could focus on how to increase speaking and listening skills by implementing metacognitive strategies as in most public schools the majority of students have lots of problems with those skills. Therefore, it is necessary to look for alternatives to improve students' communicative competences.

References

- Abdullah, M. H. (2001). Self-directed learning. Bloomington, IN: ERIC Clearinghouse on Reading, English, and Communication. (ERIC Document Reproduction Service No. ED459458).
- Alderson, J. C. (2000). *Assessing Reading*. Cambridge: Cambridge University Press
- Anderson, N. J. (2002). "The role of metacognition in L2 teaching and learning," ERIC Digest. Retrieved December 6, 2013 from <http://www/-ericdigests.org/>
- Atehortua, J. (2010). Cognitive Styles: an Approach to Autonomous Learning in 12 Adult Students . *Revista Universidad Pontificia Bolivariana*, Vol. 4 No. 8 page 11.
- Benson, P. (2001). *Teaching and researching autonomy in language learning*. Harlow: Longman/ Pearson Education.
- Best, J.W. and Kahn J.V. (2006). *Research in education*. United state of America: Pearson.
- Biehler, R. and Snowman, J. (1993). *Psychology Applied to Teaching*. Boston: Houghton Mifflin Company.
- Bonds, C., Grant Bonds, L., and Peach, W. (1992). Metacognition: Developing independence in learning. *Clearing House*, 66(1), 56-59.
- Boud, D. (1998) Moving towards autonomy in Boud. D. ed. *Developing student autonomy in learning*. 2nd edition. London: Kogan
- Brophy, J. (1986, October). On motivating students. East Lansing, Michigan: Institute for Research on Teaching, Michigan State University, (ERIC Document Reproduction Service No. ED276724).
- Brown, J.D. (2001). *Using surveys in language programs*. Cambridge: Cambridge University Press.

- Bryman, A. & Burgess, R. (1999). Qualitative research. In Hollstein, B. (n.d.). Qualitative approaches. Sage Handbook of Social Network Analysis. London, New Delhi. Vol. 4.
- Cain, K., Oakhill, J. V., & Bryant, P. E. (2000). Investigating the causes of Reading comprehension failure: The comprehension-age match design. *Reading and Writing*.
- Carvalho, S. & White, H. (1997). Combining the Quantitative and Qualitative Approaches to Poverty Measurements and Analysis. *The practice and the Potential*. Washington: The International Bank for Reconstruction and Development
- Creswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five traditions. Thousand Oaks, CA: Sage.
- Creswell, J. W. & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124-131.
- ÇubukÇu, F. (2008). How to Enhance Reading Comprehension through Metacognitive Strategies.
- Day, R., and J. (1998). Bamford. Extensive reading in the second language classroom. Cambridge: Cambridge University Press.
- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods*. New York: McGraw-Hill.
- Devine, J. (1993). The role of metacognition in second language reading and writing. In J. Carson and I. Leki (Eds.), *Reading in the Composition Classroom: Second Language Perspectives* (pp. 105-127). Boston: Heinle and Heinle.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford: Oxford University Press.

- Eggen, P. and Kauchak, D. (1995). *Strategies for Teachers: Teaching Content and Thinking Skills*. Boston: Allyn and Bacon.
- Freeman, D. (1998). *Doing teaching research: From inquiry to understanding*. Canada: Heinle and Heinle publishers.
- Fung, I. Y. Y., Wilkinson, I. A. G., & Moore, D. W. (2003). L1-assisted reciprocal teaching to improve ESL students' comprehension of English expository text. *Learning and Instruction*, 13, 1-31.
- Garb, E. (2000). Maximizing the potential of young adults with visual impairments: *The metacognitive element*. *Journal of Visual Impairment and Blindness*, 94 (9), 574 – 583.
- Gough, P.B., & Hillinger, M.L. (1980). Learning to read: An unnatural act. *Bulletin of the Orton Society*.
- Griffiths, C. (2008). Strategies and good language learners. In C. Griffiths (Ed). *Lessons from good language learners* (pp. 83-98). Cambridge: Cambridge
- Guba, E. & Lincoln, Y. (1985). *Naturalistic Inquiry*. United States of America: SAGE publications.
- Harvey, S. & Goudvis, A. (2000). *Strategies that work*. Portland, Maine: Stenhouse Publishers.
- Hammond, M and Collins, R. (1991). *Self-Directed Learning: Critical Practice*. London: Kogan.
- Janopoulos, M. (1986). The relationship of pleasure reading and second language writing proficiency. *TESOL Quarterly*, 20 (4).

- Jones, W.P. & Kottler, J.A. (2006). *Understanding research: Becoming a competent and critical consumer*. Upper Saddle River, NJ: Pearson
- Joppe, M. (2000). *The Research Process*. Retrieved February 25, 2014, from <http://www.ryerson.ca/~mjoppe/rp.htm>
- Kenning, M-M. (1996). *Creating an infrastructure for autonomous learning: The resource center*. *System*, 24, 223-231
- Krashen, S. (1993). *The power of reading. Insights from the research*. Englewood, Co.: Libraries Unlimited.
- Lepper, M.R. (1998). *Motivational considerations in the study of instruction*. *Cognition and instruction*, 5 (4), 289 – 309.
- Lonergan, J. (1994). *Self-access language centers: Implications for managers, teachers and learners*. In E. Esch (Ed.) *Self-access and the adult language learner* (pp. 119 – 125). London: CILT
- Lopez, A.& Giraldo, M. (2011). *The English Reading Strategies of Two Colombian English Pre-service Teachers* *Íkala, revista de lenguaje y cultura*, vol. 16, núm. 28, , pp. 45-76. Universidad de Antioquia. Colombia
- Mathison, S. (1988). *Why triangulate?* *Educational Researcher*, 17(2), 13-19.
- McNamara, D. S. (2004). *SERT: Self-explanation Reading Training*. *Discourse Processes*, 38, 1– 30
- Mertler, C. (2009). *Action Research. Teachers as researchers in the classroom*. SAGE Publications. Inc.
- Mishler, E. (1990). *Validation in inquiry-guided research: The role of exemplars in narrative*.

- Moore, C. (1992). *Self-access : Appropriate technology*. Manchester: British Council.
- O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., & Russo, R. (1985). Learning strategies used by beginning and intermediate ESL students. *Language Learning*, 35, 21-46.
- O'Malley, J. M., Russo, R. P., Chamot, A. U., & Stewner-Manzanares, G. (1998). Applications of learning strategies by students learning English as a second language. In C. E. Weinstein, E. T. Goetz, & P. A. Alexander (Eds.), *Learning and study strategies: Issues in assessment instruction and evaluation* (pp. 215-231). San Diego: Academic Press.
- Oxford, R. (1992). Research on Second Language Learning Strategies. *Annual Review of Applied Linguistics*, 13, pp 174-187. doi:10.1017/S0267190500002452.
- Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Pearson, J. (1998). 'Teaching terminology using electronic resources' in S. Botley, A. McEnery and A. Wilson (eds.) *Multilingual Corpora in Teaching and Research*. Amsterdam: Rodopi.
- Peirce, W. (2003). *Metacognition: Study strategies, monitoring, and motivation*. Retrieved February 14, 2014, from <http://academic.pg.cc.md.us/~wpeirce/MCCCTR/metacognition.htm>
- Piano, C. (2010). The adoption and practice of mixed methods: U.S. trends in federally funded health related research. *Qualitative inquiry*, 6 (6), 428 – 440
- Quiroga, C. (2010). Promoting tenth Graders' Reading Comprehension of Academic Texts in the English Class. *PROFILE*, 12 (2), 11 – 32. Retrieved from: <http://www.scielo.org.co/pdf/prf/v12n2/v12n2a02.pdf>
- Roberts, L. W., Geppert, C. M., Coverdale, J., Louie, A., & Edenharder, K. (2005). Ethical and regulatory considerations in educational research. *Acad. Psychiatry*.

- Salataci, R., & Akyel, A. (2002). Possible effects of strategy instruction on L1 and L2 reading. *Reading in a Foreign Language* 14(1), 1-17.
- Sale, C. (1999). *The Quality of Qualitative Research. Introducing Qualitative Methods.* Great Britain: SAGE publications Ltd.
- Samad, A. A. (2011). Structure to Facilitate Reading Comprehension. *The Reading Teacher*, 64: 368-372. doi: 10.1598/RT.64.5. How to Teach Expository Text
- Smith, F. (1971). *Understanding reading: A psycholinguistic analysis of reading and learning to read.* New York: Holt, Rinehart and Winston.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory.* Thousand Oaks, CA: Sage.
- Tsang, W. (1996). Comparing the effects of reading and writing on writing performance. *Applied Linguistics*.
- Tudor, I. and F. Hafiz. (1989). Extensive reading as a means of input to L2 learning. *Journal of Research in Reading*.12 (2).
- Vygostsky, L. (1978). *Interaction Between Learning and Development.* From *Mind and Society* (pp. 79 – 91) Cambridge, MA: Harvard University Press.
- Wren, S. (2002). Ten myths of reading instruction. *SEDL. Letter*

Appendix A
ICFES results from 2010 to 2013



Instituto Colombiano para la Evaluación de la Educación
-ICFES-

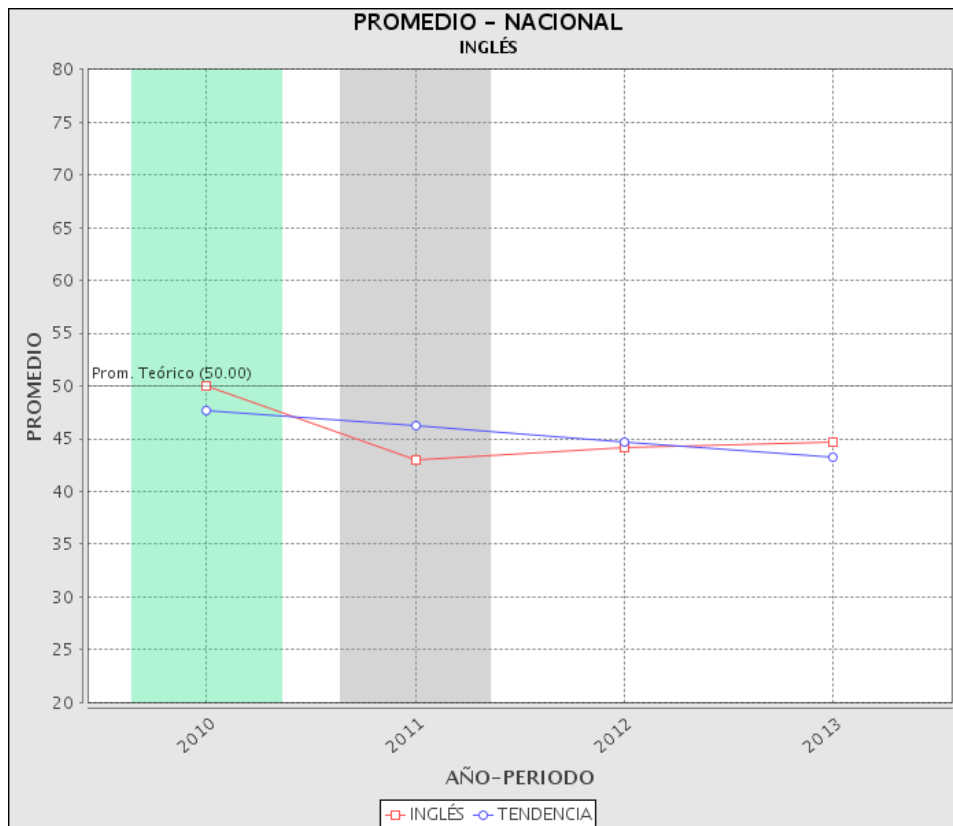
Generador de Reportes de Datos Históricos

Fecha Impresión: 28-03-2014 16:52:19

Nivel Agrupamiento: NACIONAL

Año(s): 2010 - 2013

Prueba: INGLÉS



INGLES	
AÑO-PERIDO	PROMEDIO
2010	50.03
2011	43.00
2012	44.12
2013	44.63

Appendix B
Principal's Consent Letter

Date: _____

I kindly request your authorization for conducting an action research study at the school with ninth grade students. I am currently studying a Master's in English Teaching at Universidad de La Sabana and as part of the curriculum and the emphasis of the program on fostering the research component in teaching; I am interested in finding out about the effects of implementing intensive reading to decipher information in science classes.

Reading comprehension constitutes a key area in content-based instruction, and through my project I expect to teach students different deciphering strategies in order to strengthen students' reading ability as well as students' understanding of science concepts. This study will not change any component of the physics curriculum; on the contrary, it seeks to gain insights about reading in content-based classes, and provide solid arguments about key factors to be taken into account when teaching science.

This research project will begin on January 20, 2014 and will last for one month until February 28. Integrity of data collection and analysis procedures will be pursued to guarantee a valid, reliable and ethical research study. Individual identities will be protected when writing the corresponding research reports. In addition, students will be informed and consent from parents will be requested.

Action research aims at improving teaching practices within the local context and building-up a reflective learning community. Bearing this mind, the findings of this research project will be available to all the school community.

Sincerely,

Appendix C

Parents' Consent letter

Date: _____

Apreciados Padres de Familia

Cordial Saludo,

Como parte de los estudios que adelanto en la Maestría en Didáctica del Inglés en la Universidad de la Sabana, tengo el interés de iniciar un proyecto investigativo en el grado que su hijo(a) cursa actualmente. Dicho proyecto busca apoyar el proceso de comprensión lectora en las clases de Inglés a través de la implementación de diferentes talleres y actividades. De igual manera, las estrategias implementadas para esta clase contribuirán al desarrollo académico del estudiante en la medida que fortalecen sus habilidades de pensamiento.

La información que se obtenga de este proyecto investigativo servirá solamente fines educativos y las identidades de los estudiantes se mantendrán en estricta confiabilidad. Para recolectar la información se utilizaran encuestas, exámenes, trabajos y reflexiones de los estudiantes.

El proyecto tendrá una duración de un mes, al final del cual busco contribuir al desarrollo de comunidades de aprendizaje que reflexionan sistemáticamente.

Agradezco de antemano su colaboración e interés,

Atentamente,

Yo _____, padre/madre

de _____ autorizo

a mi hijo (a) hacer parte del proyecto de investigación *“Improving reading comprehension through metacognitive self-directed reading strategies ”*

Fecha _____

Firma _____

Appendix D
Needs Analysis Questionnaire

Needs Analysis Questionnaire

A1 / A2 Level

In this questionnaire you are going to express how you feel about some things you do when you read. It isn't a test.

There is no right or wrong answers. It is just about how you feel when you are reading. For instance, you feel comfortable, uncomfortable, confident, happy, sad, worried relaxed, anxious.

Please complete the questionnaire as accurately and truthfully as possible. Put an "X" in the statement that best describes what you actually do when reading English stories and texts.

Statements	Never	Sometimes	Usually	Always
1. I relate what I already know with the texts I read.				
2. I visualize English words by making mental images of them.				
3. I remember a new word when I use it in a sentence				
4. I evoke new English words or phrases by remembering their location on the page or on the board.				
5. I make predictions before I read a text.				
6. I monitor the comprehension of a text by asking myself questions before, during and after reading.				
7. I identify the structure of the text when reading				
8. I enjoy when reading in English.				
9. I first skim an English passage (read over the passage quickly) then go back and read carefully.				
10. I look for words in my own language that are similar to new words in English.				
11. I find the meaning of an English word by dividing it into parts that I understand.				
12. I try not to translate word-by-word.				
13. I make diagrams to summarize the information I read.				
14. I make guesses to understand unfamiliar English words.				
15. I read English texts without looking up every new word.				
16. I notice my English mistakes when reading and use that information to help me do better.				
17. I look for opportunities to read as much as possible in English.				
18. I have clear goals for improving my reading skill.				

Students' age, educational level, and socio-economical stratum. _____

Other comments:

We appreciate your cooperation

Adapted from: Strategy Inventory for Language Learning (SILL) Version 7.0 (ESL/EFL) © R. Oxford. 1989

This test has been designed as an instrument to collect data to be used in the research project that intends to measure the effects of implementing metacognitive strategies (planning and monitoring) in reading comprehension.

Name: _____ **Date:** _____

Look at the title of the text and the picture next to it and choose the best option

1. The text is going to be about

a. A car accident

b. a ghost in a car

c. A car that hit a ghost

Now read the text carefully and answer the questions below it.



HAUNTED CAR

by Rudy Reyna

It was many years ago when I was still a teenager living on Murray street in San Antonio. I had been doing odd jobs around town and worked for my father at the tailor shop* after school. Finally, I was making a little bit of money and

started to save for a car. I wanted to start dating and be able to take girls to school dances. Borrowing my_dad's car was not an option especially since he needed it for work. Then I remembered there was a used car lot on Commerce Street not far from the "Malt

House."¹¹

It was a crisp** Friday night. I crossed the street and walked to the car lot to see what they were selling. There weren't too many lights on the lot. Thankfully, there was a full moon. By the light of the moon, I'd peek*** inside a car to see the interior. Then from the distance on the 15back row I saw it, a shiny beauty. It was parked apart from the rest of the vehicles. I walked towards the car. When I saw the price on the card, I couldn't believe it. It wasn't expensive! Maybe my dream of owning my own car would come true. I could actually afford this one.

By now it was around 2:30 in the morning. I knew I'd have to get home and sneak in so as not to wake up my mom or dad. I thought I'd give it one last look. I peered inside the driver's side 20of the window. For some strange reason, there seemed to be a dark shadow in the front seat. I

looked closer at the front seat. There was no one. I cupped my hands on the window to get a better look. Gradually the outline of a man began to appear right before me. Staring back at me at close range I saw a pair of eyes! I fell back almost hitting the ground, I was so frightened. This was not my reflection. I finally mustered the courage and approached the car once again. I cupped my hands and looked inside. There was nothing inside. I got a real creepy feeling. The next day, I went to the lot. The car was gone. I later found out that a few years before, a man had been murdered and his body was found in that same car.

*Tienda de confecciones

**Fria

*** vistazo

Choose the best option for each question

2. The main character of the text has:
a. had the same jobs b. had different jobs c. only worked with his father
3. He wanted to buy a car because
a. He needed one for his job b. to go out with his friends c. to take her sister to school
4. He couldn't afford a new car, so he decided to:
a. borrow his fathers' b. buy a second hand one c. walk to the street
5. When he got close to the car, there was somebody inside it
a. Yes b. No c. doesn't say
6. He could buy this car because
a. He had enough money b. the car was expensive c. the car was so beautiful
7. According to what the author says, it looks like
a. There was somebody inside the car
b. He could ask someone about the car
c. There was a ghost inside the car
8. The word "it" in line 15 refers to:
a. a woman b. a ghost c. a car
9. He saw somebody
a. in the front of the car b. inside the car c. behind the car
10. The next day the car was gone because somebody bought it
a. Yes b. No c. It doesn't say

References

Ghostly Creepy Retrieved on July 27, 2013. <http://www.ghostlycreepy.com/Ghosts2.html>

Appendix F
Semi_structured Interview

1	What kind of texts do you prefer?
2	What do you find easy when reading and understanding a text?
3	What is your purpose when you read?
4	What reading strategies do you use before and while reading a text?
5	What do you consider your limitations as an English reader?
6	What do you do when you find a text difficult to understand?
7	What do you do to evaluate how well or bad you read?
8	How do you think you can keep improving your reading skills?

Appendix. G

Students' interview.

This table summarizes the most common answers found in the analysis of the answers to the interview.

1. What do you find easy when reading and understanding a text? Identify Subjects, verbs, kinds of texts. /Three find easy to understand the content of simple texts. /2 of them said that even though they don't understand everything they read, they find easy understand what the author tries to say because of the words he uses. Commonalities: known words, subjects, familiar vocabulary
2. What is the purpose when you read? Three of them read to understand/2 to learn more words/ 1 to acquire new knowledge Learn, understand
3. What reading strategies do you use before and while reading a text? Google the topic to know better what it refers/ three of them see images to get an idea about the text, two of them: relate the title with the content of the text Predicting, previewing
4. What do you consider your limitations are as an English reader? Three of them: lack of vocabulary, 2: topics (if they are not familiar, we get lost). 3: tenses, "some texts have a terrible mixture of tenses and it makes more difficult to understand." Lack of knowledge about vocabulary, tenses and topics
5. What do you do when you find a text difficult to understand? Two: translate it, three: look up for the new words in the dictionary, three: ask somebody and 2 said they investigate about the topic. Find help, and solve the problem by themselves
6. What do you do to evaluate how well or bad you read? Four: ask friends, two: answer the questions about the reading and see if they were right or not, 4: ask the teacher for feedback Peer feedback, self-evaluation, self-monitoring
7. How do you think you can keep improving your reading skills? Learn more vocabulary/read more/listening to music and watching more TV. Because we will learn more English.

Appendix H

Teacher's journals

D	M	A	
24	01	2014	Journal Lesson plan 1
Research Project title: Improving reading comprehension through metacognitive self-directed reading strategies			
Research Question: What are the effects of teaching planning and monitoring metacognitive strategies on reading comprehension process of basic users of the language in three different academic contexts?			
Journal entry: January 24th, 2014			
<p>The major task of the lesson was to get students familiarized with the first metacognitive reading strategy (prediction). The warm up activity give students an idea about the first metacognitive strategy, students were really involved in this activity and many guesses came from them about the picture.</p> <p>During the presentation of the topic students already had an idea of what predicting meant, therefore they did not ask many questions during the explanation.</p> <p>When doing the practice, I noticed that students had problems with vocabulary, there were some words that they did not know. In addition, they could not organize the text ideas in a coherent way. Since most of them tended to translate word by word. However, making predictions about the text before reading it, help them to have a general idea about the text, which facilitated a little bit their understanding.</p> <p>A very positive aspect during the lesson plan delivery was that all students paid attention to the explanations about how to make predictions before reading a text and how this strategy could help them to improve their understanding of the text. I consider that the first implementation was a success since most students understood how to predict; in addition, some students help their classmates when they have</p>			

Appendix I
Students' product

NAME : _____ DATE: 2/12/2013

Read the following text and answer the following questions

Elephants on the coast of Thailand are acting strange. They stamp their feet and motion toward the hills. The sea draws back from the beaches. Fish flop in the mud. Suddenly, a huge wave appears. This is no ordinary wave. It is a tsunami!

Tsunami (pronounced "soo-NAH-mee") waves are larger and faster than normal surface waves. A tsunami wave can travel as fast as a jet plane and can be as tall as a ten-story building. Imagine dropping a stone into a pond. The water on the surface ripples. A tsunami is like a very powerful ripple. Tsunamis begin when the ocean rises or falls very suddenly. Large amounts of seawater are displaced. This movement causes huge waves.

For a tsunami to occur there must be some kind of force that causes the ocean water to become displaced.

Most tsunamis are caused by underwater earthquakes. However, volcanoes, landslides, large icebergs, and even meteorites are capable of causing one of these mighty waves.

Tsunamis are extremely powerful. Ordinary waves lose power when they break. Tsunami waves can remain powerful for several days. Because tsunami waves are so strong, they can kill people, damage property, and completely ruin an ecosystem in just one hour.

Scientists have no way of predicting when a tsunami will hit. However, if a powerful enough earthquakes occurs, scientists can issue a warning or a watch. A warning means that a tsunami will very likely hit soon. A watch means that conditions are favorable for a tsunami. When people are notified about a watch or a warning, they have more time to prepare. It is best not to get caught unaware when a tsunami is on the way!

READING COMPREHENSION

1. In paragraph 1, the elephants are most likely acting strange because they \rightarrow cause and effect

A. are not used to seeing fish
B. dislike the water
C. can sense something out of the ordinary
D. see the ocean drawing back from the beaches

2. This passage is mostly about \rightarrow cause and effect.

A. how to prepare for tsunamis
B. scientists who predict tsunami waves
C. similarities and differences between wave types
D. causes and effects of tsunamis

3. As used in paragraph 2, **displaced** most nearly means \rightarrow sequence.

A. moved out of normal place
B. pushed by human force
C. sloshed around quickly
D. pulled to great heights

4. After reading the passage, we can conclude that a tsunami \rightarrow cause and effect.

A. watch is more serious than a warning
B. warning is more serious than a watch
C. warning and watch are equally serious
D. warning and watch both mean a tsunami has formed

5. Tsunamis cause so much destruction because they \rightarrow cause and effect

A. cannot be predicted by scientists
B. break on the coast, unlike normal waves
C. are caused by volcanoes, landslides and meteorites
D. can be as tall as a ten-story building

3/5

Expansion (worksheet)

Name: _____

Date 13/NOV/13

Activity 1

- Task 1. Read the title and look at the picture and predict what the text is about.
 Task 2. Discuss with your partner your ideas. Are they the same or different?
 Task 3. Now read the text and answer the questions.

CAT CARRIER - your cat could make you crazy (National geographic August 2005)



Cats can act a little crazy. One minute they're completely relaxed, purring while you scratch between their ears-then they whip around and carve the mark of Zorro in your hand. They get that spooky look and do high-speed laps around the house. If you have a cat, you've seen all sorts of nutty stuff. But here's something you may not know: Some scientists suspect cats can cause mental illness in people.

A protozoan named toxoplasma gondii, commonly found in cat feces, contaminated water, and undercooked meat, has been implicated in some cases of schizophrenia. Alan S. Brown, a Columbia University professor of psychiatry and epidemiology, has found a 2.6 times greater prevalence of schizophrenia in people exposed to "toxoplasma" in uterus. Brown has also reported a threefold increase in the risk of developing schizophrenia in children of mothers who had flu during pregnancy.

Now answer these questions.

1. Cats act a little crazy because _____
 - a. They perform different and special tricks
 - b. They change their behavior without any notice
 - c. They can make you ill.

2. "Toxoplasma Gondii" can _____
 - a. Contaminate cat feces
 - b. Generate schizophrenia
 - c. Make your cat crazy

3. Professor Brown has found that _____
 - a. Schizophrenia is 2.6 more prevalent than toxo in uterus
 - b. The risk of suffering schizophrenia originated from flu is higher than from toxo.
 - c. Schizophrenia is related to other diseases such as "toxoplasma" and "flu".

Handwritten marks: checkmarks, '2/3', and a symbol resembling a lambda.

Task 4. Were your predictions right or wrong? How?

**Annex 4
Self-evaluation (Checklist)**

This checklist has the purpose of providing you with some understandings regarding your progress during the activities and evaluates the effectiveness of the lesson.

Tick YES or NO to identify the strategies you used in order to succeed in the activities.	Yes	No
Part A		
1. I was able to predict the content of the text by looking at the images, the title, charts, and the first sentences of the paragraphs.		
2. I asked questions about the text and try to predict what it would be about.		
3. I made mental images of what I was reading		
4. I used what I know about the topic to help me understand the text.		
5. I found making prediction very useful when understanding a text.		
Part B		
6. Did you feel comfortable with the different activities?		
7. Did you understand the topic?		
8. Were you able to develop all the activities without problems? If not what problem did you have? _____		
9. Did you consider the time appropriate for the activities?		
10. Do you think it is necessary more time to practice?		
11. Do you like working in couples and in group		
12. Do you prefer working alone.		

Other comments: _____

**DEFINING AND IMPLEMENTING TEACHING STRATEGIES TO FOSTER SELF-DIRECTED LANGUAGE LEARNING IN COLOMBIA RESEARCH PROJECT PART 2
(On-going Work)**

LESSON PLAN TEMPLATE FOR INTERVENTION

Adapted from Dr. Joan Rubin's Lesson Planner, ICALT lesson plan template and Weekly Planner 2012-02 Department of Languages and Cultures, Universidad de La Sabana

Name of co-researcher: xxxx					
University Code Number: 201214723 / 201214468 / 201214247					
Institution: Ciudadela del Sur High School, University Of Ibague					
Date of Class: 06 November 2013			Time class: 4:00 – 6:00 pm		
			Time Frame: 2 hours		
Week No. 1					
Class/grade: Ninth and Level 4			Room: 12 / 14		
Number of students: 30 / 15					
Level of students: A1 +					
Lesson Number					
1 X	2	3	4		
5	6	7	8		
Class Objective					
Students will learn how to make predictions					

Language Goal

Students will be able to make predictions of a text

Learning to Learn Goal

- ✓ Students will be able to verify and support predictions.
- ✓ Students will be able to make predictions based on clues and prior knowledge.

Identify a topic for the lesson

Predicting

Materials and Resources

Material 1 Name: Picture (Preparation)	Rationale Warm up	Annex 1
Material 2 Name: Power point Presentation (Presentation)	Rationale: Predicting	Annex 2
Material 3 Name: text "Purple tomato could fight cancer"	Rationale: This text will help students to practice predicting strategy.	Annex 3
Material 4 Name: text "Cat Carrier"	Rationale: this text will help students to reinforce the concept of predicting	Annex 4
Material 5 Name: Checklist (self-evaluation and progress)	Rationale: This checklist will allow students to identify their progress and their reflection about the use of the strategy.	Annex 5
Material 6 Name: Teachers' journal	Rationale: This journal will allow teachers to keep a record of their students' reactions and comments about the use of the strategy as well as the effectiveness of the intervention.	Annex 6

Assumed knowledge

The students can understand simple texts in which there are not many complex structures or new words. They are also able to make simple sentences to answer not very elaborated questions.

Anticipated problems and planned solutions

Students can struggle with unknown words; problems following the texts and therefore can't guess what is going to happen next. They can also have problems with sequencing. Predictions are based on "what happens next" which requires a student to follow a logical sequence of events.

A solution to this possible problem is promoting a good collaborative environment in which students can find support among them and a good rapport with the teacher.

Sequence the lesson to accomplish your goals

Teacher's role (1) *	Stage (2) **	Aim (3) ***	Procedures		Interact ion	Time
			Students' actions	Teacher's actions		
Encourager	Warm up Preparation	To understand what predictions are.	Look at the picture and answer the questions. (Annex 1)	Show students the pictures, and ask some questions. (Annex 1)	Teacher-students	5 minutes
Model	Presentation Modeling	To teach students how to make predictions	Students listen to the teacher explanations; they are going to answer some questions (Annex 2)	The teacher is going to present a power point presentation, where she explains what predictions are and how to do it with a text.	Teacher-students	25 minutes
Observer	Practice	To give students opportunities to make prediction using a short text.	<ol style="list-style-type: none"> 1. Students are going to work in couples. 2. They are going to receive a worksheet so that they can make some predictions. 3. Join with other couple and check their predictions. (Annex 3) 	The teacher is going to observe students' work and be ready to help students with possible doubts.	Students-Students Teacher-students	40 minutes
Mentor	Expansion	To reinforce the use of prediction as a metacognitive strategy	Students are going to practice predicting strategy through the development of a worksheet. (Annex 4)	The teacher will monitor students' performance and solve questions.	students	40 minutes
Facilitator	Learner self-evaluation	To give students the opportunity to check if they can make predictions and reflect about the effectiveness of the lesson.	Students are going to use a checklist with some questions regarding predicting strategy as well as different aspects about the lesson. (Annex 5)	The teacher is going to be ready to answer students' questions.	students	10 minutes

REFERENCE

- Rubin, J. Lesson Planner (2012)
- ICELT Lesson Plan Template
- Weekly Planner 2012-02 Department of Languages and Cultures. Universidad de La Sabana

Appendix K
Timeline

Tasks	2013												2014																												
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep				Oct				Nov				Dec				Jan				Feb				Mar				Apr					
								1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Tuning the research question																																									
Planning the implementation (Methodology, Defining Methodology																																									
Letter of Consent: School/Students																																									
Writing and sending proposal																																									
Defining Population																																									
Defining Instruments																																									
Selecting Strategies																																									
Planning Class activities																																									
Implementing/Interventions																																									
Facilitation SDL/Starting Process																																									
Implementation 1																																									
Implementation 2																																									
Implementation 3																																									
Implementation 4																																									
Implementation 5																																									
Implementation 6																																									
Implementation 7																																									
Implementation 8																																									
Implementation 9																																									
Gathering information																																									
Teacher's Journal																																									
Applying questionnaires/Survey																																									
Interviewing Ss																																									
Data analysis																																									

Teacher's Journal																																																					
Reporting results																																																					
Article writing																																																					
Preparing First Version of Article																																																					
Writing Second Version of Article																																																					
Literature Review : Annotated Bibliography																																																					
Evaluating Results																																																					
Writing the abstract																																																					
Handing in final version																																																					

Appendix L
Results of tasks development for Context 1.

Student	3 Questions	3 paragraphs	5 Questions	10 questions
S1	1	2	3	6
S2	2	2	3	7
S3	2	2	2	3
S4	3	2	2	8
S5	2	2	3	0
S6	2	2	0	8
S7	2	1	3	4
S8	0	1	3	8
S9	2	1	2	6
S10	2	2	2	5
S11	1	1	2	0
S12	2	0	3	6
S13	2	0	4	5
S14	2	2	3	8
S15	2	2	4	6
S16	1	1	3	6
S17	2	1	3	9
S18	2	0	4	8
S19	3	1	5	6
S20	2	0	3	7
SS. With more than 60%	16	9	14	14

Results of tasks development for Context 2.

Student	3 Questions	3 paragraphs	5 Questions	10 questions
S1	2	2	2	8
S2	2	1	2	7
S3	2	2	2	9
S4	2	1	2	10
S5	1	3	3	6
S6	2	3	3	7
S7	1	1	3	5
S8	1	1	3	5
S9	2	1	2	6
S10	0	1	2	9
S11	1	1	2	9

SS. With more than 60%	6	4	4	9
---	---	---	---	---

Results of tasks development for Context 3.

Student	3 Questions	3 paragraphs	5 Questions	10 questions
S1	2	3	2	6
S2	2	1	3	9
S3	1	3	2	5
S4	1	3	5	8
S5	0	3	3	7
S6	1	3	3	8
S7	3	2	4	7
S8	2	1	1	9
S9	3	3	3	8
S10	2	1	3	6
S11	1	1	4	7
S12	1	3	3	7
S13	2	2	3	8
S14	2	2	3	9
S15	0	3	2	6
S16	2	3	3	10
S17	0	3	5	5
S18	1	2	5	6
S19	3	2	4	6
S20	2	3	5	7
S21	1	3	3	9
S22	1	1	4	7
S23	2	3	3	10
S24	2	1	2	7
SS. With more than 60%	13	18	18	22

Appendix M
Results of pre and post tests

Context 1	Pretest	Posttest
S1	2	4
S2	5	7
S3	3	4
S4	5	6
S5	4	5
S6	3	5
S7	2	4
S8	2	3
S9	2	5
S10	2	3
S11	2	4
S12	4	6
S13	2	5
S14	4	4
S15	4	5
S16	3	5
S17	3	3
S18	2	4
S19	3	6
S20	3	5

Context 2	Pretest	Posttest
S1	5	7
S2	4	6
S3	10	10
S4	4	6
S5	4	7
S6	6	7
S7	6	7
S8	3	4
S9	4	6
S10	2	3
S11	10	10

Context 3	Pretest	Posttest
S1	6	6
S2	4	6
S3	4	5
S4	7	9
S5	5	7
S6	6	6
S7	4	7
S8	9	10
S9	5	8
S10	4	6
S11	2	5
S12	5	8
S13	4	7
S14	6	9
S15	3	6
S16	9	10
S17	2	4
S18	3	5
S19	4	6
S20	5	5
S21	6	8
S22	2	6
S23	8	10
S24	3	7