# Taxonomies in L1 and L2 Reading Strategies: A Critical Review of Issues Surrounding Strategy-use Definitions and Classifications in Previous Think-aloud Research

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#### ABSTRACT

Considering the various classifications of L1 and L2 reading strategies in previous think-aloud studies, the present review aims to provide a comprehensive look into those various taxonomies reported in major L1 and L2 reading studies. The rationale for this review is not only to offer a comprehensive overview of the different classifications in L1 and L2 reading strategy research but to highlight the problem of inconsistencies found in many of these taxonomies and strategy-use definitions due to the different wording used for similar or even the same strategies. Overall, there are four main objectives in reviewing the 41 studies using think-aloud reporting methods. First, the review aims to highlight the considerable overlap of (think-aloud/think-out-loud) taxonomies found in main studies in L1 and L2 reading research (listed in alphabetical order). Second, the review produces a meticulously organized chart to help reduce the confusion caused by the different wording of strategies in verbal protocols. Third, the review aims to contribute to the body of literature reviews in L1 and L2 reading research by presenting a unique and original approach in identifying, comparing, cross-referencing, and addressing overlaps found in many think-aloud taxonomies reported. Finally, the present review aims to introduce the reader to an easier (entries by alphabetical order) and probably more efficient alternative access to comparing strategy-use taxonomies in L1 and L2 reading than some previous reviews available in L1 and L2 reading strategy-use research.

### **INTRODUCTION**

Since the end of the 1970s onwards, there has been a growing interest amongst researchers in investigating the process of reading and how readers' strategies can play a role in the meaning-construction process. Whether in L1 reading research (Afflerbach, 1990a; Crain-Thoreson, Lippman, & McClendon-Magnuson, 1997; Garner, 1982; Hare and Smith, 1982; Kavale & Schreiner, 1979; Kletzien, 1991; Meyers, Lytle, Palladino, Devenpeck, & Green, 1990; Olshavsky, 1976-77) or in L2 strategy research (Abbott, 2006; Alkhaleefah, 2011; Anderson, 1991; Block, 1986, 1992; Davis & Bistodeau, 1993; Fotovatian & Shokrpour, 2007; Hardin, 2001; Hosenfeld, 1977; Lau, 2006;

Mushait, 2003; Pritchard, 1990; Pritchard & O'Hara, 2008; Yoshida, 2007, 2008; Zhang & Wu, 2009), empirical studies on reading strategies have varied in scope, subjects, reading contexts, materials, methods and findings reported. In L2 reading research, this interest in investigating the reading process has been part of a research trend that focused on language learner strategies which examined the types of strategic processes ESL/EFL learners used in language learning contexts (Cohen, 1994; Erler & Finkbeiner, 2007).

### **Defining strategies: a problematic issue**

One of the early debates amongst researchers in L1 and L2 reading research has been maintaining a concise and comprehensive definition of what a 'strategy' means in reading research. Various definitions of the term have been raised. This resulted in some problematic issues surrounding the term and what it involves (see Appendix A for the various definitions in the literature). First, there is the question of whether strategies are seen as conscious or unconscious behaviors. To Birch (2002), Davies (1995) and Johnston (1983), strategies can be both as long as they are aimed at either facilitating or solving comprehension of the text. Birch (2002: 2) asserts that "[t]he processing strategies can be optionally consciously or unconsciously applied; that is, they can operate automatically beneath the level of our awareness or they can kick in selectively because of our attention to something we perceive." However, these views might not be shared by other researchers (Block, 1986; Brown, 1980; Cohen, 1989, 1990; Garner, 1987; Pearson, Roehler, Dole and Wixson, 1994) to whom strategies can only be consciously executed by a reader who employs some strategic processing in constructing meaning from text. It is this conscious control over the cognitive processing that sets *strategies* apart from *skills* which are often viewed as being automatically processed beyond the reader's conscious knowledge (Block, 1986; Cohen, 1989; Garbe and Stroller, 2002; Pritchard, 1990a). Davies (1995), however, asserts her view that strategies can be utilized within or beyond readers' conscious knowledge. Grabe (2009: 221) recognizes that "strategies are cognitive processes that are open to conscious reflection but that may be on their way to becoming skills" although he acknowledges that such distinction is not always distinct in different contexts where conscious use of strategies cannot be determined.

Thus, if strategies are argued to be inherently conscious cognitive activities, then readers should use them to achieve certain purposes. In other words, strategies should be seen as *goal-oriented* processes carefully and *deliberately* selected by readers when approaching texts (Abbott, 2006; Anderson, 1991; Brown, 1980; Kletzien, 1991). Garner (1987: 163), for instance, asserts that a strategy is "something executed by a learner, often as a mean of attaining a goal (e.g. reading part of the text), something either developed or selected to make cognitive process or to monitor it." Similar views are also expressed by Olshavsky (1977: 656), who regards a strategy as "a purposeful means of comprehending the author's message," and by Paris, Waskik and Turner (1991: 692) to whom strategies mean "actions selected deliberately to achieve particular goals." A similar definition is also suggested by Carrell, Gajdusek & Wise (1998: 97) who view strategies as "actions that readers select and control to achieve desired goals or objectives." To Graesser (2007: 6), a reading comprehension strategy is "a cognitive

or behavioral action that is enacted under particular contextual conditions, with the goal of improving some aspect of comprehension."

Another view of cognitive strategies is that readers often resort to them to attack or solve problems that arise throughout the reading process. In other words, strategies are seen as *problem-solving tactics* (Barnett, 1988; Garner, 1982; Johnston, 1983; Kletzien, 1991; Yang, 2006). To Garner (1987: 50) strategies are "generally deliberate, planful activities undertaken by active learners, many times to remedy perceived cognitive failure." Similar views are also expressed by Yang (2006: 335) who claims that strategies are "cognitive actions taken to repair problems resulted from the insufficiency of language knowledge and to get liberal meaning."

One of the aims of this review is to accommodate for the various definitions of strategies in L1 and L2 reading research. As will be discussed later, part of the inconsistency and overlapping that emerge from previous taxonomies in the reading strategy research is often due to these various conflicting definitions of the word 'strategy' (see Appendix A). In a more cautious approach, the researcher views reading strategies as involving four attributes mentioned earlier. In other words, the term 'strategies' can be defined as any physical or mental processes that are consciously and deliberately employed by EFL/L2 readers in order to either solve problems in and/or facilitate comprehension of texts during the reading task(s) (Alkhaleefah, 2011: 31-32). We believe that our definition of reading strategies account for the various issues addressed in this review of those previous studies that defined the term.

## Strategy-use taxonomies in L1 and L2 reading research: the problem of inconsistencies and overlapping

With a growing interest in reading strategy research, many studies have provided various classifications of reading strategies elicited through a number of instruments that include questionnaires, introspective and retrospective verbal reports, recalls, and so forth. However, this paper is only interested in reviewing studies that utilized verbal reporting (think-alouds) to draw on the cognitive and metacognitive processes readers engage in when undertaking various tasks. Before reviewing the major classifications of strategies in some of the main L1 and L2 reading studies, we need to make an important note here. A careful review of this line of research in reading strategies reveals striking inconsistencies and conflicting views on how strategies are classified.

Given the knowledge that investigators differed in their definitions of reading strategies, it is not surprising that categorizing the strategies varied as a result. Some of these studies applied two or three general categories (Block, 1986, 1992; Fagan, 1987; Hosenfeld, 1984, Olshavsky, 1976/1977) some four or five broad categories (Anderson, 1991; Kucan & Beck, 1996; Pritchard, 1990) and some studies extended their strategy-use taxonomies beyond the five categories (Alkhaleefah, 2011; Lau, 2006; Mushait, 2003; Pang, 2006).

For instance, Olshavsky (1976-77) classified her subjects' strategic processing into word-level strategies, clause-related strategies and story-related strategies. The first category included strategies like 1) use of context, 2) synonym substitution, and 3) stated failure to understand a word, and the second category consisted of 4) re-reading,

5) inference, 6) addition of information, 7) personal identification, 8) hypothesis, and 9) stated failure to understand a clause while the third category included 10) use of information about the story. Extended taxonomies in L2 reading strategies were introduced almost ten years later when Block (1986) reported two main categories of strategies used by ESL readers: *general (comprehension) strategies* and *local (linguistic) strategies*. The first includes 1) anticipating content, 2) recognizing text structure, 3) integrating information, 4) questioning information in the text, 5) interpreting the text, 6) using general knowledge and associations, 7) commenting on behavior or process, 8) monitoring comprehension, 9) correcting behavior, and 10) reacting to the text. The second category includes 11) paraphrasing, 12) rereading, 13) questioning meaning of a clause or sentence, 14) questioning meaning of a word, and 15) solving vocabulary problem.

Sarig (1987) provided another taxonomy which listed 35 'reading moves' used by L2 readers and classified them into four major categories: 1) technical-aid moves (moves the reader uses to facilitate text processing), 2) clarification and simplification moves (moves the reader uses to clarify and/or simplify utterances in the text), 3) coherence-detecting moves (moves that display the reader's intention to produce coherence from the text), and 4) monitoring moves (moves displaying the reader's active monitoring of text processing (whether metacognitively conscious or not). Three years later, Pritchard (1990) identified 22 processing strategies L1 and L2 readers employed when reading two texts. These processes were classified into five major categories: 1) developing awareness, 2) accepting ambiguity, 3) establishing intrasentential ties, 4) establishing intersentential ties, and 5) using background knowledge. Similar strategies were also reported in Anderson's (1991) taxonomy which included 47 reading and test-taking strategies classified into five major categories: 1) supervising strategies, 2) support strategies, 3) paraphrase strategies, 4) strategies for establishing coherence in text, and 5) test-taking strategies.

### Introducing an original approach in addressing inconsistencies in most of previous taxonomies of L2 reading strategies

Considering these various definitions (see Appendix A) and strategy-use taxonomies in previous think-aloud reading studies, the present paper aims to provide a comprehensive review of various taxonomies reported in major L1 and L2 reading studies (see Appendix B), listed in chronological order, which involved a variety of different reading tasks and procedures (e.g., some involve test-taking instructions, some using retrospections, etc.). The rationale for this review is not only to offer a comprehensive overview of the different classifications in reading strategy research but to highlight the problem of inconsistencies in many of these taxonomies due to the different wording used for similar or even the same strategies. As for our classification of the reading strategies, categorizing the (explicit) problems and cognitive and metacognitive reported by EFL readers should reflect our view of reading as an interactive process involving bottom-up and top-down processing as we expect that EFL readers process different texts from different word and text levels.

Overall, there are *four* main objectives in reviewing the 41 studies using think-aloud reporting methods. First, the review aims to highlight the problematic overlap of (think-aloud/think-out-loud) taxonomies (listed in alphabetical order) found in many

studies in L1 and L2 reading research. Second, the review produces a meticulouslystructured table to help reduce the confusion arising from the different wording of strategies in verbal protocols. Third, the review aims to contribute to the body of literature reviews in L1 and L2 reading strategy research by developing an unprecedented approach in identifying, comparing and addressing overlaps found in many think-aloud taxonomies reported. Finally, the present review aims to introduce the reader to an easier (entries by alphabetical order) and probably more efficient alternative access to comparing strategy-use taxonomies in L1 and L2 reading than some previous reviews available in the literature. Our main approach was to group those individual strategies that are similar in meaning and/or purpose but different in wording in one single row and that, when necessary, across-reference comparison of similar strategies has been stated in bold font (e.g., 'See **Predicting**' in Appendix B)<sup>1</sup>. Those cognitive and metacognitive processes singling explicit difficulties/problems reported by L1 and/or L2 readers are inferred by the researcher and identified in grey color for easy marking (see Appendix B), although most studies reported these processes as reading strategies and not problems per se. However, we argue that stating a problem during a think-aloud reading task does *not* necessarily imply a strategy being executed. For instance, one of the common behaviors coded in previous studies is a reader 'stating failure to understand a word' or 'acknowledging lack of knowledge about the content' which many studies (e.g., Anderson, 1991; Crain-Thoreson, Lippman & McClendon-Magnuson, 1997; Olshavasky, 1977) regarded a strategy. Although a reader's awareness of certain problems in reading can be regarded as prerequisite for executing problem-solving strategies, this knowledge in and by itself does *not* necessarily qualify it to be labelled as strategy which should imply an action being taken.

### **CONCLUSION**

This review should help future research identify the overlapping and sometimes conflicting definitions of reading strategies found in the literature. But most importantly, this review should draw researchers' attention to the various taxonomies of strategy use in L1 and L2 reading process and how emerging taxonomies in future studies can be cross-referenced to those categories of codes that are similar in purpose and/or functions but might still be different in the wording. In other words, future research in L2 reading problems and strategies should be attentive to the numerous existing strategy-use taxonomies when engaged in the qualitative coding of EFL readers' cognitive processing of texts. Hence, our hope is that this review can help provide L2 think-aloud reading research with a more efficient and accessible approach not only in identifying inconsistencies in strategy use definitions and taxonomies but in comparing them to those pre-existed taxonomies (listed in the alphabetical order in Appendix B) found in previous think-aloud reading studies.

As for the implications of this review to language teaching, our comprehensive review can provide help to EFL teachers in selecting the most appropriate list of cognitive and metacognitive strategies (as covered in the review) to design L2 reading

<sup>&</sup>lt;sup>1</sup> What proceeds // (OR) refers to the exact wording of strategies identified in some studies (although similar in meaning to other strategies grouped within the same box) with each similar strategy beginning with a capital letter

strategy instruction lessons for EFL students who might lack sufficient and efficient training in strategy use. Furthermore, it is our hope that the present review can assess EFL teachers in recognizing the large variety of strategic processing that EFL readers can produce in think-aloud reading tasks. Hence, language teachers might be interested in conducting action research that looks into learners' practical reading difficulties and problem-solving strategies via making use of concurrent think-aloud activities (with different tasks and text types) in the classroom.

However, it is important to mention the limitations of our approach in reviewing and comparing the 41 taxonomies of individual strategies. For instance, the table (Appendix B) does not include studies using *inventories/questionnaires* of reading strategies or *recalls* but only limited to think-aloud/self-reports studies. Another limitation of our approach is that it was almost impossible to make one-to-one connection between a given study and the exact wording of its list of strategies (only grouping of same or similar strategies used in studies is given here) nor does the table (Appendix B) provide information on main categories of strategies used in studies since it only shows *individual* strategies reported but not *categories* of these strategies.

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**Appendix A:** Summary of the various definitions of reading strategy(ies) in L1 and L2 reading research

STUDY	DEFINITION OF READING STRATEGY(IES)/ STRATEGIC	KEYWORDS NOTED IN THE
011	PROCESS(ES)	DEFINITION
Olshavsky	"purposeful means of comprehending the	RS as <u>purposeful</u>
(1976-1977)	author's message" (p. 656)	means
Brown (1980)	"any deliberate, planful control of activities that	RS as <u>deliberate</u> and
G (1000)	gives birth to comprehension" (p. 456)	planful
<b>Garner</b> (1982)	"something executed by a learner, often as a	RS as <u>attaining a goal</u>
	means of attaining a goal (e.g. reading part of	
	a text), something either developed or selected to	
T. 1	make cognitive process or to monitor it" (p. 163)	DG . 1 . 1
Johnston	"reading comprehensioninvolves conscious	RS as <b>consciously</b> and
(1983)	and unconscious use of various strategies,	unconsciously
	including problem-solving strategies, to build a	employed
	model of meaning which the writer is assumed to	DC
V D''' 0	have intended." (p. 17)	RS as problem solving
Van Dijk &	"the idea of an agent about the best way to act in	RS aimed for <u>a goal</u>
Kintsch (1983)	order to reach a goal" (pp. 64-65)	
Block (1986)	"comprehension strategies indicate how readers	RS as making sense of
	conceive a task, what textual cues they attend to,	texts read
	how they make sense of what they read, and what	
	they do when they do not understand" (p. 465)	
Cohen	"those mental processes that readers	RS as being a
(1990)	consciously choose to use in accomplishing	conscious process and
	reading tasks. Such strategies may contribute to	involving the <b>element</b>
	successful comprehension or detract from it. In	of choice on the part of
	principle, what distinguishes strategies from other	the reader
	processes is the element of choice involved in	
	their selection" (p. 133)	
<b>Garner</b> (1987)	"generally deliberate, planful activities	RS as being deliberate
	undertaken by active learners, many times to	and <b>planful</b>
	remedy perceived cognitive failure" (p. 50)	
		RS as <b>remedying</b>
		cognitive failure
<b>Barnett</b> (1988)	"the mental operations involved when readers	RS as <u>purposefu</u> l for
	approach a text to effectively and make sense of	readers
	what they read. These [are seen as] problem	
	solving techniques" (p. 150)	
Pritchard	"a deliberate action that readers take voluntarily	RS as <u>deliberate</u>
(1990a)	to develop an understanding of what they read"	<u>actions</u>
	(p. 275)	
Wade, Trathen,	"a deliberate action—the conscious selection of	RS as conscious &
& Schraw	one alternative over another. Thus, it is accessible	deliberate actions
(1990)	to introspection and conscious report" (p. 149)	
Anderson	"deliberate, cognitive steps that learners can take	RS as <u>deliberate steps</u>
(1991)	to assist in acquiring, storing, and retrieving new	used for <u>different</u>
	information" (p. 460)	purposes

D . W	4 . 1 . 1 . 1 . 1	DG 119 /
Paris, Wasik &	"actions selected deliberately to achieve	RS as deliberate and
<b>Turner</b> (1991)	particular goals" (p. 692)	goal-oriented
		<u>Actions</u>
Kletzien	"an action (or series of actions) that is employed	RS as <u>deliberate</u> and
(1991)	in order to construct meaning (Garner, 1987).	problem-solving
	Readers who know what strategies are, how to use	
	them, and when they are appropriate are	
	considered to be strategic readers (Paris, Lipson,	
	& Wixson, 1983a)" (p. 69)	
	, , , ,	
	"deliberate means of constructing meaning from	
	a text when comprehension is interrupted" (p. 69)	
Pearson,	"conscious and flexible plans that readers apply	RS as conscious and
Roehler, Dole	and adopt to particular texts and tasks" (cited in	flexible plans
& Duffy (1992)	Jimenez, Garcia & Pearson, 1996)	Hearing plans
& Dully (1772)	Jimenez, Garcia & Fearson, 1990)	
Paris, Lipson,	"deliberate actions and therefore are available for	RS as conscious &
& Wixson	introspection or conscious report. They may not	deliberate actions
(1994)	always be accurate or useful but strategies are	deliberate actions
(1994)	·	
	identifiable to the agent and to others by	
	intensions and selected goal states. In a sense,	
	strategies are skills under consideration" (p. 790)	
	"Stratagies are not necessarily different actions	
	"Strategies are not necessarily different actions	
	[than skills]; they are skills that have been taken	
	from their automatic contexts for closer	
	inspection." (p. 790)	
	"Because strategic actions are, in a simplified	
	sense, skills that are made deliberate, it follows	
	that a 'strategy' can mirror any level of skill."	
	(p. 791)	
<b>Davies (1995)</b>	"a physical or mental action used consciously or	RS as <b>physical</b> or
` ,	unconsciously with the intention of facilitating	mental
	text comprehension and/or learning" (p. 50)	RS used <b>consciously</b> or
		unconsciously
Jiménez,	Strategic processing in reading defined as "any	RS as overt purposeful
García &	overt purposeful effort or activity used on the part	effort/activity
Pearson (1996)	of the reader to make sense of the printed material	
_ 3013011 (1779)	with which he or she was interacting." (p. 98)	
Carrell,	"actions that readers select and control to	RS as goal-oriented
Cajdusek, &	achieve desired goals or objectives"	actions
Wise (1998)	(p. 97)	westering.
Chamot &	"mental procedures that assist learning and that	RS as mental
El-Dinary	occasionally can be accompanied by overt	procedures
(1999)	activities" (p. 319)	procedures
		DC ac antionally
Birch (2002)	"strategies allow the reader to take the text as a	RS as <u>optionally</u>
	source of information, and, drawing on the	consciously or
	knowledge base as another source, make sense of	unconsciously used
	what is on the printed page. The processing	
	strategies can be optionally consciously or	

	unconsciously applied; that is, they can operate	
	automatically beneath the level of our awareness	
	or they can kick in selectively because of our	
	attention to something we perceive." (p. 2)	
Abbott (2006)	"the mental operations or comprehension	RS as mental
	processes that readers select and apply in order to	operations that readers
	make sense of what they read" (p. 637)	select and apply
Yang (2006)	"cognitive actions taken to repair problems	RS as <b>cognitive actions</b>
	resulted from the insufficiency of language	used to <u>repair</u>
	knowledge and to get liberal meaning" (p. 335)	<u>problems</u>
	Comprehension monitoring strategies are "those	
	intentional techniques by which readers monitor	
	or manage their reading" (p. 337)	
Graesser (2007)	"a cognitive or behavioral action that is enacted	RS as cognitive or
	under particular contextual conditions, with the	behavioral action with
	goal of improving some aspect of comprehension"	the goal of improving
	(p. 6)	<u>comprehension</u>
Grabe (2009)	"processes that are consciously controlled by	RS as consciously
	readers to solve reading problems." (p.221).	controlled to solve
		problems.
Alkhaleefah	"any physical or mental processes that are	RS as <b>physical</b> or
(2011)	consciously and deliberately employed by EFL/L2	mental processes,
	readers in order to either solve problems in and/or	consciously used to
	facilitate comprehension of texts during the	solve problems and/or
	reading task(s)" (pp.31-32)	<b>facilitate</b>
		comprehension

**Appendix B:** List of strategies identified in taxonomies in main L1 and L2 reading studies employing think-aloud protocols/self-reports (introspective and retrospective) for different reading tasks and contexts.

Colsidavasky (1976-77)   Hosenfeld (1977)   Colsidavasky (1976-77)   Hosenfeld (1977)   Colsidavasky (1976-77)   Hosenfeld (1977)   Colsidavasky (1976-77)   Colsidavasky (1984)   Hare & Smith (1982)   Colsidavasky (1987)   Colsidavasky (1980)   Colsidavasky (1980)   Colsidavasky (1990)   Colsidavasky (1990)   Colsidavasky (1991)   Colsidavasky (1991)   Colsidavasky (1991)   Colsidavasky (1992)   Colsidavasky (1993)   Colsidavasky (1993)   Colsidavasky (1993)   Colsidavasky (1993)   Colsidavasky (1993)   Colsidavasky (1993)   Colsidavasky (1994)   Colsidavasky (1994)   Colsidavasky (1994)   Colsidavasky (1994)   Colsidavasky (1996)   Colsidavasky (199	STRATEGIES REPORTED  (in alphabetical order)

Acknowledging lack of								•				•				•					•	
background knowledge//																						
(OR) Acknowledging lack																						
of relevant schema about																						
content of text// (OR)																						
Expressing lack of																						
background knowledge or																						
prior knowledge// (OR)																						
lack of background																						
knowledge (about a																						
topic)// (OR) Questioning																						
to show lack of knowledge																						
Acting (on a plan)									•												•	
Adding information//(OR)	•				-																	
Adding details to the text	•				•																	
without use of imagery (as																						
an Elaborative move)																						
Adjusting flexibly															1		•					
hypothesised																						
macrostructure based on																						
newly encountered																						
information in the text																						
imormation in the text		1	<u> </u>			1														ļ.		

Adjusting reading		•						•			•		•	•	•	•	•	•				•	•
rate/speed in order to																							
increase comprehension//																							
(OR) Varying reading																							
rate// (OR) Changing																							
speeds or slowing down//																							
(OR) Adjusting size of																							
chuck read// (OR)																							
Adjusting the reading																							
speed based on the levels																							
of difficulty// (OR)																							
Adjusting reading																							
rate/speed of reading																							
Analyzing words				-	•																		
That years words																							
Analyzing sentences					•				•														
(including punctuation,																							
grammatical structure, and																							
length)// (OR) Analyzing																							
structure																							
Analyzing functions of				•	•																		
paragraph or sentence																							
(e.g., compare, restate,																							
expand, etc.)																							
Analyzing stylistic aspects					•														•				
(tone, style, type of																							
discourse, etc.)// (OR)																							
Analyzing textual																							
organization and text type																							
Making analogies with																			•				
other L2 words																							

Answering one's own												•										
question// (OR) Answering																						
by confirming an earlier																						
guess or answering by																						
resolving an apparent contradiction																						
			•			-							_								_	_
Anticipating content// (OR) Anticipating and			•										•							'	•	•
predicting information																						
(See also <b>Hypothesizing</b> /																						
See Predicting)																						
Appealing to the							1								1	•				•	T	
researcher// (OR) Asking																						
for help (as part of Social																						
strategies)																						
Appreciation of given text																				•		
(as part of Utilization/																						
elaboration)																						
Applying linguistic																				•	•	
knowledge (a. using																						
lexical knowledge and b.																						
using syntactic or other grammatical knowledge)																						
Assessing comprehension															-						_	•
(See Monitoring																						•
comprehension)																						
Self-assessing order of																					_	•
sentences or paragraph to																						
be read																						
Assimilating to passage		•																				
event																						

Assimilating to personal experience		•																							
(See Referring to personal experience)																									
Associating (making associations)// (OR) Meaning associating// (OR) Associations				•											•		•	•							
Associations with prior knowledge (See also Relating information to background knowledge or experience)											•														
Attempting an action/solution										•															
Attending// (OR) Paying close attention or concentration// (OR) Concentrating // (OR) Selective attention// (OR) Attending selectively		•												•		•								•	
Automatic construction					•																				
Avoiding embarrassment (as part of Affective strategies)																							•		
В			ı					l l	l		ı		l l						!	l	!			l	

Being aware of problems encountered in the text/f (OR) Being aware of understanding or confusion/f (OR) Voicing confusion/f (OR) Voicing confusion/f (OR) Finding problems (as part of Utilization/elaboration) Being aware of personal difficulties in comprehending the text Being aware of (and revising) mistakes arisen during reading (or when answering questions) Being aware of article providing information sought article provide																								
(OR) Being aware of understanding or confusion// (OR) Voicing confusion// (OR) Voicing confusion// (OR) Finding problems (as part of Utilization/elaboration) Being aware of personal difficulties in comprehending the text Being aware of (and revising) mistakes arisen during reading (or when answering questions) Being aware of article providing information sought Being aware of article providing information sought Blitingual's thinking in language of text Breaking lexical frems into parts Breaking sentence into phrases  C Clarifying Checking (comprehension) Cisce Monitoring comprehension) Checking (comprehension) Checking solution to a	Being aware of problems										•		•	•					•			•	•	
understanding or confusion!/ (OR) Confusion!/ (OR) Voicing confusion!/ (OR) Finding problems (as part of Utilization!claboration) Being aware of personal difficulties in comprehending the text Being aware of (and revising) mistakes arisen during reading (or when answering questions) Being aware of article providing information sought  Comprehension  Comprehension Checking comprehension Checking (comprehension) Checking (comprehension) Checking (comprehension) Checking (comprehension) Checking solution to a																								
confusion// (OR) Voicing confusion// (OR) Voicing confusion// (OR) Voicing confusion// (OR) Voicing confusion// (OR) Finding problems (as part of Utilization/elaboration)  Being aware of personal difficulties in comprehending the text  Being aware of (and revising) mistakes arisen during reading (or when answering questions)  Being aware of farticle providing information sought  Bilingual's thinking in language of text  Breaking lexical items into parts  Breaking sentence into phrases  C  Clarifying  Checking (comprehension)  (See Monitoring comprehension)  Checking solution (to a	(OR) Being aware of																							
Confusion// (OR) Voicing confusion// (OR) Finding problems (as part of Utilization/elaboration) Being aware of personal difficulties in comprehension (or when a part of utilization/elaboration) Being aware of personal difficulties in comprehension) Being aware of (and revising) mistakes arisen during reading (or when answering questions) Being aware of article providing information sought Bilingual's thinking in language of text Breaking lexical items into parts  Clarifying  Clarifying  Clecking solution (to a	understanding or																							
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problems (as part of Utilization/elaboration)  Being aware of personal difficulties in comprehending the text  Being aware of (and revising) mistakes arisen during reading (or when answering questions)  Being aware of article providing information sought  Bilingual's thinking in language of text  Breaking lexical items into parts  Breaking sentence into phrases	Confusion// (OR) Voicing																							
Utilization/elaboration Being aware of personal difficulties in comprehending the text Being aware of (and revising) mistakes arisen during reading (or when answering questions) Being aware of article providing information sought Bilingual's thinking in language of text Breaking lexical items into parts Breaking sentence into phrases  Clarifying Checking (comprehension) (See Monitoring comprehension)																								
Being aware of personal difficulties in comprehending the text Being aware of (and revising) mistakes arisen during reading (or when answering questions) Being aware of article providing information sought Bilingual's thinking in language of text Breaking lexical items into parts Breaking sentence into phrases  Clarifying Checking (comprehension) (See Monitoring comprehension) (See Monitoring comprehension)	problems (as part of																							
difficulties in comprehending the text being aware of (and revising) mistakes arisen during reading (or when answering questions)  Being aware of article providing information sought blingual's thinking in language of text breaking lexical items into parts  Breaking lexical items into phrases  C  C  C  C  C  C  C  C  C  C  C  C  C																								
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Being aware of (and revising) mistakes arisen during reading (or when answering questions)  Being aware of article providing information sought  Bilingual's thinking in language of text  Breaking lexical items into parts  Breaking sentence into phrases  Clarifying  Checking (comprehension) (See Monitoring comprehension)  Checking solution (to a	difficulties in																							
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during reading (or when answering questions)  Being aware of article providing information sought  Bilingual's thinking in language of text  Breaking lexical items into parts  Breaking sentence into phrases  Clarifying  Checking (comprehension) (See Monitoring comprehension)  Checking solution (to a	revising) mistakes arisen																							
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Being aware of article providing information sought  Bilingual's thinking in language of text  Breaking lexical items into parts  Breaking sentence into phrases  Clarifying  Checking (comprehension)  Checking solution (to a	answering questions)																							
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sought Bilingual's thinking in language of text Breaking lexical items into parts Breaking sentence into phrases  Clarifying Checking (comprehension) Csee Monitoring comprehension) Checking solution (to a	providing information																							
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Breaking lexical items into parts  Breaking sentence into phrases  Clarifying  Checking (comprehension) (See Monitoring comprehension)  Checking solution (to a	Bilingual's thinking in															•								
Breaking sentence into phrases  Clarifying Checking (comprehension) (See Monitoring comprehension) Checking solution (to a	language of text																							
Breaking sentence into phrases  Clarifying Checking (comprehension) (See Monitoring comprehension) Checking solution (to a	Breaking lexical items into							•												•				
Decking (comprehension)   Checking solution (to a   Checking solutio																								
Decking (comprehension)   Checking solution (to a   Checking solutio	Breaking sentence into														•									
Clarifying																								
Clarifying         •																								
Checking (comprehension) (See Monitoring comprehension) Checking solution (to a	С																							
(See Monitoring comprehension)  Checking solution (to a	Clarifying										•													
(See Monitoring comprehension)  Checking solution (to a									•															
comprehension)     Checking solution (to a	(See Monitoring																							
Checking solution (to a																								
problem)	Checking solution (to a								•															
	problem)																							

Code-switching (bilingual											•												
strategies)																							
Coherence breaks: text														•									
Coherence break:														•									
knowledge																							
Commenting// (OR)		•		•		•			•														
Commenting on (own)																							
behaviour (or) process//																							
(OR) Comments on own																							
behavior																							
Commenting on the																	•						
strategy used																							
Commenting on structure		•				•																	
Commenting on task itself									•														
Comparing different main																		•					
ideas																							
Confirming an earlier		•				•			•	•		•					•			•		•	•
guess/predictions// (OR)																							
Confirming meaning of																							
earlier comprehension/																							
guess// (OR) Confirmation																							
of prediction// (OR)																							
Confirming (or revising)																							
predictions// (OR)																							
Confirming/disconfirming																							
hypothesis// (OR) Self-																							
confirming previous guess																							
about meaning of the																							
unknown word																							

Confirming/disconfirming			•		•			•	•								•	
(alternative) inference(s)//																		
(OR) Confirming																		
inference// (OR) Self-																		
checking and confirming																		
previous prediction/s//																		
(OR) Self-checking and																		
revising and/or confirming																		
a previous inference made																		
in the text																		
Connecting inferences												•						
Connecting or relating							•						•	•			•	
information presented in																		
different sentences or parts																		
of the text// (OR)																		
Connecting with previous																		
text// (OR) Comparing																		
different main ideas //																		
(OR) Connecting																		
information/ action to																		
previous parts																		
Connecting with current																		
and past practice																		
Connecting with																		
knowledge about students																		
Connecting with prior							•								•			
knowledge// (OR)																		
Connecting the text to																		
prior knowledge (also see																		
Relating Information to																		
background																		
knowledge/experience)																		
Connecting with plans for																		
future practice														1				

Conscious change and				•																			i '
planning of carrying out																							i '
tasks																							<u> </u>
Considering alternative						•														•			i '
inferences																							, '
(See Inferencing)																							<u> </u>
Constructing																		•					i '
macrostructure of the text																							l '
based on prior knowledge																							<u> </u>
Contextualizing// (OR)												•									•		i '
Contextualization (as part																							l
of Parsing/organization)																							<u>L</u>
Controlled and hold moves				•																			
Controlled skipping				•																			l
Corrective behaviour//			•	•													•						1
(OR) Correcting previous																							1 1
error (or revising previous																							l
understanding// (OR)																							l
Mistake correction																							l
Correctly looking up	•			•																			1
words in the glossary//																							l
(OR) Glossary use																							l
Cooperative learning (as																					•		1
part of Social strategies)																							l
																							i '
D							•	•	•	•	•	•				 •	•					 <u>'</u>	
Deciding to abandon												•										•	1
problem/plan// (OR)								1															i
Overtly dismissing taking																							l
the action decided								1															l '

																 	 _							
Deciding to read on in												•								•			•	•
spite of confusion// (OR)																								
Deciding to read on// (OR)																								
Determining what to read//																								
(OR) Deciding to take																								
action while reading the																								
text (e.g. deciding to																								
reread the text, use the																								
dictionary, etc.)																								
Deciding to reread																				•				
sentence(s)/paragraph(s)																								
Deciding to consult									T		1			Ţ						•	T			
dictionary (See Using											1													
dictionary)																								
Decoding// (OR) Decoding				•	•								•		•							•		
meaning(s) of word and/or																								
groups of words in																								
context// (OR) Decoding																								
(as part of perceptual																								
processing)// (OR)																								
Decoding (as part of																								
Knowledge of L2)																								
Demanding relationships			•																					
Demonstrating awareness													•											
Deserting a hopeless				•	•																			
utterance																								
Diagramming (e.g., key							•																	
words, graphic organizing)											1													
(Overtly) dismissing																							•	
taking the action decided											1													
Distinguishing between																			•					
different languages											1													
Drafting-and-revising						•																		

Drawing conclusion										•												
(See Inferences)																						
Drawing tentative										•												
conclusion																						
(See Inferences)																						
E																						
Elaborating (e.g., on											•	•	•			•	•	•				
content, writing style,																						
etc)// (OR) Elaborative																						
inferences (to interpret the																						
content of the text, such as																						
relationships among																						
characters, characteristics																						
of the characters, cause																						
and effects of the																						
incidents, etc. or to																						
achieve in-depth																						
understanding of the																						
theme// (OR) Generate																						
elaborations of the main																						
ideas// (OR) Elaborating																						
(as part of Background																						
knowledge)// (OR)																						
Elaborating by describing																						
prior knowledge, through																						
autobiographical																						
recollection, emotional																						
reaction, or other																						
elaborations																						

(self-)Evaluating//(OR)			•			•	•	•		•	•	•	•	•		•			•   •	•	•
Evaluating the content of																					
the text or the quality of																					
writing (OR) Ongoing																					
self-evaluation// (OR)																					
Evaluating specific parts																					
(of the text)// (OR)																					
Evaluations (e.g.																					
comments about content of																					
text)// (OR) Evaluative																					
comments// (OR)																					
Evaluating // (OR)																					
Evaluating performance//																					
(OR) Evaluating what is																					
read// (OR) Evaluating																					
overall comprehension or																					
text																					
Evaluating author's											•	•		1						•	_
writing style or biases//											•	Ĭ									
(OR) Evaluations (e.g.																					
writing of the text or the																					
reader's state)// (OR)																					
Reacting to the writing																					
style in the text										_			 -	-			_			-	
Evaluating and adding																	•				
implicit information																					
(whether correct or wrong)																					
Evaluate using genre (as																			•	•	•
part of Utilization/																					
elaboration)// (OR)																					
Evaluating overall																					
structural organization or																					
genre of text																					

Evaluating with reference								•					•					
to academic knowledge																		
(i.e., referring to author's																		
style, figurative language,																		
characterization, setting,																		
point of view, irony, or																		
author's intention // (OR)																		
Evaluating on the basis of																		
previous knowledge																		
Evaluating strategy use//																•	•	
(OR) Self-assessing/																		
commenting on the																		
action/strategy executed																		
Explanations (based on									•	•								
background knowledge)//																		
(OR) Explanatory																		
inferences																		
(see Inferences)																		
Expressing agreement						•		•			•	•					•	
(with the author/ text,																		
etc)// (OR) Agreeing//																		
(OR) Agreeing/																		
disagreeing with author//																		
(OR) Expressing opinion																		
(or agreement)// (OR)																		
Expressing disagreement																		
or self-reservation																		

Expressing emotional						•									•													i l	l
reaction// (OR) Expressing																												1	
negative reactions// (OR)																												1	
(expressing) Personal																												1	-
reaction (e.g., interest, like																												1	
or dislike, etc) as an																												1	
Elaborative move/																												1	
(See Responding																												1	
affectively)																													
Expressing interest															•													i	
Expressing need for a									•																			ı	
dictionary			1																									i	
(see Using dictionary)																												i l	
Extrapolating from							•		•																•			ı	
information presented in																												1	
the text																												1	
																												1	
F																													
Finding problems (as part																										•			
of Utilization/elaboration)																												1	
(also see Being aware of																												1	
problems encountered in																												1	
the text)																												i l	
Finding out main ideas or																			•				•	,				•	
a portion of the text// (OR)																												1	
Looking for main idea(s)/																												1	
topic sentences/ topic																												1	
paragraphs																												ı	
Finding out supporting			1								t		t				$\neg \dagger$	$\top$	1	1	t		•	,	t		$\exists$	ΠŤ	
information																												i	
Fixation (as part of			1										t				$\neg \dagger$	$\top$	1	1					t	•	$\exists$	ΠŤ	
perceptual processing)																												i	
Focusing on grammar			1								1								•	1								ſΪ	
1 ocasing on grammar	 I	1	Ь	<u> </u>	1			l	 l	<u> </u>	 <u> </u>	<u> </u>	1	l	<u> </u>	<u> </u>					<u> </u>	<u> </u>			1	1			

Focusing on certain words/vocabulary// (OR)										•		•		•		•					
Assigning importance to																					
word or phrase// (OR)																					
Individual word focus																					
Forgetting to decode	•																				
unknown words from																					
text/from the passage																					
context																					
Follow-up decision																				•	
making																					
G													 		 						
Gathering information					•																
(expressing) General		•				•															
knowledge and																					
associations																					
Going to another source								•													
(e.g. seeking help in																					
pronouncing a word or																					
stating using the dictionary																					
to look up a word)																					
(see Using dictionary)																					

Guessing meaning of	•				•	T		•				•	1		•		•	•	• •	•		•	•	•
words// (OR) Guessing																						_		
using immediate context//																								
(OR) Guessing a word																								
from its context// (OR)																								
Using context// (OR)																								
Guessing word meaning//																								
(OR) Guessing meaning																								
of unknown word using																								
contextual clues// (OR)																								
Use of context using																								
clues// (OR) Guessing																								
meaning of the current																								
context// (OR) Use of																								
context// (OR) Using																								
context clues to interpret a																								
(difficult) word or phrase//																								
(OR) Using local context																								
clues to interpret a word or																								
phrase// (OR) Using																								
context clues// (OR) Make																								
use of contextual cues to																								
interpret a different																								
word//(OR) Using textual																								
sources (including																								
dictionaries)																								
Guessing by using																	•		•				•	
morphology/grammar//																								
(OR) Guessing a word																								
from its lexical structure//																								
(OR) Guessing																								
morphological/																								
grammatical function of																								
word/ phrase																								
(see Use of context)																								

Guessing by using similar sounding L2 word																						•							
Guessing meaning of the					-	-	-	-	-	-	-	-						-	-	-	-			<del>                                     </del>	•	+			
current context																									•				
current context																													
Н				_																									
Hypothesizing// (OR)	•					•					T	T	1	•	•				Т						•		•		
Hypothesis// (OR)																													
Forming a tentative																													
hypothesis// (OR) Forming																													
(tentative) hypothesis																													
about text (as a Reasoning																													
move)// (OR) Initial																													
hypothesis (See																													
Anticipating/ See																													
Predicting)																													
Treatening)																													
I	l						1				-		<u> </u>			ll			<u> </u>	-						-		<u> </u>	
Ideational simplification				•																									
Identifying key				•										•															
information in the																													
text//(OR) Locating																													
information (see																													
<b>Identifying text</b>																													
focus/main idea in the																													
text)																													
Identifying				•																									
misunderstanding (and																													
incompatibility of																													
formerly interpreted																													
material with newly																													
interpreted material																													

Identifying people in the			•	•																	•	
text and views or actions																						
attributed to them// (OR)																						
Identifying referents of																						
pronouns/ nouns in text//																						
(OR) Identifying writer's																						
views/ opinions in text																						
Identifying problem									•											•		
source// (OR) Identifying																						
problems (see Being																						
aware of problems)																						
Identifying text focus/			•	•			•			•	•									•	•	
main idea in the text//																						
(OR) Identifying key																						
information in the																						
text//(OR) Identifying																						
main idea(s)/ main action																						
in text// (OR) Locating																						
information//(OR) Use of																						
identifying main idea//																						
(OR) Use of identifying																						
main idea in the text																						
comprehended																						
Identifying newly																					•	
introduced information/																						
action																						
Personal identification																					•	
Identifying (overall) text			•	•																		
schemata/ or text structure/																						
(macroframe of the text)																						

Identifying a synonym or a													•		•	
paraphrase of the literal																
meaning of a word, phrase,																
or sentence// (OR)																
Substituting word with a																
retrieved synonym																

Inference(s)// (OR)	•	Τ.	•		•		•	•	•	•	•		Τ,	•	•	. T		•	•	•	•	•		•	•	
Inferring// (OR) Using			•											•							-					
inference or drawing																										
conclusions// (OR)																										
Drawing an inference																										
based on information																										
presented in the text//																										
(OR) Making an inference																										
or drawing conclusions//																										
(OR) Inference or use of																										
evidence to assess																										
hypothesis or prediction,																										
to answer own question, or																										
to resolve doubt (as a																										
Reasoning move)// (OR)																										
Inferencing (as part of																										
Parsing/organization)//																										
(OR) Inferencing (as part																										
of Background																										
knowledge)// (OR)																										
Inferring ideas from text//																										
(OR) Make elaborative																										
inference to interpret the																										
content of the text (such as																										
relationships among the																										
characters, characteristic																										
of the characters, cause																										
and effects of the																										
incidents, etc.)// (OR)																										
Make elaborative																										
inference to achieve in-																										
depth understanding of the																										
theme// (OR)																										
Reinstatement inferences																										
(See Considering																										

alternative inferences/																				-
See Drawing tentative																				-
conclusion)																				
Inferring meaning of a															•					
difficult word based on its																				
pronunciation																				
Inferring meaning of a															•					-
difficult word based on its																				
structural feature																				
(Self-)initiating																		•		
Integrating// (OR)			•										•							
Integrating information//																				
(OR) Integrating personal																				
identification with the																				
text// (OR) Integrating text																				
passages																				
(See Relating																				
information to personal																				
experience)																				
Interpretation// (OR)			•													•				
Interpreting the text// (OR)																				
Interpreting ideas of text																				
related to writer																				
(comments on)									•											
Intrasentential features																				
J																				
Judging ideas (e.g.,				•																
appropriateness,																				
effectiveness, difficulty,																				
importance, etc.)																				

Judging text features (e.g.,					•	•																		
appropriateness,																								
effectiveness, difficulty,																								
etc.)																								
Jumping around the text															•									
K																								
Keeping the meaning (of		•																	•					
passage/text) in mind																								
while reading																								
Knowledge-based																•	•							
coherence breaks (e.g.,																								
statements about reader's																								
inability to understand due																								
to lack of experience or																								
knowledge)																								
8 /																								
L															-									
Lack of background														•										
knowledge (about a topic)																								
(See Acknowledging lack																								
of background																								
knowledge and																								
Expressing lack of																								
knowledge or prior																								
knowledge)																								
Listing (strategy)						•																		
Looking backward or																				•				
ahead to see if there is																								
information in the text that																								
can resolve comprehension																								
difficulty																								
	1	L	 				 	 	1	<u> </u>	 	 	 					 	 	 	 	 	 	- 1

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	•																									
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	•																									
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						•																				
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_	 	 	 					 	 						 									 	 
Matching key vocabulary																					•				
in the item to key																									
vocabulary in the text																									
(Test-taking strategies)																									
Memorizing// (OR)									•										•						
Memorizing text																									
Mental integration					•																				
(making ) Metacognitive																	•								
comments																									
Monitoring// (OR)									•	•	•	•	,	•		•		•	•	•	•	•	•	• •	
Monitoring																									
comprehension/																									
processes// (OR)																									
Monitoring or evaluating																									
comprehension// (OR)																									
Assessing																									
comprehension// (OR)																									
Monitoring onself// (OR)																									
(self-) Monitoring																									
comprehension by a)																									
posing a question about																									
some aspect of the text or																									
made a prediction, b)																									
provided evidence of																									
recognition of successful																									
comprehension, or c)																									
paraphrased a text																									
sentence or summarized																									
across several sentences//																									
(OR) Monitoring																									
comprehension (of the																									
text)// (OR) Monitoring																									
the task				<u></u>																					

(self-) Monitoring-non												•											
comprehension by a)																							
asking a question that																							
indicated reader['s]																							
awareness that their lack																							
of knowledge was																							
compromising																							
comprehension or b)																							
providing evidence of																							
awareness of their lack of																							
comprehension																							
Monitoring doubts				•	•																		
reflecting awareness of																							
poor understanding, of																							
word or sentence)																							
Monitoring conflicts				•	•																		
within text or between text																							ł
and reader's knowledge or																							
beliefs																							
Monitoring reading																			•				
progress of the text																							
Monitoring the task// (OR)																		•				•	
Maintaining management																							
of the reading task/time																							l
Monitoring the strategy			•													•						•	
choice// (OR) Self-																							
assessing/commenting on																							
action/strategy executed																							
(using) Morpho-syntactic																		•		1	1		_
knowledge																							
N	·							 															
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				 						,				 			 					 		
Non-use or Non-awareness of strategy// (OR) No							•		•															
awareness of strategies																								
Note-taking// (OR)						•												•				•	•	•
Copying key words,																								
phrases, or sentences//																								
(OR) Taking notes// (OR)																								
Writing down the																								
unknown word// (OR)																								
Writing down a selected																								
part of the text									<u> </u>												<u> </u>			
Noticing an apparent																								
contradiction in the text																								
Noticing novelty// (OR)												•			•									
Noting novelty or salient																								
details																								
Noticing feature of																			•	•			•	
punctuation or figures//																								
(OR) Noticing																								Ì
orthographic/																								Ì
typographical features in																								
text					_																			
Noticing cohesive devices									<u> </u>	_									•	_				igspace
Noticing key word		<u> </u>			_						_		<u> </u>						•	,				igsquare
Noticing reference word																			•	)				

							_				-															
Noticing sentence												•											•		•	•
structure// (OR) Noting																										i
aspect of structure (e.g.,																										i
"this is a main idea," this																										i
is an example")// (OR)																										i
Noticing text																										i
characteristics// (OR)																										i
Noticing structural																										i
organization of																										i
information/ action in text					_	_	-	-								-	-	-		_	-	-				<del></del>
Noting anomaly												•				_										<del></del>
Noting important detail//			•									•														ł
(OR) Noting/searching for																										i
salient details																_										<del></del>
Noting structural signal												•														i
0		!			 																					
Organizing (information																				•						1
and ideas in the text)																										ł
Outlining							•																			Ī
(See Marking the text)																										i
Other (any think-aloud														•												1
comments that did not fit																										ł
other categories																										ı
																										Ш
P																										

Paraphrasing// (OR)		1	•		_	•	T _	1	•	Т.		Т.		•	•	•	•	•	•			•	•	•	•		_	1	_	•	•	Τ.	
Substituting reader's own			•	•	•	•	•		•	•	'	-   `	•	•	•	•	•	•	•		•	•	•	•	•		•		•	•	•	•	
words// (OR) Paraphrasing																																	
ideas// (OR) Paraphrase																																	
parts of text into oral																																	
language or more familiar																																	
terms// (OR) Rephrasing a																																	
portion of the text// (OR)																																	
Restatement// (OR)																																	
Paraphrasing sentence's																																	
meaning (to signal																																	
understanding)// (OR) Restatement// (OR)																																	
Restating the text// (OR)																																	
Paraphrasing in L1 and/or L2																																	
								1		-	_		_					_	+							_					_		
Paraphrasing the text																		•								•							
without relating it to prior																																	
knowledge or other parts																																	
of the passage// (OR)																																	
Simple paraphrase or																																	
incorrect																																	
inference/paraphrase if the																																	
reader a) paraphrased the																																	
text without relating it to																																	
background knowledge or																																	
other parts of the passage,																																	
b) missed the point or																																	
significance of the																																	
information or c)																																	
incorrectly paraphrased the																																	
text or made an incorrect																																	
inference																				<u> </u>													

Paraphrasing sentence tentatively (to signal understanding)					•																					
Paraphrasing sentence's meaning inaccurately (to signal understanding)					•																					
Pausing in silence// (OR) Pausing to collect ideas// (OR) Pausing and thinking about reading																•					•					•
Paying close attention or concentrating																	•									
Personal identification)// (OR) Personalizing// (OR) Identifying personally// (OR) Personal reaction or autobiographical connection (See Integration)	•								•					•		•									•	
Planning what strategy to use or what to do while reading// (OR) Planning// (OR) Strategic planning// (OR) Self-planning the action/ strategy to take										•		•			•				•				•	•	•	

Predicting (or predictive	•		•		•	•	•	•	•	•	•		•	•	• •	•	•	•		•	•	•	•	•
inferences) meaning/																								1
content of text/ text																								1
structure// (OR)																								1
Predictions// (OR)																								1
Predictive inferences//																								1
(OR) Predicting content of																								
succeeding portion of																								
text// Predicting/																								1
hypothesising about																								1
meaning // Makes																								1
prediction about the																								i
meaning of a word or																								i
about text content//(OR)																								
Predicting about what may																								
happen next (as a																								1
Reasoning move)// (OR)																								
Watching or predicting//																								1
(OR) Predict (as part of																								
Background knowledge)																								
//(OR) Predicting or																								
guessing text meaning																								1
(See Anticipating/ See																								1
Hypothesizing)																								
Previewing (and noting												•								•		•		•
structure)// (OR)																								1
Previewing what the text is																								1
about// (OR) Prediction (as																								İ
part of Parsing/																								İ
organization)																								İ
Problem formulation		•																						
Q																								

							1																			
(posing) Question(ing) //	•	•	•	•	•	•	•		•	•	•	•   •	•		•	•		•		•		•	•	•	•	
(OR) Questioning of text//																										
(OR) Questioning about																										
some aspect of the text (or																										i
made a prediction)// (OR)																										
Generate questions about																										i
the main ideas and try to																										
find out the answers//																										
(OR) Self-questioning//																										
(OR) Self-																										
questioning/self-testing//																										
(OR) Asking self question																										
or search for evidence (e.g.																										
rereading as a Reasoning																										
move)// (OR) Formulating																										
a question// (OR)																										i
Formulating a question in																										
general sense																										i
Questioning meaning of a		•												•	•						•	•			•	
word (or/and) phrase//																										
(OR) Questioning																										i
vocabulary or words//																										
(OR) Questioning a drawn																										
guess about meaning/																										
reference of a word/																										
phrase																										
Questioning meaning of a		•																	T						•	
clause or sentence																										
Questioning to express																		•	T							
lack of sufficient																										
information in the text																										
or uto toke																										

Questioning to show lack of knowledge (see Acknowledging lack of background knowledge)																•						
Questioning coherence of ideas/action in text																					,	•
Questioning writing style in text																					,	•
Self-questioning whether or not to take action/ strategy (either during or after the reading task)																						•
(Recognizing that) Question is answered or a prediction is confirmed													•									
Questioning methodology or results													•									
R		l - 1							1	1	<u> </u>							1		 	 	
Raising redundancy level by means of syntactic simplification			•	•																		
Reading only (orally)// (OR) Reading aloud a word/phrase// (OR) Vocalizing// (OR) Pronouncing an unknown word slowly and carefully						•													•		•	•
Reading actively by evaluating the content																			•			
Reading critically by raising questions																			•			
Reading aloud sentence(s)																			•			

Reading text (silently)							•																
Reading slowly// (OR)							•																•
Reading slowly and																							i
carefully																							
Reading selectively and		•		•												•			•				i
flexibly in accordance																							i
with the reading with the																							1
reading goal// (OR)																							1
Flexibility of reading rate//																							1
(OR) Selective reading//																							1
(OR) Selectively reading																							i
(See Adjusting reading																							i
rate/speed)																							
Reading the difficult part			•																				1
to resolve the																							i
comprehension difficulty																							
Reading parts of the text to																			•				1
increase memory of it,																							i
facilitate question																							i
answering or clarify																							i
unclear part																							1
Reading ahead (for						•		•	•		•							•				•	in .
contextual clues)// (OR)																							in .
Reading subsequent text//																							i
(OR) Keeping on reading																							in .
after encountering a																							ii
problem with the intention																							'n
of using later the text to																							'n
draw inferences from//																							'n
(OR) Reading on																							
Reading 'broader phrases'	•																						'n
																							'n

Re-reading (e.g., text,	•		•	•	•	•	•		•	•	•	•	•	•		•	1	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•
unknown word, phrase,																																	i '
etc)// (OR) Rereading																																	i '
selected portions of the																																	1
text// (OR) Repeated																																	1
reading of same decoding																																	1
unit// (OR) Rereading																																	l
difficult part to resolve																																	l
comprehension difficulty//																																	l
(OR) Rereading aloud//																																	l
(OR) Backtracking// (OR)																																	i '
Rereading previous text//																																	l
(OR) Rereading potions of																																	l
text aloud without adding																																	l
any comments// (OR)																																	ı
Rereading parts of the text																																	l
to increase memory of it,																																	l
facilitate question																																	ı
answering or clarify																																	ı
unclear parts (as post																																	l
reading strategy)//																																	l
(OR)Text repetitions																																	i
Re-accessing the lexicon																				•				•								•	l
to try to find/recall the																																	l
meaning of a word he/she																																	ı
thought to be known//																																	ı
(OR) Repeating a selected																																	l
word to locate/retrieve or																																	ı
confirm its meaning within																																	l
mental lexicon																																	i
Reacting (affectively) to						•					İ											•				•						•	l
the text// (OR) Make											1				1																		i
affective reactions to the											1				1																		i
overall content of the text//											1				1																		ł
(OR) Emotional reaction											1				1																		ł

Reacting to author's style	
or text's surface structure//	
(OR) // (OR) Reacting to	
the writing style in the text	
Reacting to the tone in the	
text	
Reciting • • • • • • • • • • • • • • • • • • •	
Recognizing loss of       Recognizing loss of	
Concentration// (OR)	
Acknowledging lack/ loss	
of concentration	
Recognizing a problem	
(problem recognition)//	
(OR) Recognizing/	
acknowledging a problem	
in comprehending text (or	
part of it)	
(see Acknowledging a	
problem)	
Recognizing structure of   • • • • • • • • • • • • • • • • • •	
sentence	
Recognizing structure of • • • • • • • • • •	
text/ passage/ paragraph//	
(OR) Recognizing	
discourse format// (OR)	
Recognizing coherence of Recognizing Coherence Coherence (Recognizing Coherence C	
the text// (OR)	
Recognizing structure of Recognizing structure	
passage or paragraph//	
(OR) Reacting to	
coherence of ideas/	
information in the text	
Recognizing the Second	

Recognizing the																	•					
conclusion																		_				
Recognizing topic																	•					
sentence																						
Recognizing transition of																	•					
ideas																						
Reconstruction (as part of																				•		
Utilization/elaboration)																						
Referring// (OR)		•					•			•												
References to antecedent																						
information// (OR)																						
Reference (to an																						
antecedent information in																						
the text)																						
Referring to the						•		•											•			
experimental task/design					_																	
Recognizing a problem in																					•	
retrieving meaning of an																						
unknown word/phrase																						
Recognizing problem in																					•	
comprehending																						
concept/idea behind a																						
word/phrase																						
Referring to difficulty/															•						•	
identify source of an																						
unknown word (Word																						
problem ID)// (OR)																						
Recognizing problem in																						
comprehending meaning																						
of an unknown word/																						
phrase																						

Referring to (using) the	•														•						
dictionary// (OR) Keeping																					
constant lookups for																					
unknown words (see																					
Using the dictionary)																					
Referring to lexical items								•													
that impede																					
comprehension																					
Referring to (the) previous						•		•		•											
passage// (OR) Reference																					
Referring to an idea				•	•																
mentioned previously in																					
the text and noting																					
connection to current text																					
(as an Elaborative move)																					
(see Connecting/relating																					
information in text)																					
Referring to an idea					•																
mentioned previously by																					
the reader and noting																					
connection to text (as an																					
Elaborative move)																					
Rehearsal		•																			
Relating text to previous																	•				
or subsequent excerpts																					
(going back and forth																					
within the text)																					
Relating new information																		•			
to old stated earlier in the																					
text															<u></u>						

Dalatina to content and I	1		- 1					Τ_						T			1				 
Relating to content area//								•		•					•						
(OR) Relating to previous																					
knowledge of content																					
(either general of subject																					
specific)// (OR)																					
Background knowledge if																					
the reader indicated prior																					
exposure to the content																					
without explicitly																					
integrating the text and																					
background knowledge																					
Relating to personal															•				•		
experience (see Relating																					
information to																					
background knowledge)																					
Relating to cultural															•						
knowledge (see Relating																					
information to																					
background knowledge)																					

D. Leting information to			<del></del>			
Relating information to background knowledge or	• •	•   • •	•   •   •	•   •	•     • •	
experience//(OR) Relating						
to personal experience//						
(OR) Connecting with						
prior knowledge//(OR)						
Connecting the text to						
prior knowledge//(OR						
Bringing background						
knowledge to the						
text//(OR) Relating the						
stimulus sentence to						
personal experience//(OR)						
Relating to personal						
experiences (as part of						
Utilization/elaboration)//						
(OR) Associations with						
prior knowledge (i.e. using						
general knowledge to						
make to make associations						
with information in the						
articles)//(OR) Using						
background knowledge						
and personal						
experience//(OR) Invoking						
knowledge // (OR) Using						
previous/ background						
knowledge (of the						
discourse format)// (OR)						
Using prior extratexual						
content schemata						
(knowledge of the word)//						
(OR) Using background						
knowledge//(OR) Using						
background knowledge of						

the discourse format//(OR)																							
Invoking prior																							
knowledge// (OR) Using																							
prior knowledge// (OR)																							
Utilizing prior																							
knowledge// (OR)																							
Recalling prior knowledge																							
or experience external to																							
text (as an Elaborative																							
move)// (OR) Relating																							
information to prior																							
personal knowledge or																							
experience// (OR) Relating																							
information to cultural																							
knowledge or experience//																							
(OR) Using previous																							
background knowledge																							
Relating information to																						•	
world knowledge																							
Relating to knowledge of															•								
formal schemata (making																							
use of text structure)																							
Relating to knowledge of															•								
the L1 at the word level																							
Relating to knowledge of															•								
the L2																							
Relating to the stimulus				•																•			
sentence to a previous																							
portion of the text// (OR)																						1	
Relating to previous																						1	
portion of the text																							
Relating verbal							$\neg \dagger$							1 1		1	1	•			1	1	
information to																						1	
accompanying visuals																							
		 I			ıi			 _ I	1	1	 1	 1	 l	1 1	 		-1	1	 				

Relying on identified over				•																							
purpose of text Relying on summarizing				•	-		-										-	 -				-					
units identified in the text				•																							
(See Summarizing)																											
Relying on textual	-			•		1		1	1									 -	-	_	+	-		 -			—
schemata norms for the				•																							
purpose of prediction																											
about text development																											
Repeated skimming and	-			•		1		1	1	1								 -	-	_	+	-		 -			—
scanning and				•																							
Repetitions (of words or												•				•		•							•	•	
												•				•	•	•							•	•	
phrases in the text)// (OR)																											
Word-repetition// (OR)																											
Repeating a word// (OR) Individual word focus//																											
(OR) Text repetitions//																											
(OR) Repetition (as part of																											
perceptual processing)//																											
(OR) Repeating a selected																											
word to locate, retrieve or																											
confirm its meaning within																											
mental lexicon																											
Reporting distraction													•														
Reporting typical process													•														
(e.g., "I usually")																											
Reproducing logical				•																							
development of text																											
Resolving an apparent																											•
contradiction//(OR)																											
Resolving conflicting																											
information							1	1	1	1																	

ourcing (i.e. using reference erials) ponding affectively to content// (OR) ective response expressing pitional reaction) ponding to the stions used in the text instatement inferences linferences) ising/or revision// (t) Self-correcting/ (t) Self-correcting// (t)
ponding affectively to content// (OR) ective response expressing pitional reaction) ponding to the stions used in the text instatement inferences elements. Singlor revision// (S) Self-correcting// (S) Revising prior coning move// (OR) isses solution/ (OR) Ferevising previous
content// (OR) ective response Expressing obtional reaction) ponding to the stions used in the text  Instatement inferences Inferences) rising/or revision// Expressing prior soning movel/ (OR) rise solution// (OR) F-revising previous
ective response e Expressing otional reaction) ponding to the stions used in the text instatement inferences e Inferences) expression//
e Expressing ottonal reaction) ponding to the stions used in the text instatement inferences Inferences)  So Self-correcting// R) Revising prior coning move// (OR) rise solution// (OR) F-revising previous
ponding to the stions used in the text statement inferences sting or revision// (OR) sties solution// (OR) sties solution// (OR) sties solution// (OR) stressing previous
ponding to the stions used in the text stions used in
stions used in the text instatement inferences Inferences Inferences Instatement inferences
Instatement inferences Inferences Inferences Instatement inferences Inferences Instatement inferences Inferenc
Enferences)  dising/or revision// (S) Self-correcting// (A) Revising prior  doning move// (OR)  dise solution// (OR)  Grevising previous
ising/or revision// (S) Self-correcting// (R) Revising prior coning move// (OR) rise solution// (OR) G-revising previous
R) Self-correcting// R) Revising prior coning move// (OR) rise solution// (OR) G-revising previous
R) Revising prior coning move// (OR) crise solution// (OR) F-revising previous
soning move// (OR) rise solution// (OR) 6-revising previous
rise solution// (OR) F-revising previous
F-revising previous
Frevising previous
ss about meaning of
unknown word
F-revising/ changing
nt of view/position
ressed
riewing text
Scanning)
e learning of specific
ormation (i.e., reciting
erial mentally,
centrating on specific
primation, reading
nd, reviewing notes or
erlying, etc.)

Scanning// (OR) Scanning					•						•													•	•			•		
reading material for a																														1
specific word or phrase//																														
(OR) Scanning for																														l
unfamiliar words// (OR)																														l
Scanning for explicit																														l
information requested in																														
the item// (OR) Making an																														
overview of the text to																														
activate prior knowledge																														
or generate an initial																														
hypothesis about the text																														<u> </u>
Searching for clarifying																							•							1
information elsewhere in																														
the text																														
Searching for clarifying																							•							
information in other																														
sources																														
Searching for cognates																	•													
(Bilingual strategies)																														
Self-directed dialogue					•																									
Setting up a reading goal//															•									•						
(OR) Stating purpose																														1
Shortening a difficult word																													•	
in pronunciation																														1
Skimming// (OR)					•			•			•				•					Ī		•			•					
Skimming reading				1																										l
material for a general				1																										l
understanding// (OR)				1																										l
Skimming for				1																										l
gist/identifies the main				1																										l
idea, theme, or concept				1																										l
and, and a concept		-	1	 		1	L	 <u> </u>	1	1		<u> </u>	 1	1	1	1		1	 <u> </u>			1	1			1				

Skipping// (OR) Skipping	•		•		•		•							•	•	•		•		•	•	ı
(unknown/ irrelevant/																						ı
unrelated/ unimportant																						ı
words/ or sentences) to the																						ı
total meaning// (OR)																						ı
Skipping the problem and																						ı
reading on// (OR) Ignoring																						ı
and reading on// (OR)																						ı
Skipping and reading on																						
Slowing down and using			•																			
sing-song intonation to																						.
facilitate comprehension																						ı
(see <b>Reading slowly</b> )																						l
Solving vocabulary			•																			.
problem// (OR) Word																						.
solving																						
Speculating beyond the					•		•										•		•			ı
information presented in																						.
the text// (OR) Speculating																						ı
beyond the text (See																						ı
Predicting/ See																						.
Inferencing )																						
Stating failure of																	•					
previewing what the text is																						
about																						

Stating failure to	•								•											•	,
understand a word/ (OR)																					
Failing to understand a																					
word// (OR) Recognizing																					
a problem in retrieving																					
meaning of an unknown																					
word/phrase// (OR)																					
Recognizing a problem in																					
comprehending meaning																					
of an unknown																					
word/phrase																					
Stating failure to	•																				
understand a clause																					
Stating failure to					•	,		•	•					•				•	•	•	,
understand a portion of the																					
text// (OR) Stating failure																					
of comprehending a																					
portion of the text// (OR)																					
Failing to understand																					
story//(OR) Recognizing/																					
acknowledging problem in																					
comprehending text (or																					
part of it)																					
Stating success in				•				•						•						•	,
understanding a portion of																					
the text// (OR) Signalling																					
understanding by reporting																					
understanding of text																					
without paraphrasing//																					
(OR) Providing evidence																					
of recognition of																					
successful comprehension																					
(same as <b>Understanding</b> )																					
Stating title of the text																		•			

			-			1	_																						_			
Stating success in																															•	
comprehending meaning																																
of word or phrase																																
Summarizing// (OR)			•	•	•	•				•				•	•	•		•		•		•	•	•	•	•			•	•	•	
Summarizing inaccurately																																
// (OR) Summarizing main																																
ideas after reading each																																
part of the text// (OR)																																
Constructing cohesive																																
summary of the text// (OR)																																
Summarizing a portion of																																
the text or whole text//																																
(OR) Summarizing																																
explicit information from																																
the text// (OR) Signalling																																
understanding by																																
summarizing meaning of																																
text (by synthesizing three																																
or more sentences)// (OR)																																
Summarization (as part of																																
Utilization/ elaboration)//																																
(OR) Margin paragraph																																
summary// (OR) Making a																																
summary																																
Suspecting judgment							•																				•					
Suspending problems																											•					
Overtly suspending taking																															•	
the action decided																																
Symbol-sound association																																
Synonym substitution//	•																						•							•	•	
(OR) Using synonym in																																
context// (OR) Substituting																																
word with a retrieved																																
synonym																																
		 			 		 -	 1	 ٠	1	L	<del></del>	<b>.</b>	1		<del></del>	-		1	<b>.</b>	 			<del></del>				٠		1		

(using) Syntax,						•		•												
punctuation, style, known																				
phrases// (OR) Using																				
syntax or punctuation																				
Synthesizing			•																	
Т	· · · · · ·																 			
Text-analysis planning (by											•									
commenting on style,																				
referring to the author's																				
use of a particular vehicle,																				
or verbalizing a plan that																				
reflected knowledge of the																				
structure of texts																				
Text-based coherence												•								
breaks (e.g. statements																				
about coherence of text's																				
content)																				
(comments on) Text									•										•	
order//(OR) Self-assessing																				
order of sentences or																				
paragraph to be read																				
Topic commenting				•																
Transforming paraphrase											•									
(if the reader goes beyond																				
restating the text by a)																				
connecting it to																				
background knowledge, b)																				
making a correct inference																				
or connecting information																				
accurately across																				
sentences or paragraphs)																				
(See Paraphrasing)																				

Translating (a word or a										•						•			•	•	•			•		•	•	•	
phrase into the L1)// (OR)																													
Transferring (as part of																													
translating)// (OR)																													
Translating// (OR)																													
Translating sentence(s)																													
into L1// (OR) Translation																													
(as part of Parsing/																													
organization)// (OR)																													
Translating text																													
Transferring knowledge//										•									•										
(OR) Transferring																													
Trying to enjoy (as part of																										•			
Affective strategies)																													
U																													
(showing/ expressing)														•			•												
Understanding// (OR)																													
Confirming understanding/																													
(See Stating success in																													
understanding a portion																													
of the text)																													
Use of information about	•																												
the text/story																													
Use of macroproposition						•																							
as starting point in the																													
synthesis task																													
Use of the relevance																						•							
signals of the text (e.g.,																													
title, paragraphs, graphic																													
signals, etc.) to form an				1																									
initial understanding of the																													
text																													
		 1	1		1		 			1	1	1	1	1	1	-		 1	 	 		-1	-	ı	_	 	1	1	

			 			 		_										 							 		
Using cognates between									•									•									
L1 and L2 (to																											
comprehend)// (OR) Using																											
cognates																											
Using dictionary// (OR)	•								•	•				•						•			•		•	•	•
Using a dictionary (as part																											
of Using resources)// (OR)																											
Referring to (using) the																											
dictionary// (OR) Keeping																											
constant lookups for																											
unknown words//(OR)																											
Deciding to consult																											
dictionary												1		-													
Using knowledge about																						•					
punctuation			1							1		1		-						_							
Using knowledge about																						•				•	•
typographical																											
conventions// (OR) Using																											
typographical aids//(OR)																											
Noticing orthographical features in the text (see																											
Noticing orthographical features in the text)																											
Using knowledge about			1							1										-		•					
word formation																						_					
Using morpho-syntactic			1							1										-		•					
knowledge																						•					
Using opposites in context			1							1										•							
Using previous/			1	+						1		+	<del>                                     </del>	+	1					+	+						
background knowledge																											
(See Relating																											
information to																											
background knowledge																											
or experience)																											
or experience)		1	1				<u> </u>	1	1	1	1	1	1		 1		11		!_		1	<u> </u>	1	11			

Using/ making use of text structure (to understand or organize the main ideas)													•							•						
,																										
V			 																							
Visualizing// (OR) Make visual images based on the description of the text// (OR) Visualization//(OR) Imagining// (OR) Use of sensory imagery (as an Elaborative move)// (OR) Using visual imagery// (OR) Imagery (as part of Parsing/ organization)// (OR) Using visual aids// (OR) Visualizing information read		•			•		•	•			•	•	•			•	•			•	•		•	•	•	•
Verbalizing or subvocalizing (See <b>Reading</b> )														•												
W				•						·					•				•						•	
Word pronouncing concern									•	•																
Writing pinyin and/or English equivalent																									•	