Propuesta de una teoría instruccional basada en la metacognición de un protocolo de escritura para medir la subcategoría del parafraseo más allá del formato de selección multiple

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Abstract: This article is the result of a qualitative multiple-case study carried out for the Licenciatura en Educación Básica con Enfasis en Humanidades-Inglés at University of Córdoba, Colombia. The participants were a case group and a comparative group from the 6th semester Communication subject. Both groups were selected according to comparative criteria. A diagnostic test and a post-test reading comprehension test in English were applied to analyze, compare and contrast the results of the literal paraphrasing subcategory in the pre-intervention and intervention phases. The writing protocol included the intervention program, which in turn included an instructional theory based on three metacognitive questions to illustrate the reading comprehension process. The three metacognitive questions are part of a procedural interpretation of metacognitive knowledge proposed by Flavell: “declarative knowledge (what?), procedural knowledge (how?), and conditional knowledge (why?)”.

Keywords: paraphrase subcategory, instructional theory, writing protocol, metacognitive knowledge, multiple-choice format and open-ended questions.
Propuesta de una teoría instrucional basada en la metacognición de un protocolo de escritura para medir la subcategoría del parafraseo más allá del formato de selección múltiple

Resumen: Este artículo se deriva de un estudio cualitativo de casos múltiples realizado en la Licenciatura en Educación Básica énfasis en Humanidades-Inglés de la Universidad de Córdoba, Colombia. Los participantes fueron un grupo de caso y uno comparativo de la clase de Comunicación, de sexto semestre. Ambos grupos se seleccionaron según unos criterios comparativos. Una prueba diagnóstica y otra postest de comprensión lectora en inglés se aplicaron para analizar, comparar y contrastar los resultados de la subcategoría literal de parafrases en las fases de preintervención e intervención. En el protocolo de escritura se incluyó el programa de intervención, en el cual se aplicó una teoría instrucional basada en tres preguntas metacognitivas para ilustrar el proceso de comprensión lectora. Las tres preguntas metacognitivas forman parte de una interpretación procedimental del conocimiento metacognitivo propuesto por Flavell: “conocimiento declarativo (¿qué?), conocimiento procedimental (¿cómo?) y conocimiento condicional (¿por qué?)”.

Palabras clave: subcategoría literal de parafrases, teoría instruccional, protocolo de la escritura, conocimiento metacognitivo, formato de opción múltiple y preguntas abiertas.

Proposta de uma teoria instrucional baseada na metacognição de um protocolo de escritura para medir a subcategoria do parafraseio mais além do formato de seleção múltipla

Resumo: Este artigo se deriva de um estudo qualitativo de casos múltiplos realizado na Licenciatura em Educação Básica com ênfase em Humanidades-Inglês da Universidade de Córdoba, Colômbia. Os participantes foram um grupo de caso e um comparativo da aula de Comunicação, de sexto período. Ambos os grupos foram selecionados segundo uns critérios comparativos. Uma prova diagnóstica e outra pós-teste de compreensão de leitura em inglês foram aplicadas para analisar, comparar e contratar os resultados da subcategoria literal de parafrases nas fases de pré-intervenção e intervenção. No protocolo de escritura se incluiu o programa de intervenção, onde se incluiu uma teoria instrucional baseada em três perguntas metacognitivas para ilustrar o processo de compreensão de leitura. As três perguntas metacognitivas fazem parte de uma interpretação procedimental do conhecimento metacognitivo proposto por Flavell: “conhecimento declarativo (o quê?), conhecimento procedimental (como?) e conhecimento condicional (por quê?)”.

Palavras chave: subcategoria literal de parafrases, Teoria Instrucional, protocolo da escritura, conhecimento metacognitivo, formato de opção múltipla e perguntas abertas.
Introduction

Literal or centered text reading comprehension (text-based reading comprehension) could be considered the simplest level or surface dimension of comprehension, but indispensable for developing a set of inferential and critical reading skills.

At this level, the reader may well be answering text based questions (Perfetti, Van Dyke & Hart, 2001, cited in Grabe & Stoller, 2013), in which skills are not potentially open to conscious reflections and use but to “lower-level processes: lexical access, syntactic parsing, semantic parsing, and working memory activation” (Grabe & Stoller, p. 20).

At the literal reading comprehension level, readers are expected to understand a writer’s every word while reading. Hence, the memory of events are stored and simply remembered by the reader, either because the event or fact duly caught the readers’ attention or they are simply recalled for having being underlined, circled or highlighted. It that memorizing or remembering these specific facts does not guarantee or equal comprehension, since lexical access does not always suggest that; however:

Previous content knowledge of the text (Nagao, 2002)

“Previous knowledge concerning text organization” (Grabe & Stoller, 2013, p.12)

“Paragraph structure and development” (Wyrick, 2008, cited in Pandey, 2010, p. 8)

“Text level processes; Oral language weaknesses and Memory” (Nation 2005, cited in Nation & Angell, 2006, p. 81–83); and

Even though little interpretation is required to perform well in this level, it is more complex than commonly assumed, though not simple or easy, passive, less strategic, or poorly skillful.

**Literature Review**

According to Tardy (2010), paraphrasing in a second language tends to be a difficult skill to develop, considering that students may have gaps in linguistic resources (Keck, 2006), the requirements and demands of the task (Currie, 1998) as well as the educational or cultural background (Pecorari, 2003; Pennycook 1996, cited in Tardy, 2010). This may explain why many students end up (in the case of the shortcomings of language resources) giving a completely different meaning from the one stated by the author. This may result from the use of equivocal language forms, such as a verb or an adjective or grammar aspects other than the idea to be paraphrased, changing or distorting author’s ideas. When authors’ ideas are changed, it is known as “the construction of self-explanations during reading” (Chi, de Leeuw, Chiu, & LaVancher, 1994; McNamara, 2004; Millis et al., 2004, cited in McNamara, 2012, pp. 8-9). Moreover, it may happen that the coherence and cohesion of a paraphrase is far from based on the author’s ideas. This last assumption may also be a call for the need to know how to use connectors. Considering this, the development of the paragraph topic sentence, through the supporting ones, is not reached (Parra, 2004, Jiménez, 2006) in conjunction with supporting ideas raised by the author to develop the paragraph.

This entirely indicates a difficulty when readers try to put into their own words what the authors has said. It may, indeed, be taken not as an isolated process but “a process which (Italics added) recapitulates the reader, summarizes and attributes meaning to certain linguistic units to be read in a coherent and meaningful manner” (Meléndez, 2007, p. 6).

The idea that students do not develop all the ideas in a paragraph is to a large extent, as suggested by the critics, one of the three basic strategies used to understand a text, that is, “the sampling or the ability to select the most relevant words and ideas for comprehending the text” (Jouini & Saud, 2005, p. 101).
Similarly, it is true that it is not necessary or mandatory to write the same number of words, sentences or even to retain the original text structures. Sometimes, it can even be possible to develop original supporting ideas within a paraphrase that do not necessarily respond to that developmental taxonomy of ideas; the most important thing is to capture phrases or paraphrase text segments without distorting the fundamental idea or supporting ideas, cultivating the spirit or sense of it.

In short, it is necessary to teach learners not only how to build a rhetorical fluency but rather to construct a paragraph. Paraphrasing may or not be taken as an easy literal reading category, even though “the paraphrase is not an indication that suggests high-level cognitive skills, it does suggest a process that denotes an access to understanding the reading material” (Choy & Kin, 2009, p. 1).

The Instructional Theory

Its importance is based on the fact that “you must have Instructional Theories that focus attention on intervention during the process of knowledge construction as well as teaching how to build strategic knowledge” (Coll, 1993; Gallagher, 1994). Instructional Theories may regulate learners’ reading processes by “a self-reflection process in which readers analyze and overcome the problems that appear and to make decisions about their possible resolution. This may result from a sort of dialogue with himself. Thus, a student who applies this strategy, at all time, is aware of his reading purposes though when deviating from them, he/she is able to redirect or regulate his/her reading purposes.” (Monereo & Castelló, 1997, p. 13).

In several studies, “researchers have shown that Instructional Theories in the same reading comprehension process contribute to more conscious, straightforward, and systematic process” (Brown, Armbruster & Baker, 1986). It also “provides learners with knowledge and confidence that enables them to manage their own learning and empowers them to be inquisitive and zealous in their pursuit” (Paris & Winograd, 1990, cited in Mokhtari & Reichard, 2002, p. 250).

In this research, Instructional Theory is based on the inclusion and teaching, both, theoretically and procedurally, of the two dimensions of metacognition, Metacognitive Knowledge and Regulation of Cognition. The first one, Metacognitive Knowledge, “constitutes knowledge of ourselves,
kinds of tasks we engage in, and strategies we use while engaged in tasks” (Thomas & Barksdale-Ladd, 2000, p. 68). In the second one, regulation of cognition, students monitor, control, and regulate knowledge about cognition (Brown, Bransford, Ferrara & Campione, 1983; Flavell, 1979, cited in Pintrich, 1999) in order to promote cognitive and metacognitive reading skills and strategies in English as a second language.

The school of thought buttressing the Instructional Theory, as mentioned above, was procedurally adapted by questioning three sequential metacognitive processes that were included in the writing-down protocol (Figure 1).

**Figure 1.** The Instructional Theory

Through the three questions stated in the Instructional Theory, learners are driven into “one slow reading, where it promotes the intentional use of the procedures and their adaptation in different situations, in short, learning strategies are prioritized” (Monereo, 1997, p. 31). As a result, “we can change the ways of learning and promote a strategic approach to the problems” (Monereo & Castelló, 1997, p. 32), which can be represented as follows in Figure 2.
**Research Design**

**Participants and context**

Participants for this research were two groups of sixth semester students, from the Communication A and B subjects. The ages of both groups ranged between 19 and 21, according to a demographic questionnaire applied. This research was carried out at the University of Córdoba in the *Licenciatura en Educación Básica con Enfasis en Humanidades-Inglés*.

On one hand, the Case Group, Communication VI-A, was made of 24 students. This group was assigned the name “Case Group” due to the diagnostic reading comprehension test results, which were less favorable than those of the “Comparison Group” in most sub-categories of the reading comprehension levels. Furthermore, another important but indefinite comparative analysis to take into account was that the Case Group had more students graduating from public schools. They also came from a lower socioeconomic level; this last demographic information may also, in one way or another, explain or add meaning to the results obtained in the diagnostic
test. On the other hand, there is the Comparison group (Communication VI-B, with 21 students).

Considering that the data collection stage lasted more than a semester, students went from sixth to seventh semester. It is also worth mentioning that three students during the exploratory phase failed sixth semester, but they attended the five sessions scheduled for the intervention phase, which took place on Saturdays for a period of approximately 3 hours per session. The sessions were scheduled for Saturdays, considering that students had to attend classes during weekdays.

Type of study

This research is a Multiple Case Study. Eisenhardt (1989) mentions that these studies “conceived as a contemporary case study: “is a strategy of research aimed at understanding the dynamics present in unique contexts,’ which could be the study of a single case or multiple cases, combining various methods for collecting qualitative evidence and/or quantitative with the aim of describing, verifying or generate theory” (Carazo, 2006, p. 174).

The research has two phases: the Exploratory and Intervention. On one hand, during the exploratory phase, a demographic questionnaire with some comparative criteria was applied to different groups until they met its requirements (same university, English language program, semester, similar numbers of students graduated from public or private schools, social level, ages, etc.). Once the two groups were chosen, a diagnostic reading comprehension test was applied. In this text, some multiple-choice questions were used accompanied by a writing protocol for students to support their choices. Although two sorts of reading genres were used (narrative and expository), the paraphrase from the expository one was the focus of interest of this article.

The results of four instruments were used for a holistic analysis: a diagnostic reading comprehension test, the writing protocol, a students’ reading experience questionnaire, and a students’ metacognitive reading comprehension questionnaire.

On the other hand, during the intervention phase, an open-ended question format was used instead of the multiple-choice format, so students
were not asked to choose a paraphrase of a paragraph from the text but to construct it.

The results the following instruments were applied in order to analyze and compare both phases: a post-test reading comprehension test, the writing protocol including the application of instructional theory, and a questionnaire about the students’ reading experience. A students’ metacognitive reading comprehension questionnaire was not applied because Instructional Theory brings not only quantitative but also qualitative information of the metacognitive strategies applied during the reading comprehension process.

**Findings**

These results correspond to a triangulation of instruments within both phases, going beyond being merely a description of them, obeying an analytical reflection from the contributions mentioned in the literature review. This same way of building evidence is considered by Bourdieu and Passeron (1996) as “The problematic theoretical facts is not constructed in isolation, but rather in terms of establishing relationships among them” (cited in Dominguez, 2006, p. 42).

**The paraphrase sub-category (literal level)**

It is important to remember that these results correspond to a paraphrase from an expository text. It is also important to bear in mind that when it says *Sin protocolo de lectura* (No reading protocol), it refers to a measurement from the multiple-choice format. On the other hand, *Con protocolo de lectura* (Reading protocol) suggests a measurement of the constructed paraphrase (topic sentence and supporting ideas), as well as the processes that are developed when constructing it, which entails a qualitative measurement.

On one hand, during the Exploratory Phase, as shown in the results below, the case group without the introspective protocol shared 50% of negative and 50% of positive results. When analyzing the reports in the writing protocol, it was determined that 50% of the negative results increased to a 63% because the arguments of many students were different from those who paraphrased using their assumptions of personal views and
experiences. Apart from that, a reduction of the reports in the introspective protocol was noticed in relation to the reports of the transcript subcategory, while the other paraphrases are both from the narrative reading.

On the other hand, despite representing a less favorable performance than the case group in the reading comprehension process, the comparative group’s results do not suggest in any way that the case group is superior to the comparison one. This is because this superiority was not recurring in the other sub-categories of the Literal, Inference, and Critical level where the comparison group always exceeded the case group. Therefore, this result deviates from a steady trend.

The results from this paraphrase (Figure 3) explain why many students start college unprepared for the demands of expository readings (Saumell et al., 1999; Wade et al., 1990; Wood et al., 1998). This is often due to a “lack of Metacognitive knowledge” (Dreyer, 1998; Strydom, 1997; Van Wyk, 2001). Another reason for this inexperience is due to the “low level of required reading activities that normally take place in schools, where readers still focus on development and this is based on reproduction, the identification sub-category (Italics added) and mostly from reading narratives, making this transition more difficult to enter the University” (cited in Dreyer, 2003, p. 350; see also Anderson, Hubert, Scott, & Wilkinson, 1985, cited in Fabrikant, Siekierski, & Williams, 1999).

To overcome these cognitive shortcomings, aims to “orchestrating elements” are suggested (Paris, Cross & Lipson, 1984, cited in Carrel, 1998). That may involve not giving a taxonomy of cognitive and metacognitive strategies with the aim of being applied by students (Anderson, 1991, cited in Carrel, 1998), but the modeling of the same from an instructional theory (Roehler & Duffy, 1984, cited in Carrell, 1998; Afflerbach, Pearson, Paris & Scott, 2008). Moreover, it may suggest self-reflective measurements (Veenman & Elshout, 1999; Dermitzaki & Efklides, 2003, cited in Desoete & Ozsoy, 2009) to facilitate the development and promotion of metacognitive skills and strategies during the process of reading comprehension in English (see Metacognitive Awareness of Reading Strategy Inventory, MARSI, by Mokhtari & Reichard, 2002).
Overall, modelling metacognition from an instructional theory may empower students’ transitions between different reading comprehension levels: literal (transcription or identification and paraphrase sub-categories); inference (inferential, coherence, identifying the main idea, compare and contrast, and identification of the author’s opinion sub-categories), and critical (anticipation sub-category). Instructional Theories may support readers reading processes strategically, efficiently, and successfully to accomplish the reading tasks. When a metacognitive approach is not included into readers reading processes, in the words of O’Malley et al. (1985, cited in Carrell, 1998) “students without metacognitive approaches are essentially learners without direction or opportunity to review their progress, accomplishments, and future directions” (p. 2).
To provide deeper explanations of the results, we took the ones reported in the students’ reading experience questionnaire (Figure 4), particularly question number 4, in which results reported in the purple color stand for their experience from the narrative text and those in orange represent the expository reading.

**Figure 4.** Results of the students’ reading experience questionnaire

<table>
<thead>
<tr>
<th>4. In what ways did the strategies help your reading?</th>
</tr>
</thead>
<tbody>
<tr>
<td>“To understand and comprehend the text in order to respond assertively to the questions”</td>
</tr>
<tr>
<td>“it helps me to memorize and understand the reading”</td>
</tr>
<tr>
<td>“I could capture every detail and that facilitated my understanding”</td>
</tr>
<tr>
<td>“Strategies help a lot but I did not use any”</td>
</tr>
<tr>
<td>“In this reading, the strategies I knew were not much help”</td>
</tr>
<tr>
<td>“They were not very helpful for understanding the reading either to answer the questions”</td>
</tr>
<tr>
<td>“Scanning because I could give a quick reading before answering the questions in the text”</td>
</tr>
<tr>
<td>“To be slightly focused”</td>
</tr>
</tbody>
</table>

Source: Amaya (2012).

These results not only provide information on the implementation of metacognitive strategies and their impact on learners’ reading performance, but also contribute to the understanding of the results of both readings, where the narrative reading results are significantly better than those of the expository reading.

Results showed that metacognitive knowledge is indispensable, considering that, according to Anderson (1991, cited in Carrel, 1998), successful reading comprehension in a second language is not a simple matter of knowing what strategies to use; the reader must know how to use them successfully and how to orchestrate their use with other strategies. It is not enough to know about the strategies, the reader must be able to apply them strategically.
Another aspect that could influence the results of the students’ performance in reading comprehension is certainly linguistic aspects such as vocabulary, which directly affects the understanding of text. This last aspect could be mitigated if learners have prior knowledge about the reading; otherwise, vocabulary should be according to the students’ language acquisition level. Taking this into consideration, Alderson (2000) believes that “tests of vocabulary are highly predictive of performance in reading comprehension tests. In studies of readability, most vocabulary difficulties account for about 80% of the predicted variance. In short, vocabulary plays a very important role in reading tests” (p. 99). He also suggests that, “to reduce the effect of vocabulary knowledge on measures of reading comprehension, it might be wise to allow students to compensate for lack of vocabulary by consulting dictionaries” (p. 99). This is possible because, during reading comprehension processes, meanings are not taken in isolation but in context, and this inference is not in the dictionary, but it is students who must conduct this process (Amaya, 2012). Figure 5 shows the questionnaire results regarding the influence of vocabulary.

**Figure 5. Results of students’ reading experience questionnaire**

<table>
<thead>
<tr>
<th>Number of students</th>
<th>No tenia conocimiento previo</th>
<th>Gramatica familiar</th>
<th>Deduje el tema facilmente</th>
<th>Secuencia de eventos comprensibles</th>
<th>No tenia conocimiento previo</th>
<th>Pude comprender esforzandome</th>
<th>Pocos inconvenientes con las preguntas</th>
<th>Lectura clara o facil de entender</th>
<th>Las preguntas no exigen mucho analisis</th>
<th>Desconocio algunas palabras</th>
<th>No tube que releer más de 2 veces</th>
<th>Vocabulario claro, facil o familiar</th>
<th>Sucesos confusos</th>
<th>Lectura muy compleja</th>
<th>Vocabulario complejo</th>
<th>Con más tiempo/paciencia sería mejor</th>
<th>Dificil pero intente entender lo que más pude</th>
<th>Deduje o supuse el contexto</th>
<th>No entendí que me quería decir el articulo</th>
<th>El tema no era atractivo</th>
<th>No entendi mucho, vocabulario desconocido</th>
<th>Dificil la lectura por la letra pequeña</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>0</td>
<td>0</td>
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<tr>
<td>80%</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>1</td>
<td>1</td>
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<tr>
<td>60%</td>
<td>10</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
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<td>40%</td>
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<td>20%</td>
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</tbody>
</table>

Source: Amaya (2012).

1. It would be more appropriate to consider red numbers, which are the numbers that represent the highest percentages.
As for the students’ metacognitive reading comprehension, results were not favorable, considering that only 1 student was able to recognize 18 out of the 24 options representing an application of metacognitive reading comprehension processes. None of the other results are encouraging.

A possible way to reduce the unconscious application of metacognition in the students’ reading comprehension processes is to promote procedural domain, which can be achieved through metacognitive knowledge (Monereo & Castelló, 1997), seeking to offset traditional directed instruction toward conceptual and declarative domain (Figure 6).

**Figure 6.** Results of students’ metacognitive reading experience

![Figure 6](image)

Source: Amaya (2012).

On the other hand, during the Intervention Phase, it is important to mention that the case group was reduced from 24 students to 20 and the comparison group decreased from 21 students to 17. This was due to several reasons, including some students going abroad, while others failed the semester and not continuing their studies and some showed no interest in cooperating with the research. On the other hand, students were allowed to respond to the writing protocol in Spanish, their first language, since reports in the second language made it impossible to measure students’ reading comprehension. This decision was made due to learners’ limited knowledge of linguistic aspects of the English language, such as lack of synonyms, coherence, cohesion, and connectors, which hindered the development of ideas (topic and supporting sentences). According to Swain
(1995), “when students produce English they may notice a gap between what they want to say and what they can say, leading them to recognize those language structures or elements that they do not know, or know only partially” (cited in Zhang, 2009, p. 33). Wolf (1993) also reports to having found a considerable number of researches suggesting that “even in the highest levels of language learning, the ability of students to demonstrate their understanding is limited, which is evident when being evaluated” (p. 476). Even though this theory showed the promotion of reading comprehension processes, it is vital to do research concerning the first language’s influences reading comprehension processes in the second language (Figure 7).

**Figure 7.** Results of reading comprehension post-test: Paraphrase sub-category

<table>
<thead>
<tr>
<th>Literal reading comprehension</th>
<th>Expository reading</th>
<th>Paraphrase</th>
<th>Case group</th>
<th>20 Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expository reading</td>
<td>50%</td>
<td>45%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Translation</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Literal reading comprehension</th>
<th>Expository reading</th>
<th>Paraphrase</th>
<th>Case group</th>
<th>17 Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expository reading</td>
<td>12%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Translation</td>
<td>88%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Amaya (2012).

When analyzing students’ answers, it was interesting to find a student mentioned that: “la respuesta estaba más q clara (the answer was more than clear)”. He also added that “por un momento sentí que estaba traduciendo todo al pie de la letra, tuve que releer cuando fue necesario y traté de buscar sinónimos para que no se viería igual a la lectura” (for a moment I felt I was translating everything literally, I had to read again when necessary, and I tried to find synonyms so that it wouldn’t look the same as the text). It could be said that this reflection and, consequently, the correct development of the

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2 Students’ answers are in Spanish; the ones in English are my own translation.
paraphrase, was due notably to the reflective process that normally causes the influence of Instructional Theory (Phakiti, 2006).

As to the results of the students’ reading experience, specifically in terms of vocabulary knowledge, they did not suggest impediment to read, comprehend, and understand the text because of language difficulties. The students recognized that there were some new words; the issue was complex but understandable unlike the expository reading of the diagnostic reading comprehension test (Figure 8). Then, it is important to remember that there should be a meaningful dialogue between the writer and the reader to involve not only understanding, but also the construction of knowledge. To do this, students must meet 80% of the linguistic aspects (Alderson, 2000). Failure to do so could explain the absence or the inclusion of all ideas to be paraphrased.

Figure 8. Results of students’ reading experience questionnaire

<table>
<thead>
<tr>
<th>Numbers of students</th>
<th>Percentages</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>5</td>
<td>80%</td>
<td>3 1 1</td>
</tr>
<tr>
<td>14</td>
<td>60%</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>40%</td>
<td>1 1 5 2 4 1</td>
</tr>
<tr>
<td>0</td>
<td>20%</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Amaya (2012).

On the other hand, regarding the questions of instructional theory results, see Figure 9 below.
According to Figure 9, 39% corresponds to those students who not only answered correctly the statements but also answered the three metacognitive questions of the Instructional Theory. This indicates that answering these questions did favor reading performance. The other favorable 11% who answered was also possible because the students performed a reflection, monitoring, and evaluation of the reading comprehension process to respond to that statement. Thus, the answer to the question ‘How?’ can be overlooked as long as the students answer the question ‘Why?’, seeing as the latter is part of a conditional domain, which means that the evaluation process was done not only on the paragraph structure but also on its development. The sum of the last two results suggests a 50% positive reading comprehension performance. It could be said that to the extent that these questions are answered, or at least those combinations that have shown positive percentages, the result will be favorable even when the question ‘How?’ was not answered. It is also imperative to say that not answering the question “How?” did not suggest, under any circumstances, that this process was not carried out.

**Figure 9.** The influence of Instructional Theory on students’ test performance

Expository reading
Paraphrase
Case group
20 Students

- Students who answered the **WHAT?** and **WHY?** metacognitive processes and answered the statement, correctly.
- Students who answered the **WHAT?** and **HOW?** did not answer the statement correctly.
- A student who did not answer any of the metacognitive processes. In fact, this student made a paraphrase of a different paragraph.
- Students who answered the **WHAT?**, **HOW?**, and **WHY?** metacognitive processes and answered the statement correctly.

Source: Amaya (2012).

The other 44% that answered incorrectly suggests students who did not answer through a thoughtful evaluation of the process (the “Why?”) on the product (the “What?”) during the reading comprehension exercise as poor readers “lack effective metacognitive strategies (Alderson, 2000)
and have little awareness on how to approach reading (Baker & Brown, 1984). They also have deficiencies in the use of metacognitive strategies to monitor their understanding of texts (Pitts, 1983)” (Phakiti, 2006, p. 56).

On the other hand, the following metacognitive strategies were identified from the writing protocol among the students who successfully constructed the paraphrase in the question “How did you find the answer?”

“Rereading, accompanied by a scanning to identify and extract relevant information” (dates, beliefs).

“Rereading and extracting the main ideas of each paragraph”.

“I made a careful or focused reading to interpret the paragraph”.

None of these reports literally account for the extraction and consideration of the main idea and supporting sentences for subsequent inclusion in the paraphrase, but for extracting main ideas of each paragraph. They also mention the identification of features within the narrative of the paragraph as a whole.

As for the process “What information did you consider to support your decision and why?”, 10 out of 20 students reported the main idea and the two supporting ideas. Furthermore, according to the analysis of this subcategory, students not only reported the three ideas, but also did a correct paraphrase in terms of the development of ideas, in use of synonyms, coherence, cohesion, and connectors respecting the spirit of the author’s idea.

On the contrary, learners from the comparative group and a few of the case group mentioned, “It is evident or obvious that the answer is already stated in advance (the paragraph to be paraphrased itself, since students were asked to paraphrase a complete paragraph). The previous answered was given in the reading experience questionnaire. This idea could be the cause of the negative results in the intervention phase, considering that the answer is not the paragraph itself, but the identification of the structure (topic sentence and supporting ones) and their development. This indicates that the exclusion of any of these ideas (main and supporting) is far from responding to the development of the spirit of the author’s ideas.

It is important to show results related to the use of the mother tongue to build a paraphrase, which was also an instruction in the intervention phase. To do so, a student mentioned in the writing protocol that “la

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3 These extracts were taken from the writing protocol. They demonstrate a deliberate application of metacognitive strategies during the reading comprehension processes.
respuesta era más que clara (the answer was more than clear), but also added, “por un momento sentí que estaba traduciendo todo al pie de la letra y tuve que releer y encontrar sinónimos para que no se viera igual (for a moment, I felt I was translating everything, word by word, I had to reread and find synonyms so it did not look just the same).”

This report demonstrates that the Instructional Theory encouraged reflection and hence evaluation on the cognitive resources during the reading comprehension processes, which is important when paraphrasing. In addition, The Instructional Theory also provides teachers with information on “decision-making on an individual’s performance, test validation research is needed to inform us of possible factors that affect language test performance” (Phakiti, 2006, p. 57).

Conclusions and Implications

The writing protocol and the questionnaire about the students’ reading experience revealed some of the cognitive shortcomings of the reading comprehension processes. In the paraphrase sub-category, when supporting their choices from the multiple-choice format as well as when constructing the paraphrase, students showed different cognitive gaps. These ones were:

- Lack of prior knowledge, vocabulary, focused reading synonyms, coherence, and cohesion, etc., which are essential for the reading comprehension processes.
- The writing protocol also revealed shortcomings in knowledge regarding paragraph structure and development, which have greatly increased the negative results of the students from literal level to advanced level ones.
- The last two statements may closely explain why the topic sentence and the supporting ones were not fully developed when constructing the paraphrase. This last statement applied not only to the reports made in English but also to the ones in Spanish.
- It seemed to be that translations responded not only to the lack of development of the metacognitive knowledge from the three processes proposed in the Instructional Theory but also to linguistic type flaws, as stated previously.
• It is also true that the writing protocol not only demonstrated the lack of some cognitive and linguistic processes but also their positive influence when included and developed as reading comprehension processes.

• Taking into account the results of both phases, it was concluded that the format of multiple-choice assessment revealed neither the cognitive deficiencies nor the strengths of students with regard to the state of development of the paraphrase sub-category, but an irresponsible and disrespectful assessment of these students’ cognitive needs.

• When selecting a text, it is important to consider the inclusion of the students’ psychological benefits (motivation, attitude, interest, etc.), so that metacognitive strategies are applied. In addition, it is necessary to consider if not students’ prior knowledge, at least linguistic aspects should be easily recognized. The latter would replace the students’ lack of prior knowledge regarding the subject of reading.

• Although it has been demonstrated that the Instructional Theory improved the learners’ reading performance with regard to this sub-category, these results would have been better if the structure and development of paragraphs had been taught to students in the intervention phase. It is also true that if that had been done, the influence of Instructional Theory in relation to the construction of the paraphrase would have not depended directly from this influence but the teaching itself of the structure and development of paragraphs. It is also true that any of them would benefit the intervention program.

References


