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## **ELL High School Students' Metacognitive Awareness of Reading Strategy Use and Reading Proficiency**

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### **Abstract**

This study investigated the metacognitive awareness and reading strategies use of high school-aged English language learners (ELLs) and the relationship between ELL reading strategy use and reading proficiency as measured by a standardized reading test and self-rated reading proficiency. Results reveal that participants reported moderate use of reading strategies overall. Problem-solving strategies were most preferred by ELLs, followed by Global Reading strategies and Support Reading strategies. Although the differences in strategy use by reading proficiency were not statistically significant, ELLs with intermediate proficiency in reading reported using more strategies. Finally, ELLs who considered themselves advanced readers reported using more strategies.

**Key Words:** reading strategy, reading comprehension, ELL adolescent

### *Introduction*

The population of English language learners (ELLs) continues to grow in today's schools in the United States (National Clearinghouse for English Language Acquisition, 2011; National Council of Teachers of English, 2008). According to a recent report, 10% of total enrollment of public schools (Pre-K-12) in 2009-2010 were ELLs, which is 2% higher than in 2000-2001; in other words, there is a 21% increase of ELLs over the decade (National Center for Education Statistics, 2012). Research indicates that many ELLs face challenges in schools, including developing English language skill and reading and comprehension proficiency (Short & Fitzsimmons, 2007). In a startling statistic, the National Assessment of Educational Progress (NAEP, 2011) reported that only 3% of the eighth-grade ELLs scored at proficient or advanced levels on the reading assessment in 2011. Unfortunately, this percentage has not changed much over the years, fluctuating only 2% since 1998; in 1998 the percentage was 3% and reached a high of 5% in 2003 (Coltrane, 2002; NAEP, 2011).

Although considerable attention has been given to adolescent literacy in an effort to respond to the literacy crisis of adolescents over the years, little attention has been focused on the literacy development of adolescent ELLs. To enhance our awareness of these issues and concerns, this study investigates the metacognitive awareness and reading strategies as used by adolescent ELLs, as well as the relationship between students' reading strategy use and their reading proficiency as measured by standardized reading achievement measures and a self-rated assessment. This study aims to fill a gap in current L2 reading scholarship by examining the literacy development of a population that has received little scholarly attention. The areas of literacy development of adolescent ELLs are interconnected, and broadening this understanding can contribute to the development of students and educators. For educators, this study offers pedagogical implications for determining what strategies to employ, when to use these strategies, and how to use these strategies with their students.

### *Literature Review*

#### **Reading Strategies Use**

Scholarship in L2 reading has shown that readers actively interact with texts yet differ in their reading strategy use depending on whether the reading is presented in the first language (L1) or second language (L2). For instance, in L1 reading, many metacognitive strategies and reading processes are automatic for the student; however, many L2 readers do not understand and use these automatically, which results in them often struggling with inferencing, schemata, background knowledge, unfamiliar vocabulary, syntax, text types, and reading tasks (Graesser, Gernsbacher, & Goldman, 2003; Horiba 2000; Koda 2005; Yoshida, 2012). Furthermore, metacognition is often synonymous with reading awareness (Carrell, Gajdusek, & Wise, 1998; Paris & Jacobs, 1984). Metacognition includes thinking about learning processes, the planning and monitoring of learning, and the evaluation of that learning (Oxford, 1990; Pintrich, 1999). In the context of L2 reading, metacognition includes the acquisition of L2 reading and reading strategies (Li & Wang, 2010; Pintrich, 1999). Readers use their metacognitive awareness and knowledge to manage and apply their reading strategies to the task, which can lead to literacy success (Chamot, 1998; Lee & Oxford, 2008).

Using metacognitive strategies can be even more challenging when ELLs undertake reading as independent readers and learners. In this independent context, readers draw on particular strategies to learn, understand, and process information, and these skills support readers as they prepare, examine, and assess new information (Boekaerts, 1997; Butler, 2002; Cohen, 1998; Cohen & Macaro, 2007; Finkbeiner, 2005; Zimmerman, 2002). This relationship between reader and text is referred to as a co-construction of meaning or comprehension (Kletzien, 1991). To gain full comprehension, comprehension strategies are taught, as their use does not always occur automatically with readers. Pressley, Wharton-McDonald, Hampson, and Echevarria (1998) affirm that simply reading texts or additional texts does not increase students' comprehension; rather, they found students who use reading strategies improved their comprehension.

In the context of ELLs, Finkbeiner (2005) and Yoshida (2012) state that L2 reading is an operational process that relies on the use of these comprehension strategies similar to L1 reading. These strategies contribute to the interactive engagement between text and reader, which helps the reader fully understand the text. Yet according to Cohen (1998), some learners use strategies to understand a comprehension issue within a text but have very limited success. This limitation could stem from a lack of knowledge or skills needed to put into operation the selected strategies or because the selected strategies are not relevant. Finkbeiner, Knierim, Smasal, and Ludwig (2012) state that comprehension skills are considered vital in today's global information society and once these skills are learned, readers can use them in the long term.

### **Metacognitive Strategies and Reading**

In recent studies of metacognition, researchers state that the concept of metacognition has become a trend in education (Boulware-Gooden, Carreker, Thornhill, & Joshi, 2007; Brown, 1987). Kuhn (2000) defines metacognition as “enhancing (a) metacognitive awareness of what one believes and how one knows and (b) metastrategic control in application of the strategies that process new information” (p. 178). In other words, the researchers state that the use of metacognitive processing helps students reflect on their thinking before, during, and after they read. Other researchers have acknowledged that proficient readers often use metacognitive strategies to comprehend texts, strategies which increase as readers realize which strategies most effectively support comprehension (Pressley, Wharton-McDonald, Mistretta-Hampston, & Echevarria, 1998). In addition, Yin and Agnes (2001) indicate that strong readers use their metacognitive awareness along with their reading strategies. Finally, Marzban (2006) and Mokhtari and Sheorey (2008) conclude that metacognitive functions implemented by readers contribute greatly to learning English.

### **Reading Strategy Use and Reading Proficiency**

Several studies have been conducted to examine the relationship between reading strategy use and reading proficiency (Hong-Nam & Page, 2014; Kletzien, 1991; Mokhtari & Reichard, 2002; Poole, 2009). The majority of studies have shown a positive relationship between the two variables. For instance, high school students with advanced reading skills in Kletzien's (1991) study reported using more reading strategies than students with poor reading skills. Studies conducted with college students report the similar findings. L2 college students in both ESL and EFL contexts who rated themselves as good readers also reported high degree of reading strategy use (Hong-Nam & Leavell, 2007, 2011; Hong-Nam & Page, 2014; Sheorey & Mokhtari, 2001). In sum, the censuses of research in this area indicates that the appropriate use of reading strategies relates to reading proficiency; readers who have a higher use of reading strategies do well on reading tests and perceive themselves as high in their reading ability.

As stated above, the majority of studies on adolescents' strategic reading and reading strategy use are associated with native English speakers; however, little research to date

has been done on high school ELL readers' metacognitive awareness and their strategy. To bridge this gap, the current study addresses the following research questions:

1. What reading strategies are reported by high school ELLs?
2. What is the relationship between high school ELLs' reported strategy use and their reading proficiency as measured by a standardized reading achievement test?
3. What is the relationship between high school ELLs' reading strategy use and their self-rated reading proficiency?

### *Methods*

#### **Participants**

Participants included 96 high school students in Grades 9 through Grade 12 who were enrolled in English language classes in two suburban high schools in the Southwestern United States. Students who were enrolled in these classes were selected for this study because they were identified as students with limited English proficiency (LEP) according to the school district's language proficiency test.

As shown in Table 1, participants consisted of 44 males (46%) and 52 females (54%). Freshman students represented the largest group (56%) among the academic levels, followed by sophomores (21%), juniors (15%), and seniors (8%). The participants used English as L2 in their daily lives, and they reported using their L1 at home. Spanish was the L1 used by the majority of the participants (69%) at home, followed by English and their L1 combined (13%), English only (12%), Korean (3%), Vietnamese (2%), and other languages (2%). When asked to rate their reading proficiency, 41 students (43%) considered themselves to be good readers and 34 students (35%) considered their reading ability to be average. Four students (4%) considered themselves to be great readers, while 14 students (18%) rated their reading skills as poor.

**Table 1. Summary of Demographic Information of Participants**

<b>Variable</b>		<b><i>n</i></b>	<b>%</b>
Gender	Male	44	46
	Female	52	54
Academic Year	Grade 9	54	56
	Grade 10	20	21
	Grade 11	14	15
	Grade 12	8	8
Home Language	Spanish	66	69
	English + L1	12	13
	English only	11	11
	Korean	3	3
	Vietnamese	2	2

Variable		<i>n</i>	%
TAKS* Level	Other	2	2
	Commended (Above 2, 400)	5	5
	Standard (Between 2, 100-2, 400)	28	29
	Below Standard (Below 2, 100)	63	66
Self-Rated Reading Proficiency	Great	4	4
	Good	41	43
	Okay	34	35
	Not so great	17	18

*Note.* N = 96; \*TAKS represents the Texas Assessment of Knowledge and Skills.

### **Instruments**

The state-mandated Texas Assessment of Knowledge and Skills (TAKS) was used to measure students' reading proficiency. On the reading comprehension section of the TAKS reading test, as shown in Table 1, 5% of participants had achieved Commended/Advanced status, according to the state guidelines for number of items missed. Standard/Average status was attained by 29% of the ELLs, and 66% received Below Standard status.

The questionnaire completed by participants consisted of two parts. The first part of the questionnaire included five items regarding students' background information, including age, gender, academic year, language used at home and school. The fifth item asked students for a self-rating of reading proficiency (1=Not so great, 2=Okay, 3=Good, 4=Great).

The second part of the questionnaire included the Metacognitive Awareness of Reading Strategies Inventory or MARS (Mokhtari & Reichard, 2002). The MARS is a self-report questionnaire consisting of 30 items that measure the behaviors and strategies readers employ when they read academic or school-related materials (e.g., textbooks or library books). Questions are grouped into three categories: (a) Global Reading strategies (metacognitive), (b) Problem-solving strategies (cognitive), and (c) Support Reading strategies. Global Reading strategies (13 items) refer to intentional reading strategies such as monitoring comprehension and planning for reading. Problem-solving strategies (eight items) include strategies directly related to information in the text, such as paying closer attention to text, adjusting reading speed, and visualizing information. Support Reading strategies (nine items) involve basic aids to improve reading comprehension, such as underlining or highlighting information, using a dictionary, and taking notes.

The MARSII uses a five-point Likert scale system for each strategy ranging from 1 to 5 (1 = *I never or almost never do this*, 2 = *I do this only occasionally*, 3 = *I sometimes do this*, 4 = *I usually do this*, 5 = *I always or almost always do this*). Respondents indicate the degree to which they engage in a behavior when reading academic materials (e.g., school textbooks). The reliability analysis was conducted to examine the reliability coefficients for the MARSII using Cronbach's alpha. High reliability coefficients were observed for overall usage (.82) and for all three strategy categories, with .83 for Global Reading, .81 for Problem-solving, and .80 for Support Reading.

## **Data Collection and Analysis**

A survey method was employed for the current study to obtain data from as many participants as possible (Johnson & Christensen, 2010). The design of the study was similar to that used by Sheorey and Mokhtari (2001), which also investigated metacognitive awareness and reading strategy use of native and non-native readers; Sheorey and Mokhtari employed a survey method and similar data analysis procedures. The students were selected using the method of cluster sampling, which involves selecting two schools as clusters and groups of individual from within the selected schools. Before administering the questionnaire to participants, the researchers contacted the central office of the independent school district to solicit the participation of ELL high school students in this study. Permission from the central office was obtained.

The survey packet was administered by the teachers during class time. The teachers provided participants with a brief explanation about the purpose of the study and how their confidentiality would be ensured. The teachers also helped students who struggled to understand the statements on the questionnaire by providing more explanations about the statements. The students were informed that they were free to withdraw from the study at any time without penalty and that their responses to the questionnaire would not affect their grades. The teachers returned the collected data directly to the researchers for analysis. After discarding surveys with missing data, the final 96 students were selected for this study. The reading test scores for the students participating in this study were collected through the school district offices to determine the nature and direction of the relationship between reading proficiency and strategy use.

Several statistical techniques were employed for data analyses. Descriptive statistics (frequencies, means, and standard deviations) were calculated to summarize demographic information and describe students' reading strategy use. In order to determine any variation in strategy use related to students' reading proficiency as measured by the TAKS assessment and students' self-rated reading proficiencies, an Analysis of Variance (ANOVA) test was conducted. TAKS reading test levels and self-rated reading proficiency served as the independent variables; strategy use was the dependent variable.

## Results

### Overall Strategy Use

Participants' responses were grouped into three categories (High, Medium, and Low). The grouping were based on the mean scores and used to examine the students' strategy usage. As shown in Table 2, 35% of participants reported high use of reading strategies ( $M \geq 3.50$ ) and 51% reported medium strategy use ( $2.50 \leq M \leq 3.49$ ). Lastly, 14% reported low strategy use ( $M \leq 2.49$ ).

**Table 2. Mean Scores of Reported Overall Strategy Use**

	<i>n</i>	%	<i>M</i>	<i>SD</i>
High ( $M \geq 3.50$ )	34	35	3.15	0.681
Medium ( $2.50 \leq M \leq 3.49$ )	49	51		
Low ( $M \leq 2.49$ )	13	14		
Total	96	100		

The mean scores, standard deviations, and ANOVA for three categories of strategies are presented in Table 3. The ANOVA revealed a statistically significant difference ( $F=14.03, p=.00$ ) in strategy use at  $p < 0.05$  level. The Scheffé post-hoc test showed the higher use occurred for Problem-Solving strategies with less use for the other two groups (Global Reading strategies and Support Reading strategies) at  $p < 0.05$  level, indicating that the participants reported using Problem-Solving strategies most, followed by Global Reading strategies and Support Reading strategies.

**Table 3. F-tests for Mean Difference among the Three Categories of Strategy**

Type of Strategy	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	Difference*
Global Reading	3.06	0.689	14.03	0.00	P>G, S
Problem-solving	3.51	0.764			
Support Reading	2.99	0.771			

*Note.* P = Problem-solving Strategies; G = Global Reading Strategies; S = Support Reading Strategies. \* $p < 0.05$  (Scheffé post-hoc test).

In addition to the mean scores for overall strategy use and each strategy category, the mean scores and standard deviations of the MARSIs items are presented in Table 4 in descending order by their means, listing most preferred items to least preferred, in

Table 4. The mean scores of six most frequently used strategies all occurred with high usage ( $M \geq 3.50$ ). The most preferred strategy was Item 16: *When text becomes difficult, I pay closer attention to what I am reading* ( $M = 3.95$ ), followed by Item 11 ( $M = 3.78$ ), Item 21 ( $M = 3.65$ ), Item 8 ( $M = 3.63$ ), Item 27 ( $M = 3.59$ ), and Item 12 ( $M = 3.57$ ). As the table indicates, the five most frequently used strategies were among the items measuring Problem-solving strategies.

The least preferred strategy was Item 2: “I take notes while reading to help me understand what I read” ( $M = 2.45$ ). Item 2, a Global Reading strategy was the only strategy that fell in the range of low usage ( $M \leq 2.49$ ). The second least used strategy was Item 10, a Support Reading strategy: “I skim the text first by noting characteristics like length and organization” ( $M = 2.56$ ).

**Table 4. Preferences in Reading Strategy Use by ESL High School Students**

Rank	Item	Strategy Type	Description	<i>M</i>	<i>SD</i>
1	16	PS	When text becomes difficult, I pay closer attention to what I am reading.	3.95	1.07
2	11	PS	I try to get back on track when I lose concentration.	3.78	1.20
3	21	PS	I try to picture or visualize information to help remember what I read.	3.65	1.29
4	8	PS	I read slowly and carefully to make sure I understand what I am reading.	3.63	1.03
5	27	PS	When text becomes difficult, I re-read it to increase my understanding.	3.59	1.25
6	12	SS	I underline or circle information in the text to help me remember it.	3.57	1.09
7	3	GS	I think about what I know to help me understand what I read.	3.45	1.17
8	19	GS	I use context clues to help me better understand what I am reading.	3.44	1.15
9	13	PS	I adjust my reading speed according to what I am reading.	3.42	1.11
10	15	SS	I use reference materials (e.g., a dictionary) to help me understand what I read.	3.40	1.21
11	20	SS	I paraphrase (restate ideas in my own words) to better understand what I read.	3.39	1.22
12	30	PS	I try to guess the meaning of unknown words or phrases.	3.25	1.17
13	25	GS	I check my understanding when I come across new information.	3.24	1.19
14	4	GS	I preview the text to see what it is about before reading it.	3.22	1.34



Rank	Item	Strategy Type	Description	<i>M</i>	<i>SD</i>
15	17	GS	I use tables, figures, and pictures in text to increase my understanding.	3.18	1.26
16	29	GS	I check to see if my guesses about the text are right or wrong.	3.16	1.17
17	26	GS	I try to guess what the content of the text is about when I read.	3.14	1.09
18	24	SS	I go back and forth in the text to find relationships among ideas in it.	3.07	1.16
19	23	GS	I critically analyze and evaluate the information presented in the text.	3.01	1.12
20	18	PS	I stop from time to time and think about what I am reading.	2.89	1.02
21	20	GS	I have a purpose in mind when I read.	2.88	1.15
22	14	GS	I decide what to read closely and what to ignore.	2.86	1.08
23	5	SS	When text becomes difficult, I read aloud to help me understand what I read.	2.83	1.28
24	22	GS	I use typographical features like bold face and italics to identify key information.	2.80	1.15
25	7	GS	I think about whether the content of the text fits my reading purpose.	2.77	1.07
26	6	SS	I summarize what I read to reflect on important information in the text.	2.74	1.16
27	28	SS	I ask myself questions I like to have answered in the text.	2.74	1.10
28	9	SS	I discuss what I read with others to check my understanding.	2.70	1.32
29	10	GS	I skim the text first by noting characteristics like length and organization.	2.56	1.10
30	2	SS	I take notes while reading to help me understand what I read.	2.45	1.21

*Note.* GS = Global Reading; P = Problem-solving; SS = Support Reading.

### **Reading Strategy Use and Reading Proficiency**

The ANOVA was conducted to examine the difference in strategy use according to participants' reading proficiency levels. The overall mean scores of strategy use are shown in Table 5. According to the mean scores of strategy use, students with Standard status reported using strategies more frequently ( $M = 3.25$ ) than students with Below Standard ( $M = 3.14$ ) and Commended ( $M = 2.82$ ) statuses. The findings reveal a curvilinear relationship between strategy use and reading proficiency, indicating the more frequent use of strategy by intermediate group than other two groups, although the differences were not statistically significant ( $F=0.908, p=0.41$ ).

**Table 5. Differences in Reading Strategy Use by Reading Proficiency Level**

Strategy Type	Below Standard (n = 63)		Standard (n = 28)		Commended (n = 5)		F	p	Differences*
	M	SD	M	SD	M	SD			
Global Reading	3.01	0.75	3.19	0.48	2.86	0.86	0.876	0.42	-
Problem-Solving	3.47	0.86	3.62	0.53	3.38	0.61	0.427	0.65	-
Support Reading	3.03	0.82	3.02	0.54	2.27	0.97	2.384	0.10	-
Overall	3.14	0.76	3.25	0.44	2.82	0.79	0.908	0.41	-

Note. \* No significant differences ( $p < .05$ ) were observed.

### Reading Strategy Use and Self-Rated Reading Proficiency

Table 6 presents a summary of differences in strategy use according to self-rated reading proficiency. Among the four groups (*Not So Good*, *OK*, *Good*, and *Great*), ELL high school students rating their reading proficiency as *Good* reported most frequent use of reading strategies ( $M=3.49$ ), followed by the two proficiency groups of *Great* ( $M=3.27$ ) and *OK* ( $M=3.02$ ). The students who rated their reading proficiency as *Not So Good* reported using the least number of reading strategies ( $M=1.24$ ) than other three groups. The differences in strategy use among reading proficiency groups were statistically significant ( $F=23.82$ ,  $p=0.00$ ) at the  $p < 0.05$  level.

When looking at the differences in strategy use by category, the differences were statistically significant in all categories, with certain strategy categories being used more often by advanced groups. For instance, Global Reading strategies ( $F=20.69$ ,  $p=0.00$ ) and Problem-solving strategies ( $F=20.70$ ,  $p=0.00$ ) were reported as being used more by the three advanced groups (*Great*, *Good*, and *OK*) than by the *Not So Good* group. Support Reading strategies were used more often by the *Good* and *OK* groups than by the *Great* and *Not So Good* groups ( $F=16.81$ ,  $p=0.00$ ).

**Table 6. Differences in Reading Strategy Use by Self-Rated Reading Proficiency**

Strategy	Not So Good (n = 4)		OK (n = 41)		Good (n = 34)		Great (n = 17)		F	p	Differences*
	M	SD	M	SD	M	SD	M	SD			
Global Reading	1.25	0.29	2.89	0.50	3.36	0.61	3.28	0.52	20.69	0.00	2, 3, 4 > 1 3 > 2
Problem-Solving	1.38	0.43	3.40	0.61	3.80	0.60	3.69	0.59	20.70	0.00	2, 3, 4 > 1 3 > 2
Support	1.1	0.1	2.8	0.5	3.3	0.6	2.8	0.6	16.8	0.0	2, 3 > 1

Strategy	Not So Good (n =4)		OK (n =41)		Good (n =34)		Great (n =17)		F	p	Differences*
	M	SD	M	SD	M	SD	M	SD			
Reading	1	3	9	9	8	7	7	7	1	0	3>2
Overall	1.2	0.2	3.0	0.4	3.4	0.5	3.2	0.5	23.8	0.0	2, 3, 4>1
	4	7	2	8	9	7	7	4	2	0	3>2

Note. \* For Differences: 1=Not So Good; 2=OK; 3=Good; 4=Great, atp < 0.05 (Scheffé post-hoc test).

### Discussion

The current study explored high school English language learners' metacognitive awareness and reading strategy use when reading academic materials. The study also examined the relationship between participants' strategy use and their reading proficiency as measured by a state test and self-rated proficiency. Results indicate that in the context of overall strategy use, students used medium to high-level reading strategies. Data also indicate that students used such reading strategies as re-reading and underlining and circling of information to help them better understand and remember information in the texts.

Results of the present study support findings of Anderson (1991), Genc (2011), and Goldsmith and Tran (2012). Anderson (1991) found that strategies including re-reading, reading slowly and carefully, or visualizing information were reported most frequently by ELLs. Genc (2011) identified reading strategy actions by ELL learners as re-reading, paying closer attention to the text, and reading aloud. Goldsmith and Tran (2012) found that ELL students used such reading strategy skills as recognizing organizational patterns in texts, making conclusions based on what was read and using evidence to support understanding. The English language learners in our study were found to actively utilize strategies to assist their comprehension; additionally the choice of strategies serves to enhance the ELL's knowledge of English language yet seems influenced by their reading proficiency level.

According to the mean scores of strategy use, the participants in the ranges of Standard (measured by TAKS) reported actively using various reading strategies more than other two groups (Below Standard and Commended). This finding is similar to Anderson's (1991) research, whose study showed that both high and low proficient readers appeared to be utilizing similar comprehension strategies while answering the comprehension questions. Yet the study also indicated that readers identified as highly proficient readers applied reading strategies more successfully and that were fitting. Sheorey and Mokhtari (2001) and Ozek and Civelek (2006) found comparable results, which showed that readers at high-proficient level and proficient levels used strategies more often than low-level proficient readers. The present data results support these previous findings as students rated as Standard (proficient) engaged in utilizing various reading strategies than Below Standard (low-level proficient). In contrast to the data of

the mentioned researchers, data results of this study reveal the Commended (high-level proficient) participants of this study were less engaged in using varied reading strategies than Standard (proficient) readers. This data information is appealing as it adds a dynamic to ELL adolescent research, which can be further investigated in future research.

Nonetheless, this study was limited by the sample size; the sample size of the Commended group was significantly smaller than the sample sizes of the Below Standard and Standard groups. A larger sample size of Commended would have a different impact on the results because a larger sample size more reliably reflects the population mean.

Findings from this study offer several implications for teaching. First, English language learners at diverse levels vary their reading strategy use. Teachers' response to this information could include explicitly assisting ELLs in their continued effort in using reading strategies. To realize that many students acknowledge they are at divergent levels, teachers could also consider approaching literacy-based activities from that point of view and scaffold reading strategy practices to guide students towards reading independence and comprehension.

When looking at the difference in strategy use in strategy categories, data indicate that there was more use of certain strategies by advanced groups. This information could signify that students pull from their catalog of strategy knowledge. For educators, this data presents the opportunity for continued comprehensive reading strategy instruction for ELL students, as it is known that reading texts frequently requires advanced metacognitive skills. Teachers could help students learn which strategies to employ, when to use these strategies, and how to use these strategies.

Support Reading strategies were used more by the OK and Good groups than other two groups (Not So Good and Great). Students who report they are these or other levels should realize that the use of reading strategies and the variation of the strategies used is on a continuum based on the experiences of the reader, the complexity of the text, the strategies needed to augment comprehension of the text, and the fundamental goal of the reading. Teachers could show students which strategies to apply, model effective strategies, offer alternative strategies, and encourage students to choose and use strategies that are appropriate for themselves and the reading at hand. All of these factors can lead to self-sufficiency.

Lastly, teachers can create situations in which students can apply these strategies to reading. Educators should also plan to monitor their students over the years in order to identify in which they are having difficulties. This suggestion is based on the idea that texts often become more difficult as students advance through school.

As the ELL population in schools continues to grow, it is imperative for educators to understand students' metacognitive awareness and reading comprehension strategy

use. Continuous monitoring of the literacy development of adolescent ELLs is necessary as they interact with various texts and advance in their metacognition and reading strategy knowledge and skills. The current study offers broad suggestions to teachers not only a means to enhance the knowledge of their students but also a means to guide researchers for future research.

### **About the Author**

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