

**Teaching English as a Foreign Language to  
Students with Learning Disabilities at the  
Intermediate and Advanced Levels: A  
Multiple-Strategies Approach**

**Revised Edition**

**Abdel Salam A. El-Koumy**

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Teaching English as a Foreign Language to Students with  
Learning Disabilities at the Intermediate and Advanced  
Levels: A Multiple-Strategies Approach

Revised Edition

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## **Dedication**

I dedicate this book to Almighty God for giving me inspiration, strength, and patience to accomplish it.

I also dedicate it to my late parents who taught me to face challenges with faith in God and confidence in His divine assistance. May God mercy them!

I further dedicate it to my family who offered me encouragement and support in all my endeavors.

Finally, I dedicate it to students with learning disabilities, their families, and their teachers all over the world. May God reward me for it!

The author

## Contents

<b>Dedication</b>	iii
<b>Contents</b>	iv
<b>Preface</b>	viii
<b>Abstract</b>	ix-x
<b>Chapter One: Learning Disabilities</b>	
1.0 Introduction	1
1.1 Definition of learning disabilities	1
1.2 Effective instruction for adolescents/adults with learning disabilities	10
<b>Chapter Two: Teaching Learning Strategies to Students with Learning Disabilities</b>	
2.0 Introduction	14
2.1 Definition of learning strategies	18
2.2 Benefits of learning strategies	20
2.3 Classification of learning strategies	26
2.3.1 Cognitive strategies	27
2.3.2 Metacognitive strategies	29
2.3.2.1 Planning	31
2.3.2.2 Self-monitoring	32
2.3.2.3 Self-assessment	36

2.3.2.4 Implementation of metacognitive strategies	44
2.3.3 Social strategies	47
2.3.4 Affective strategies	49
2.4 Models of learning strategies instruction	54
2.5 Methods of detecting learning strategies	60
2.6 Research on effective/ineffective learning strategies	64
2.7 Research on teaching learning strategies to students with learning disabilities	70

### **Chapter Three: Teaching Communication Strategies to Students with Oral Communication Disabilities**

3.0 Introduction	77
3.1 Definition of communication strategies	85
3.2 Classification of communication strategies	88
3.3 Benefits of communication strategies	100
3.4 A model for teaching communication strategies to students with oral communication disabilities	105
3.5 Research on teaching communication strategies to students with learning disabilities	118

### **Chapter Four: Teaching Reading Strategies to Students with Comprehension Disabilities**

4.0 Introduction	119
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4.1 Definition of reading strategies	128
4.2 Classification of reading strategies	129
4.3 Essential strategies for reading comprehension	132
4.4 Benefits of reading strategies	137
4.5 A model for teaching reading strategies to students with comprehension disabilities	140
4.6 Reciprocal teaching	153
4.6.1 Definition of reciprocal teaching	153
4.6.2 Reciprocal teaching strategies	153
4.6.3 Theoretical foundation of reciprocal teaching	158
4.6.4 Benefits of reciprocal teaching	159
4.6.5 Procedures of reciprocal teaching	160
4.6.6 Research on the use of reciprocal teaching with learning/reading disabled students	161

## **Chapter Five: Teaching Writing Strategies to Students with Written Expression Disabilities**

5.0 Introduction	173
5.1 Definition of writing strategies	180
5.2 Classification of writing strategies	182
5.3 Benefits of writing strategies	191
5.4 A model for teaching writing strategies to students with written expression disabilities	193

5.5 Research on teaching writing strategies to students with learning disabilities	207
<b>References</b>	222
<b>Subject Index</b>	289



## Preface

The idea of this book arose out of an awareness that students with language learning disabilities are completely ignored in the Egyptian school system and there are no special programs that cater to these students. They are placed in normal schools that are not prepared to deal with their unique difficulties. This book, therefore, is an attempt to provide teachers with multiple-strategies models for teaching English language skills to these students at the intermediate level and beyond. More specifically, this book will help pre-and in-service teachers to:

- identify effective strategies for language learning and language use,
- use multiple-strategies models for teaching language skills,
- interweave strategies for language learning and language use into regular language activities, and finally
- improve both the processes and products of language learning of students with learning disabilities.

Thus, the target audience of this book includes pre-and in-service EFL teachers, special education teachers, school psychologists, counselors, and administrators.

## **Abstract**

This revised edition updates and expands on the first edition published in 2016. In this revised edition, theories of different types of learning strategies are expanded and more recent studies are added. A large amount of tabular information is also reconstructed in a more meaningful manner. This revised edition is divided into five chapters. Chapter one covers the different definitions of learning disabilities to reach a consensus with respect to the meaning of this term. Chapter two discusses learning strategies as a general instructional intervention for students with learning disabilities at the intermediate level and beyond. Each of the other three chapters in this book presents detailed theoretical and experimental information on a specific type of learning strategies and introduces an innovative multiple-strategies model for teaching a specific language skill to those students. Chapter three addresses the teaching of communication strategies to students with oral communication disabilities. Chapter four deals with the teaching of reading strategies to students with comprehension disabilities. The last chapter is concerned with the teaching of writing strategies to students with written expression disabilities. This revised edition also includes

a list of references and a subject index. [For the 2016 edition of this book, see ED568128.]

**Descriptors:** Communication Disorders, Communication Problems, Communication Strategies, English (Second Language), Foreign Countries, Language Skills, Learning Disabilities, Learning Processes, Learning Strategies, Reading Comprehension, Reading Difficulties, Reading Instruction, Reading Process, Reading Strategies, Speech Communication, Writing (Composition), Writing Difficulties, Writing Instruction, Writing Process, Writing Strategies.

# **Chapter One**

## **Learning Disabilities**

### **1.0 Introduction**

This introductory chapter presents the definitions of the term learning disabilities in different countries to reach a consensus with respect to its definition. In light of the attained consensus, it then presents an overview of the most effective intervention for students with learning disabilities at the intermediate level and beyond. The importance of this chapter lies in the fact that the more precisely a definition of the term learning disabilities is reached, the more successfully these disabilities can be tackled and overcome.

### **1.1 Definition of learning disabilities**

The term learning disabilities is defined in different ways in different countries. In Australia, the term refers to a small subgroup within the general area of learning difficulties. This subgroup involves students who have difficulties in specific areas as a result of impairment in one or more of the cognitive processes related to learning. From the Australian perspective, these

specific areas of learning difficulties (known as learning disabilities) share the following characteristics (Commonwealth of Australia 1992, 2005):

- are intrinsic to the individual;
- can cause an individual to learn in a different way;
- are not linked to intellectual deficiency (except in an incidental manner);
- may coincidentally exist with difficulties in self-regulatory actions, social perception, and social dealings;
- are life-long; and
- lead to failure or low levels of achievement unless educational interventions appropriate to the learner's needs are provided to prevent failure and increase achievement.

In the American context, a variety of definitions of the term learning disabilities have been proposed. The American National Joint Committee on Learning Disabilities (1994), for example, defines this term in the following way:

Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous

system dysfunction, and may occur across the life span. (p. 65)

Also in the American context, the Individuals with Disabilities Education Act (IDEA) (2004, cited in Wright, 2005, p. 9) defines the term specific learning disability as "a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations".

In Canada, the Learning Disabilities Association of Ontario (2001) defines the term learning disabilities as follows:

Learning Disabilities refers to a variety of disorders that affect the acquisition, retention, understanding, organization or use of verbal and/or non-verbal information. These disorders result from impairments in one or more psychological processes related to learning, in combination with otherwise average abilities essential for thinking and reasoning. Learning disabilities are specific not global impairments and as such are distinct from intellectual disabilities. (p. 1)

Similarly, the Learning Disabilities Association of Alberta (2010) defines the term learning disabilities as "a number of disorders which may affect the acquisition, organization,

retention, understanding or use of verbal or nonverbal information" (p. 3).

In the United Kingdom, the term learning disabilities is used differently to refer to what is known, in Australia and many other countries, as intellectual disabilities which are out of the scope of this book; whereas the term specific learning difficulties (SpLDs) is used to refer to difficulties with certain aspects of learning. These SpLDs include dyslexia, dyspraxia, dyscalculia, and dysgraphia (Department of Health, 2010).

Many neuropsychologists and psychiatric associations (e.g., Cortiella and Horowitz, 2014; Learning Disabilities Association of Alberta, 2010; National Dissemination Center for Children with Disabilities, 2004) agree that students with learning disabilities have average or above average cognitive ability, but they have neurologically-based disorders in one or more of the processes related to information processing, including perceiving, storing, remembering, and communicating information. These neurologically-based disorders manifest themselves in significant difficulties with listening, speaking, reading, writing, reasoning, or mathematical abilities. Specifically, these disorders interfere with the acquisition and

use of one or more of these language skills: (1) oral communication (e.g., listening, speaking), (2) reading (e.g., decoding, comprehension), and (3) written language (e.g., spelling, written expression). More specifically, research (e.g., Chalk, Hagan-Burke and Burke, 2005; Gerber, 1998; Graham, Schwartz and MacArthur, 1993) has shown that students with learning disabilities often experience difficulty in the following areas:

- comprehending what is read,
- understanding what is said,
- oral expression,
- written expression,
- generating ideas,
- organizing ideas logically,
- writing in stages,
- drawing inferences and making conclusions,
- understanding jokes or sarcasm,
- planning and decision-making,
- repairing breakdowns in interaction,
- monitoring and self-evaluating performance,
- identifying and recognizing strengths and weaknesses,
- requesting and giving clarification,
- expressing personal opinions adequately on common topics,



- communicating viewpoints in a logical and coherent manner, and
- probing viewpoints and perspectives.

However, as Gerber (1998) states, "Learning disabilities are not a unitary construct. An individual can have one specific problem or constellation of problems. Moreover, learning disabilities do not manifest themselves in individuals in exactly the same way. Some learning disabilities can be mild, while others can be quite severe" (p. 9). Furthermore, the severity of learning disabilities can influence many personal aspects, including self-esteem, personal relations, social interactions, employment, and educational pursuits (Comstock and Kamara, 2002).

Some psychotherapists, learning disabilities associations, and educationalists (e.g., Commonwealth of Australia, 1992, 2005; Gerber et al., 1990; Gerber and Reiff, 1994; Wilson and Lesaux, 2001) believe that learning disabilities are long-lasting and that interventions only prevent complications and help students to cope with their disabilities. In contrast, many psychotherapists, learning disabilities associations, and educationalists (e.g., Graham and Harris, 2005; Learning Disabilities Association of Alberta, 2010; Learning Disabilities

Association of Canada, 1999; Mishna, 1998) hold that students with learning disabilities have the potentials to achieve age-appropriate levels (or above) once provided with programs that incorporate appropriate support and evidence-based instruction because these disabilities have nothing to do with a student's intelligence. Mishna (1998), for example, believes that students with learning disabilities can be very successful when they are provided with strategies that support their learning. The Learning Disabilities Association of Canada (1999) goes so far as to say:

Adults with learning disabilities have average, above-average, or even exceptional intelligence. They may be highly artistic, musical, or gifted in a specific academic area. Their general intellectual functioning is not impaired and they are able to reason and make judgments at least within the average range. In other words, people with learning disabilities are not slow learners. They just learn in a different way. They learn inefficiently, due to inefficiencies in the functioning of the brain. (p. 13)

The Learning Disabilities Association of Ontario (2001) also declares that persons with learning disabilities can overcome their learning disabilities and achieve academic success if they are provided with specialized interventions that are appropriate to their individual strengths and their needs. In the same vein, Nichols (2002) contends that all students with learning

disabilities can acquire literacy skills when they are taught appropriately. She maintains that these students "are able to participate in secondary education successfully and graduate, provided that they are taught the way that they learn best and that they are guaranteed access to the accommodations which they have a right to have and without which they may turn out to be unsuccessful" (p. 5).

In addition, the Learning Disabilities Association of America (2010) affirms that every person with learning disabilities can succeed in school, at work, and in the community when provided the right strategies and the right supports.

Moreover, the National Dissemination Center for Children with Disabilities (2004) asserts that children with learning disabilities are not dumb or lazy and that they can learn successfully with the right help. It expresses this view in these words, "Children with learning disabilities are not 'dumb' or 'lazy'. In fact, they usually have average or above average intelligence. Their brains just process information differently.... With the right help, children with LD can and do learn successfully" (p. 2).

Over and above, the Learning Disabilities Association of Alberta (2010) opines that with the appropriate support and intervention,

people with learning disabilities can succeed in school and life.

This association puts it simply in the following way:

Simply put, a person with a learning disability may be just as intelligent, or even more intelligent, than most people. However, certain skills or subjects pose uncommon challenges. The important thing to remember is that learning disabilities can cause people to learn differently from others. (p. 3)

In support of what has been mentioned earlier, research findings indicated that students classified as having language learning disabilities could acquire foreign language skills, satisfy university foreign language requirements, and achieve at levels that match their peers in regular foreign language classes (Downey and Snyder, 2000).

It is then evident that there are various definitions of the term learning disabilities. However, these definitions, with the exception of the United Kingdom's definition, share these key elements: (1) learning disabilities are neurologically-based information-processing disorders that manifest themselves in difficulties with listening, speaking, reading, writing, or mathematics; (2) these disabilities are specific and unrelated to one's intelligence; (3) although learning disabilities are not caused by environmental factors such as insufficient and

inappropriate instruction, these factors contribute to the negative impact of these disabilities on students' life and make it worse; and (4) students with these disabilities have average to above average intelligence and demonstrate at least average abilities essential for thinking and reasoning. It is also evident that psychotherapists, learning disabilities associations, and educationalists—with the exception of few ones—agree that students with learning disabilities can attain average or above average achievement with effective, appropriate educational support.

## **1.2 Effective instruction for adolescents/adults with learning disabilities**

It is widely recognized that students with learning disabilities at the intermediate level and beyond do well with decoding but experience difficulties with language comprehension and language production in real situations. This is mainly because they employ ineffective strategies for language learning and language use (Englert, Raphael, Anderson, Anthony and Stevens, 1991; Graham and Harris, 1999; Reid, Lienemann and Hagaman, 2013; Schnee, 2010; Schoenbach, Greenleaf, Cziko and Hurwitz, 1999). To put it in other words, these students often possess a good collection of vocabulary and grammatical

structures, but they cannot comprehend oral or written language; nor can they express themselves orally or in writing because they lack the effective strategies that can improve their receptive and productive language skills. Therefore, they are in critical need of an intervention that explicitly teaches language-learning and language-use strategies in conjunction with language skills. In favor of this type of intervention, Price and Cole (2009) declare that "[e]ffective instruction for students with learning disabilities is explicit and intensive and combines direct instruction with strategy instruction.... and responsive to the specific information processing and learning needs of students" (p. 31). Likewise, Fowler and Hunt (2004) assert that "[i]ndividuals with learning disabilities have skills that make it possible for them to learn how to use strategies and accommodations to help them pursue their goals" (p. 30). In the same vein, Sturmski (1997) argues that due to the information processing difficulties that students with learning disabilities often experience with learning, they more than their peers without learning disabilities are in need of effective learning strategies instruction. He states:

Because of the nature of their learning difficulties, students with learning disabilities need to become strategic learners, not just haphazardly using whatever learning strategies or techniques they have developed on their own, but becoming consciously aware of

what strategies might be useful in a given learning situation and capable of using those strategies effectively. (p. 4)

In addition, the National Information Center for Children and Youth with Disabilities (1997) expresses the need for teaching students with learning disabilities to learn how to learn in the following way:

Perhaps one of the most important skills they [students with learning disabilities] need to learn is how to learn. Knowing that certain techniques and strategies can be used to assist learning, knowing which techniques are useful in which kinds of learning situations, and knowing how to use the techniques are powerful tools that can enable students to become strategic, effective, and lifelong learners. (p. 3)

In support of strategy instruction (in conjunction with language skills) as an effective intervention for students with learning disabilities, many research studies in the field of learning disabilities recommended using this type of intervention for overcoming disabilities in language areas. In this respect, Corley and Taymans (2002), in their review of research on learning disabilities and adult literacy, concluded that research on instructional variables positively associated with successful learning for students with learning disabilities strongly supported

combining direct instruction with strategy instruction. In the same respect, several meta-analytic reviews (e.g., Hughes, 1998; Sencibaugh, 2005; Swanson, 1999) concluded that a combination of both direct instruction and strategy instruction for students with learning disabilities produced a larger effect than either instructional method by itself.

It is clear then that the most effective intervention for students with learning disabilities at the intermediate level and beyond emphasizes improving their information processing abilities—through modeling language-learning and language-use strategies—to enable them to learn effectively and independently and to apply what they learn efficiently in real-life situations. The aim of this book, therefore, is to help those students to become efficient language learners and users by equipping them with multiple strategies for language learning and language use.



## **Chapter Two**

### **Teaching Learning Strategies to Students with Learning Disabilities**

#### **2.0 Introduction**

Students with learning disabilities are not aware of how their minds learn and fail to use strategies that represent the dynamic processes underlying effective learning and academic success. Many neuropsychologists and psychiatric associations (e.g., Allsopp, Minskoff and Bolt, 2005; Cortiella and Horowitz, 2014; Learning Disabilities Association of Alberta, 2010) agree that individuals with learning disabilities have neurologically-based processing disorders which mean that their brains process information differently than normal people. These information processing disorders manifest themselves in their failures to independently apply effective learning processes and monitor their own learning. In other words, these information processing disorders appear in their failures to apply and orchestrate learning strategies skillfully and flexibly and to change these strategies when they don't work. These failures in turn interfere

with the acquisition of these language skills: (1) oral communication, (2) reading comprehension, and (3) written expression (Fowler, 2003; Learning Disabilities Association of Canada, 2005; National Dissemination Center for Children with Disabilities, 2004; Reid, Lienemann and Hagan, 2013; Torgesen and Kail, 1980; Wong, 2000). The information processing disorders can also lead to frustration, low self-esteem, and withdrawal from school (Fiedorowicz et al., 2001).

To put it plainly, having learning disabilities doesn't mean that the brain cannot learn, but means that the brain does not process information normally. This, of course, requires modeling effective learning processes through learning strategies instruction to help students with these disabilities change their ineffective learning processes and employ effective ones in a purposeful, reflective way. In favor of this intervention, Neil Sturmski (1997), the former director of the National Adult Literacy and Learning Disabilities Center who has more than thirty-five years of experience related to individuals with learning disabilities and other special learning needs, states that students with learning disabilities need to learn strategies that help them learn effectively and overcome their disabilities. He further explains:

Because of the nature of their learning difficulties, students with learning disabilities need to become strategic learners, not just haphazardly using whatever learning strategies or techniques they have developed on their own, but becoming consciously aware of what strategies might be useful in a given learning situation and capable of using those strategies effectively. Teachers can be enormously helpful in this regard. They can introduce students to specific strategies and demonstrate when and how the strategies are used. ... Teachers may then gradually fade reminders and guidance so that students begin to assume responsibility for strategic learning. (p. 3)

Citing many other scholars, Mothus and Lapadat (2006) also regard learning strategies instruction as an appropriate intervention for overcoming the information processing difficulties experienced by students with learning disabilities in the following way:

The Strategies Intervention Model (SIM), developed by researchers at the University of Kansas, is based on the theory that students with LD [Learning Disabilities] have information processing difficulties, are strategy deficient, and are inactive learners. That is, they do not create or use appropriate cognitive and metacognitive strategies spontaneously to process information, to cope with problems they encounter, or to learn new material (Alley & Deshler, 1979; Bender, 1995; Clark, 1993; Deshler, Schumaker, Lenz, & Ellis, 1984; Ellis, Deshler, & Schumaker,

1989; Shaw et al., 1995; Palincsar & Brown, 1987; Torgesen, 1988a, 1988b). (p. 14)

It is clear then that to help students with language learning disabilities overcome their own learning difficulties, instruction should take as its aim the improvement of the underlying processes these students depend upon to learn language skills because these skills are rooted in complex processes. In support of learning strategies instruction as an intervention for improving language skills, research studies have shown that: (1) learners' awareness of their own learning processes plays a significant role in improving language performance (e.g., Baker and Brown, 1984; Bereiter and Bird, 1985), (2) greater strategy use is related to better language learning and good language learners apply multiple strategies more frequently and more effectively than poor language learners (e.g., Kaufman, Randlett and Price, 1985; Lau, 2006; Paris, Lipson and Wixson, 1983), and (3) struggling language learners have difficulty in using learning strategies (e.g., Brown and Palincsar, 1982; Chan and Lan, 2003). Therefore, the present chapter focuses on learning strategies in general to help teachers become aware of the various strategies they should teach to enable students in general and learning disabled students in particular to learn independently and

effectively. More specifically, this chapter presents the definition of learning strategies and discusses the benefits and types of these strategies. It also addresses the most-widely used models of learning strategies instruction. Then, it discusses the methods of identifying these strategies. Finally, it reviews research literature pertinent to effective/ineffective learning strategies as well as research on the effects of teaching learning strategies to students with learning disabilities.

## **2.1 Definition of learning strategies**

Definitions of learning strategies are many. According to Chamot (1987), "Learning strategies are techniques, approaches, or deliberate actions that students take in order to facilitate the learning and recall of both linguistic and content area information" (p. 71). For Wenden and Rubin (1987), learning strategies are "any sets of operations, steps, plans, routines used by the learner to facilitate the obtaining, storage, and use of information" (p. 19). Along the same line, Schmeck (1988) defines the same term in relation to learning tactics in this way:

The term strategy was originally a military term that referred to procedures for implementing the plan of a large scale military operation. The more specific steps in implementation of the plan were called tactics. More generally the term strategy has come to refer to

the implementation of a set of procedures (tactics) for accomplishing something. Thus a learning strategy is a sequence of procedures for accomplishing learning and the specific procedures within the sequence are called learning tactics. (p. 5)

In a similar way, learning strategies are defined by O'Malley and Chamot (1990) as "special thoughts or behaviors that individuals use to comprehend, learn, or retain new information" (p. 1). In Wenden's (1991a) view, "Learning strategies are mental steps or operations that learners use to learn a new language and to regulate their efforts to do so" (p. 18). In addition, Cohen (1998) defines language learning strategies as conscious behaviors used to learn the language. In the *Concise Encyclopedia of Educational Linguistics*, Oxford (1999) defines learning strategies for second or foreign language as "specific actions, behaviors, steps, or techniques that students use to improve their own progress in developing skills in a second or foreign language" (p. 518). Furthermore, Weisnstein, Husman and Dierking (2000) define learning strategies as "any thoughts, behaviors, beliefs, or emotions that facilitate the acquisition, understanding, or later transfer of new knowledge and skills" (p. 727). Moreover, Anderson (2005) defines learning strategies as "the conscious actions that learners take to improve their

language learning" (p. 757). Besides, Chamot (2005) defines learning strategies as "procedures that facilitate a learning task" (p. 112).

In an attempt to define learning strategies more closely, the key characteristics of these strategies are mentioned as follows (Oxford, 1990, p. 9):

- They are deliberate operations employed by the learner.
- They involve many aspects of the learner, not just the cognitive aspect.
- They support learning both directly and indirectly.
- They enable learners to become self-directed and self-regulated.
- They are not always observable.
- They are often conscious.
- They can be taught.
- They are flexible.
- They can be influenced by a variety of factors.

## **2.2 Benefits of learning strategies**

Learning strategies are a means of enhancing successful learning. As Oxford (1990) states, learning strategies "make learning easier, faster, more enjoyable, more self-directed, more

effective, and more transferable to new situations" (p. 8). Rubin (1996) also believes that strategy instruction is a means of enhancing learners' procedural knowledge which leads to successful learning. She states:

Strategy instruction is one way to work towards enhancing your procedural knowledge. Since many adults are "language phobic" or inexperienced with language learning, they need to gain more procedural knowledge to deflect negative affective influences and to begin to experience some success. (p. 151)

Specifically, the use of learning strategies is a fundamental requirement for successful language learning. It develops the comprehension and production of language. In this respect, Oxford (1990) states that learning strategies are "especially important for language learning because they are tools for active, self-directed movement, which is essential for developing communicative competence" (p. 1). In the same respect, Long and Crookes (1992) argue that learning strategies instruction "clearly improves rate of learning" and "improves the ultimate level of SL (second language) attainment" (p. 42). Oxford (1999) adds that "language learning strategies can facilitate the internalization, storage, retrieval, or use of the new language" (p. 518). In support of this, researchers found that skilled language learners are masters of learning strategies (Bereiter and



Scardamalia, 1987), and that a positive correlation exists between strategy use and second language proficiency (Oxford, Cho, Leung and Kim, 2004).

Learning strategies are also seen as a means of enhancing self-efficacy and self-confidence of students in general and students with learning disabilities in particular. In this respect, Schunk (1989) argues that strategy instruction can positively influence students' self-efficacy which can in turn lower their level of anxiety. In the same vein, Chamot, Barnhardt, El-Dinary and Robbins (1996) declare that having access to appropriate learning strategies leads to gaining a higher expectation of success and this, in turn, increases motivation for learning. Along the same line of thought, Oxford et al. (1990) argue that "strategy training can enhance both the process of language learning (the strategies or behaviors learners use and the affective elements involved) and the product of language learning (changes in students' language performance)" (p. 210).

Besides, learning strategies instruction is an important factor for developing independent learning as it helps learners discover what particular strategy works for them in a particular situation and improves their control over their own learning. The more

students become aware of their own learning strategies, the greater the control they take of their own learning. In this regard, Wenden (1986) writes, "[T]o be self-sufficient, learners must know how to learn" (p. 315). Along the same line, Cohen (1998) argues that strategy instruction helps learners explore ways in which they can effectively learn the language by themselves. He further emphasizes the significant role that strategy instruction plays in developing learners' independence in the following way:

The strategy training movement is predicated on the assumption that if learners are conscious about and become responsible for the selection, use, and evaluation of their learning strategies, they will become more successful language learners by ... taking more responsibility for their own language learning, and enhancing their use of the target language out of class. In other words, the ultimate goal of strategy training is to empower students by allowing them to take control of the language learning process. (p. 70)

Research has also shown that self-regulated learners engage in the use of both cognitive and metacognitive strategies for learning and that students who use effective strategies are better able to work outside the classroom, where teacher direction and teacher input are not present, because these strategies enable

them to take full responsibility for their own learning and to become lifelong learners (Pintrich and De Groot, 1990).

Moreover, learning strategies enable students to stretch their own learning styles. In this respect, Oxford (2003) states that teachers can actively help students stretch their learning styles by trying out some strategies that are outside of their primary style preferences. She adds that this can happen through strategy instruction.

Over and above, learning strategies instruction holds a significant benefit to students with learning disabilities because the learning difficulties of these students are due to their lack of effective information processing strategies. In this regard, Beckman (2002) points out that when students with learning disabilities become strategic learners, they become productive lifelong learners; and as a result of strategy use, they trust their own minds, feel a sense of power, and know how to learn effectively. Protheroe and Clarke (2008) also emphasize the importance of teaching students with learning disabilities to use learning strategies in the following way:

An increasingly strong research base points to the potential of strategy instruction to help support struggling learners, including students with learning

disabilities. Specifically, teaching students how to use learning strategies, and helping them choose and implement them effectively, helps to strengthen their metacognitive abilities—and this, in turn, connects to improved student learning. (p. 34)

It is also widely recognized that strategy instruction can enhance the social-emotional side of learning disabled students and minimize their social exclusion and social anxiety because it helps them overcome their language deficiencies which cause them to avoid dealing with normal people for fear of losing the respect of these people if such deficiencies become known to them.

In support of the necessity of teaching learning strategies to students with learning disabilities, Proctor, August, Carlo and Snow (2006) found that learning disabled students scored lower on the measures of learning strategy use than did their non-disabled peers as a result of comparing the learning strategies used by 79 postsecondary students with disabilities to those used by 139 students without disabilities. Vann and Abraham (1990) also found evidence that unsuccessful learners "apparently ... lacked ... what are often called metacognitive strategies ... which would enable them to assess the task and bring to bear the necessary strategies for its completion" (p. 192).

In light of the previously-mentioned theoretical and experimental literature, it appears that it is widely acknowledged that identifying the strategies successful learners use can make it possible to help disabled learners to become successful language learners and users through the deliberate teaching of these strategies to them. This deliberate teaching can benefit these learners in particular because it helps them to become more aware of their mental processes, to recognize when meaning breaks down, and to understand what strategies work best for them. Learning strategy research also suggests that less competent students improve their skills through training in the strategies used by more successful learners. Therefore, many educationalists propose that learning strategy instruction should be integrated into learning disabled students' courses.

### **2.3 Classification of language learning strategies**

There are many classifications of language learning strategies (e.g., Chamot and Küpper, 1989; O'Malley and Chamot, 1990; O'Malley, Chamot, Stewner-Manzanares, Küpper and Russo, 1985b; Oxford, 1990; Wenden and Rubin, 1987). However, most of these classifications reflect more or less the same categories of language learning strategies. To bring these classifications together and reach a consensus among them, Dornyei (2006)

proposed a compromised classification which consists of four categories: cognitive strategies, metacognitive strategies, social strategies, and affective strategies. These four categories are the next topics of discussion.

### **2.3.1 Cognitive strategies**

Cognitive psychologists generally agree that cognitive strategies are behaviors, techniques, or actions used by learners to "operate directly on incoming information, manipulating it in ways that enhance learning" (O'Malley and Chamot, 1990, p. 44). This type of strategies is closely linked to language skills. More specifically, there is a cluster of cognitive strategies for each language skill. For example, the reading comprehension strategies that have consistently been advocated as playing an important part in the reading comprehension include making predictions about the likely content of a text, clarifying, guessing, questioning, and summarizing. The choice from these cognitive strategies depends on the demands of the reading task, among many other factors. The learner should also employ a variety of these cognitive strategies to comprehend what s/he reads on condition that these strategies should support and complete each other. As Synder and Pressley (1990) point out, "Strategies are rarely used in isolation. Rather, they are

integrated into higher-order sequences that accomplish complex cognitive goals" (p. 9). In support of this, research revealed that teaching a repertoire of learning strategies was more effective than individual strategy instruction (Duke and Pearson, 2002; Pressley and Afflerbach, 1995) and that students' use of multiple strategies improved their performance on academic tasks (Dole, Nokes and Drits, 2009; Duke, Pearson, Strachan and Billman, 2011; McNamara and Magliano, 2009).

Cognitive strategies are very important for all students. In general, these strategies enable students to learn better because they help them process (organize, understand, retain and retrieve) the information they are actually learning. In addition, the use of these strategies enables them to perform efficiently on learning tasks because it helps them to "develop the necessary skills to be self-regulated learners, to facilitate comprehension, to act directly on incoming information, and ultimately improve academic performance" (Khoshsima and Tiyar, 2014, p. 90). In addition, Meltzer and Krishnan (2007) assert that "effective cognitive strategies help students bridge the gap between their weak executive function skills and the academic demands they face" (p. 88). Therefore, cognitive strategies instruction is one of the most effective ways of improving the academic performance

of all students, including those with learning disabilities, because it enables them to learn better and to become independent learners.

### **2.3.2 Metacognitive strategies**

In addition to awareness of one's own learning strategies, metacognition encompasses management of one's own learning through the use of metacognitive strategies. These strategies involve "planning for learning, ... self-monitoring during learning and evaluation of how successful learning has been after working on language in some way" (Hedge, 2000, p. 78). While these strategies (i.e., planning, self-monitoring, and self-assessment) are distinct, they are also interdependent because (1) planning informs self-monitoring, (2) self-monitoring helps to achieve plans (i.e., attain learning goals), and (3) self-assessment helps to set new plans (El-Koumy, 2004c; Schunk, 1994).

Metacognitive strategies are very important for language learners because they help them select, monitor and regulate cognitive strategies. This in turn assists them in taking responsibility for their own learning and enables them to change or modify their ineffective learning processes. Moreover, "[t]he use of metacognitive strategies ignites one's thinking and can lead to



more profound learning and improved performance, especially among learners who are struggling" (Anderson, 2002, p. 2). In support of these benefits, there is a large body of research literature showing that proficient learners use metacognitive strategies more than less-proficient ones (e.g., Anderson, 2003; Goh, 1998, 1999; O'Malley, Chamot and Küpper 1989; Vandergrift, 1996, 1997, 1998, 2003; Young, 1997). The literature on metacognition also suggests that the use of metacognitive strategies positively influences learners' academic performance (Chevalier, Parrila, Ritchie and Deacon, 2015; Pintrich, 1994, 2002; Pintrich and Schunk, 1996).

Furthermore, metacognitive strategies can positively impact the performance of students with learning disabilities and help them become independent learners. As Lerner and Kline (2006) state, "Efficient learners use metacognitive strategies but students with learning disabilities tend to lack the skills to direct their own learning. However, once they learn the metacognitive strategies that efficient learners use, students with learning disabilities can apply them in many situations" (p. 184). The next subsections will present metacognitive strategies in some details.

### **2.3.2.1 Planning**

#### **2.3.2.1.1 Definition of planning**

Planning is a metacognitive strategy used by learners before doing a task to set goals and consider the ways these goals will be achieved (Zimmerman, 2000). However, planning-in-action may take place while doing the task to change goals and reconsider the ways of achieving them.

There are two types of planning. One type is process-oriented. In this type of planning, students look for ways to help them perform a task more skillfully. The other type is outcome-oriented in which students consider the outcomes that must be achieved (Seijts and Latham, 2006).

#### **2.3.2.1.2 Benefits of planning**

The benefits of planning for learning include (1) giving students the opportunity to set their own personal goals which, in turn, fosters their self-regulation skills and increases their motivation for learning; and (2) reducing the cognitive strain while learning which, in turn, improves academic achievement (Zimmerman, 1998). In support of the beneficial effects of planning, many research studies indicate that successful learners utilize planning for language learning (e.g., Graham and Harris, 1996;

Zimmerman and Risemberg, 1997). They further indicate that students' planning positively affects the comprehension and production of language. Ellis (1987) and Crookes (1989), for example, found that planning positively affected students' oral performance. Pintrich, Smith, Garcia and McKeachie (1991) also found that learners' use of planning resulted in deeper processing and higher levels of understanding the materials being learned. In addition, Dellerman, Coirier and Marchand (1996) found that planning was effective for non-proficient writers. Furthermore, Asaro-Saddler (2008) found that planning was effective in improving the writing skills of second and fourth grade students with autism spectrum disorders.

### **2.3.2.2 Self-monitoring**

#### **2.3.2.2.1 Definition of self-monitoring**

Self-monitoring is defined as a metacognitive strategy utilized to observe and regulate one's own cognitive strategies while doing a task to fine tune these strategies as needed to achieve learning goals. While reading, for example, a student can use the context to guess the meaning of difficult words. To monitor her/his use of this strategy, s/he should pause and check to see if the meaning s/he guessed makes sense in the text; and if not, s/he

should go back to modify or change this strategy. Thus, self-monitoring helps students to track their comprehension as they read and to implement repair strategies when comprehension breaks down (Zimmerman, 1998, 2000). It also helps students to track their oral and written communication and to implement repair strategies when communication breakdowns occur.

There are two types of self-monitoring: self-monitoring of attention (SMA) and self-monitoring of performance (SMP). The SMA is used for students who are inattentive or hyperactive (i.e., students with attention-deficit or hyperactivity disorder) during academic activities. It involves them in observing the frequency or duration of their hyperactive or distracted behaviors so that they can engage in appropriate task behavior. The SMP is used to help students monitor their cognitive performance to enhance self-learning and increase academic productivity. Research revealed that students at all grade levels (including those who had behavioral or cognitive disabilities) could successfully learn to use self-monitoring through modeling and thinking aloud (e.g., Agran, Blanchard, Wehmeyer and Hughes, 2001; Hughes and Boyle, 1991; Hughes et al., 2002; Reid, 1996).

#### **2.3.2.2.2 Benefits of self-monitoring**

Self-monitoring is necessary for academic success (Conley, 2007). Students who use self-monitoring actively adjust performance and strategies as needed in order to attain goals without the need for external help, thus increasing the probability of success in achieving learning goals (Zimmerman, 1998) and fostering independence in learning (Cresswell, 2000; Dunlap, Dunlap, Koegel and Koegel, 1991; Graham, Harris and Reid, 1993). In support of the beneficial effects of self-monitoring, many researchers found positive relationships between self-monitoring and academic achievement (e.g., Kauffman, 2004; Schraw and Nietfeld, 1998). Research also showed that self-monitoring improved reading comprehension and written expression for students with learning disabilities in grades six through eight (Shimabukuro, Prater, Jenkins and Edelen-Smith, 1999), increased both the length and the quality of written stories of fifth and sixth graders with learning disabilities (Harris, Graham, Reid, McElroy and Hamby, 1994), and positively affected both the quantity and quality of narrative and expository writing of fourth-grade learning disabled students (Goddard and Sendi, 2008).

Additionally, self-monitoring reveals information about one's own deficiencies and goes beyond such detection to repairing these deficiencies, thus increasing the probability of improving the learning of students with learning disabilities. This is simply because it allows them to track their language learning and language use and to implement repair strategies when failure occurs. It also encourages them to look critically and analytically at their own behaviors. In support of this, research on self-monitoring with students of learning disabilities (e.g., Goddard and Sendi, 2008; Gumpel and Shlomit, 2000; Harris, Graham, Reid, McElroy and Hamby, 1994; Prater, Joy, Chilman, Temple and Miller, 1991; Rooney, Hallahan and Lloyd, 1984) demonstrated that this metacognitive strategy led to positive changes in social behaviors, aggressive behaviors, disruptive behaviors, and on-task behaviors.

Furthermore, self-monitoring can positively affect the level of students' self-efficacy. When they become able to monitor their language learning and language performance, their feelings of efficacy can be strengthened and developed. In sum, self-monitoring is important for both normal and learning disabled students because it empowers them to be in control of their own language behaviors.

### **2.3.2.3 Self-assessment**

#### **2.3.2.3.1 Definition of self-assessment**

Self-assessment is defined as the involvement of the student in evaluating her or his own learning processes and products. Montgomery (2000) defines it succinctly as "an appraisal by a student of his or her own work or learning processes" (p. 5). The Ontario Ministry of Education (2002) defines it more comprehensively as "the process by which the student gathers information about and reflects on his or her own learning ... [it] is the student's own assessment of personal progress in knowledge, skills, processes, or attitudes" (p. 36).

In light of the previous definitions, it is clear that self-assessment is self-judgment of one's own learning processes and products for the purpose of improving them, not for grading or placement.

#### **2.3.2.3.2 Benefits of self-assessment**

Self-assessment is a key to academic success because it helps learners to identify their own strengths and weaknesses, thus assisting them in addressing areas in need of improvement and adjusting cognitive learning strategies accordingly. To put it another way, self-assessment helps learners to reflect not only on

their learning processes (how they learned and what did or did not work for them) but also on the products of their own learning (what they have learned or not learned). Moreover, the greater the students' ability to accurately self-assess their potential for success at a specific task, the more likely they will work hard and expend extra effort in order to maximize the chances of mastery over this task (Lew, Alwis and Schmidt, 2010). In support of the beneficial effects of self-assessment, research studies showed that this metacognitive strategy positively affected student achievement outcomes, skill acquisition, and self-regulation (El-Koumy, 2004a, 2009; Kitsantas, Reiser and Doster, 2004; Schunk, 1994).

Self-assessment is also one of the cornerstones of self-directed learning. In order for self-directed learning to occur, learners must be able to determine what their needs are and to take action to meet these needs. Accordingly, they need to be able to self-assess their own learning processes and outcomes so that they can understand what they need to learn without the help of their teachers. Hunt, Gow and Barnes (1989) go so far to say that without self-assessment, "there can be no real autonomy" (p. 207). By the same token, Gottlieb (2000) states that "[m]ultiple opportunities for self-assessment within instruction allow second



language students to develop as independent learners while acquiring English" (p. 97). Likewise, Rivers (2001) argues that self-assessment is a must for self-regulation and self-directed learning to take place. He goes so far as to say that in the absence of accurate self-assessment, self-directed learning will not occur.

Moreover, motivation and self-efficacy can be fostered significantly with continuous self-assessment. Teachers can enhance students' motivation for learning when self-assessment becomes part of day-to-day learning and when learners do it for keeping track on their learning, not for grading it. In this regard, the results of several studies established that self-assessment practices in the field of language learning increased students' motivation (e.g., Black and Wiliam, 1998; Blanche and Merino, 1989; von Elek 1985). Self-assessment can also enhance students' self-efficacy because it gives them a voice in their learning (Bandura, 1997; Dodd, 1995). In support of this, Coronado-Aliegro (2006) found that Spanish undergraduate students' self-efficacy was strengthened more significantly with continuous self-assessment than without it.

Besides, self-assessment can boost students' confidence. In relation to writing, Pajares, Johnson and Usher (2007) mention this as follows:

Frequent self-assessment leads to more successful writing. ... as students learn to evaluate themselves as writers, they also learn to set goals and strategies for improving their writing and to document their growth. This self-awareness helps students to interpret their achievements in ways that will boost their confidence. (p. 116)

Furthermore, self-assessment is seen as a necessary life skill because it is beneficial for people in their daily lives and helps them to meet the challenges of a changing society. In this respect, Ellis (1999) asserts that knowing one's strengths and weaknesses can make a difference in the real world. He adds that when people carry out self-evaluation they will have a truer sense of what is good or better for them, whether in a work situation or an academic situation. Therefore, Boud, Cohen and Sampson (1999) affirm that without fostering students' self-assessment, lifelong learning will be undermined.

Over and above, self-assessment practices in the classroom make teachers aware of individual students' needs and learning processes because they help them gather information about

learners from the learners' perspectives (Black, Harrison, Lee, Marshall and Wiliam, 2003). Self-assessment practices also alleviate teachers' assessment burden and save their time because they spare them from assessing students' learning progress continuously and regularly in all areas. More than that, rather than giving a comprehensive diagnostic test to have a glimpse of students' problem areas, it is much faster to ask them directly about the problems they feel they have (Harris and McCann, 1994).

Additional benefits of involving students in assessment include developing self-reflection, reducing assessment anxiety, raising awareness of learning strategies, encouraging personal goal setting, improving critical thinking skills, and developing democratic citizens who know how to evaluate different views for the public good. However, critics of self-assessment (e.g., Campbell, Mothersbaugh, Brammer and Taylor, 2001; Patri, 2002) argue that students may either underestimate or overestimate their own progress. They further argue that students who are less proficient tend to overestimate their abilities, placing emphasis on effort rather than achievement, while students who are more proficient tend to underestimate their abilities.

To overcome the obstacle of students' inaccurate estimation of their own progress, many assessment experts (e.g., McDevitt and Ormrod, 2004; Paris and Ayres, 1994; Winne, 1995) suggest ways such as (1) providing students with self-assessment training, (2) identifying appropriate criteria for self-assessment and explaining these criteria to students, and (3) giving feedback on student self-assessments. In support of self-assessment training as a way for surmounting inaccurate estimation of one's own learning, research studies revealed that self-assessment training had a positive effect on the quality of students' self-assessment and learning. In her study which focused on self-assessment training with a group of adult immigrants, Dieten (1992) found that training had a positive effect on the quality of self-assessment. Along the same line, Ross, Rolheiser and Hogaboam-Gray (1999) found that teaching self-assessment skills increased accuracy, especially for those who tended to overestimate their own abilities, and had a positive effect on achievement among low achievers as it helped them better understand teacher expectations. They (Ross, Rolheiser and Hogaboam-Gray) concluded that language students need to be taught how to self-assess their learning. Likewise, McDonald and Boud (2003) found that self-assessment training had a significant impact on student performance in all curriculum areas

and students with training in self-assessment outperformed students without similar training.

The use of self-assessment criteria could also enhance the quality of self-assessment practice and improve student learning. In support of this, Orsmond, Merry and Reiling (2000) found that eighty-four percent of the students who self-assessed their progress according to a set of criteria thought that this exercise was beneficial and made them better critical thinkers. Based on these results, Orsmond et al. concluded that "[d]eveloping an appreciation of criteria may enhance the quality of the assessment practice and have a major impact on student learning" (p. 24). Along the same line, in a study with high school students, Andrade and Boulay (2003) found that simply explaining assessment criteria gave students a deeper understanding of the qualities that were evaluated. In another study with undergraduate students, Andrade and Du (2005) found that having a good grasp of assessment criteria enabled students to self-assess their work in progress and helped them to "identify strengths and weaknesses in their work" (p. 3). They also found that students reported positive attitudes when they were involved in criteria-referenced self-assessment.

Research also indicated that teacher feedback on student self-assessment improved the quality of self-assessment. Taras (2003), for example, found that minimal integrated tutor feedback enabled students to consider their errors, understand assessment procedures, and realize their strengths and weaknesses. Based on these results, Taras concluded that "SA [Self-assessment] without tutor feedback cannot help students to be aware of all their errors" (p. 561), and that "student self-assessment with integrated tutor feedback is one efficient means of helping students overcome unrealistic expectations and focus on their achievement rather than on the input required to produce their work" (p. 562). Along the same line, El-Koumy (2010) found that self-plus-teacher assessment was more effective in improving students' knowledge achievement and academic thinking than either alone. Based on this result, he further recommended:

Rather than viewing self and teacher assessments as opposing strategies, it is more useful to capitalize on the advantages of both. In other words, for self-assessment to be effective, students are in need to practice it with teacher feedback. The teacher feedback can be decreased gradually, and the student can take greater responsibility for assessment as her/his self-assessment skill is developed. (p. 16)

It is clear then that students' over- and under-estimations of their performance can be overcome in many ways. Therefore, such estimations should not prevent teachers from allowing students to self-assess both their learning processes and products.

#### **2.3.2.3.3 Self-assessment tools**

Many educationalists believe that students need instruments in order to be able to independently take charge of assessing their own learning. Checklists, learning logs, prompting questions, and learning strategies questionnaires are examples of the tools used to help students reach this goal (for additional information on these self-assessment tools, see El-Koumy, 2004b).

#### **2.3.2.4 Implementation of metacognitive strategies**

To help students, particularly those with learning disabilities, implement metacognitive strategies, the teacher should provide them with metacognitive scaffolds. These scaffolds may simply comprise explicit prompts in the form of questions. Such questions can easily trigger students' metacognitive strategies, including planning to approach a particular task, monitoring the strategies being applied to the task, and evaluating learning outcomes. The following are examples of these questions (Schraw, 1998, p. 121):

### Planning

1. What is the nature of the task?
2. What is my goal?
3. What kind of information and strategies do I need?
4. How much time and resources do I need?

### Monitoring

1. Do I have a clear understanding of what I am doing?
2. Does the task make sense to me?
3. Am I reaching my goals?
4. Do I need to make changes?

### Evaluating

1. Have I reached my goal?
2. What worked?
3. What didn't work?
4. Would I do things differently the next time?

Along the same line of thought, Anderson (2002, p. 3) suggests five questions that students can answer to guide them to implement metacognitive strategies before, during, and after doing a task. The first of these questions triggers planning; the second and the third elicit self-monitoring; and the fourth and the fifth prompt self-assessment. These questions are the following:

1. What are the goals I want to accomplish?
2. What strategies am I using?
3. How well am I using them?
4. What is the outcome?
5. What else could I do?



Similarly, Thamraksa (2005) suggests that the student should ask herself or himself the following questions that trigger her or his metacognitive strategies before, during, and after doing a task:

1. Before: When developing a plan of action, the student can ask herself or himself the following questions:
  - What is my prior knowledge that will help me do this task?
  - What should I do first?
  - What is my expectation in doing this task?
  - How much time do I need to complete this task?
2. During: When doing the task, the student can ask herself or himself the following questions:
  - How am I doing?
  - Am I on the right track?
  - What strategies am I using?
  - Should I use a different strategy to complete this task?
  - What other things/information do I need to know?
- 3 After: After doing their task, the student can ask herself or himself the following questions:
  - How well did I do?
  - What did I learn from doing this task?
  - Did I learn more or less than I had expected?

- Do I need to redo the task?
- What could I have done differently?

### **2.3.3 Social strategies**

Social strategies are actions that involve other people in learning. These strategies include, but are not limited to, asking others for help, speaking together in the target language, cooperating with fellow-students, and reviewing others' work. According to Oxford (1990), social learning strategies include four main categories. The first is asking questions which includes, among many others, asking for clarification, verification, or correction. The second is cooperating with others such as learning with peers and proficient users of the language. The third is empathizing with others like becoming aware of others' thoughts and feelings. The fourth is seeking opportunities to learn from and with others such as reading, writing, and speaking with proficient peers.

From the social constructivist viewpoint, social strategies are extremely important for all learning because they allow students to construct meaning together and to learn from each other. As Walqui (2006) points out, "The basis for all learning is social interaction" (p.162). Social strategies are particularly more

important for language learning because language is a social behavior and cannot be separated from its social context. As Williams (1994) points out, "[T]here is no question that learning a foreign language is different to learning other subjects. This is mainly because of the social nature of such a venture. Language, after all, belongs to a person's whole social being; it is part of one's identity" (p. 77). Therefore, many scholars (e.g., Ellis, 1988; Ligthbown and Spada, 1993; Shale and Garrison, 1990; Strickland and Shanahan, 2004) emphasize the importance of social interactions for developing the learner's communicative and linguistic competence. Ellis (1988), for example, claims that second/foreign language learning succeeds when the teacher uses reciprocal interaction in the classroom. Shale and Garrison (1990) go so far to say, "Without interaction, [language] teaching becomes simply ... passing on content as if it were dogmatic truth" (p. 29).

Over and above, social strategies help students communicate more effectively and engage with the themes and issues that exist in real-world contexts. They also allow them to use language in non-threatening communities. In these communities, they feel more comfortable and more confident to share their own thoughts and opinions and to use the language openly and freely.

#### **2.3.4 Affective strategies**

Affective strategies are strategies concerned with managing one's own emotions, motivations, and attitudes. These strategies include, but are not limited to, activating supportive emotions and beliefs, generating and maintaining motivation, lowering one's anxiety, encouraging oneself, positive self-talking; self-rewarding, relaxation, engaging in leisure activities, and taking one's own emotional temperature (Oxford, 1990, 2013; Oxford and Crookall, 1989).

The importance of affective strategies is widely recognized in all areas of learning. The literature indicates that positive affect can play a key role in stimulating critical and creative thinking (Isen, 1999, 2000; Isen, Daubman and Nowicki, 1987; Kahn and Isen, 1993); steering mental processes and cognitive decisions (Isen, 1984; Isen and Reeve, 2005; Isen and Shalke, 1982; Rowe, Hirsch and Anderson, 2007); maintaining commitment to task and boosting problem-solving skills (Isen, 2000; Isen and Patrick, 1983; Isen and Reeve, 2005); fostering helpfulness, kindness, and flexibility during group interaction and cooperative work (Isen, 2001); promoting and sustaining self-regulated learning (Pintrich, 1999; Pintrich and De Groot, 1990; Pintrich and Schunk, 1996); improving achievement in general

(Hamre and Pianta, 2005); and enhancing language learning in particular (Crooks and Schmidt, 1991; Dornyei, 2008; Gardner, 2001, 2010). In contrast, negative affect states such as anxiety and depression leads to deficits in attentional and cognitive control mechanisms, closing off, withdrawal, and low language achievement (Horwitz, 2001; Horwitz, Horwitz and Cope, 1986; MacIntyre, 1995, 1999; Matsuda and Gobel, 2004; Mayberg et al., 1999; Zheng, 2008).

Moreover, a review of neuroscience research on affect (e.g., Ashby, Isen and Turken, 1999; Estrada, Isen and Young, 1997; Gray, Braver and Raichle, 2002) reveals that positive affect is beneficial for the workings of the neural pathways which improve the performance of cognitive tasks. Ashby et al. (1999), for example, provided evidence demonstrating that positive affect influenced everyday cognitive processes and improved episodic and working memory. Their study also showed the effect of positive affect on neural and chemical pathways that resulted in improving creativity, problem solving, social interaction, and emotional reactions.

Furthermore, affective strategies are particularly important to foreign language learners because learning a new language can

be highly stressful (Arnold, 1998). The literature indicates that these strategies can play a key role in helping students gain better control over their own emotions, overcome their negative attitudes, increase their self-confidence and reduce their anxiety (Oxford and Crookall, 1989). This in turn enhances their learning, as Bolitho et al. (2003) put it, "[M]ost learners learn best whilst affectively engaged, and when they willingly invest energy and attention in the learning process" (p. 252).

Over and above, affective strategies are important to students with learning disabilities because these students perceive themselves as less capable, more apprehensive, and as possessing fewer capabilities to master oral and written language skills as compared to their non-LD peers (Javorsky, Sparks and Ganschow, 1992). Therefore, these strategies are essential to these students to build their confidence, lessen their anxiety, and increase their motivation to learn a foreign language.

It is important here to point out that although affective strategies are actions taken in relation to self, the teacher should play a large role in fostering these strategies. S/he ought to create a relaxed atmosphere conducive to learning through non-verbal behaviors such as reducing physical distance, displaying relaxed

postures, smiling, and engaging in eye contact during interactions; and through verbal behaviors such as addressing students by name, praising them, and using inclusive pronouns (Gorham, 1988). Moreover, the teacher should create a non-threatening and low-anxiety classroom atmosphere by tolerating students' linguistic errors to remove their fear of being wrong. S/he ought to "pay attention to the message of students' utterances rather than to the form in which the utterances are cast... [and] treat the correction of errors as a 'pragmatic' or interactional adjustment, not as a normative form of redress, for example, by restating the incorrect utterance in a correct manner rather than pointing explicitly to the error" (Kramsch, 1987, p. 17). To put it another way, the teacher should convey to the students that making errors is normal and that such errors are signals of progress in learning, not sins. As Lewis (2002) puts it:

Error is intrinsic to learning, and any strategy of error avoidance will be counter-productive. Anyone who learns a foreign language to a reasonable degree of proficiency will inevitably make thousands of mistakes on the way. Correcting every one of them is an impossibility. Fortunately it is also highly undesirable. (p. 173)

In addition, the teacher should respect every student's thinking; value her/his individuality; make her/him feel accepted; and

allow her/him to explore issues, make judgments, and propose strategies to achieve goals. The teacher should also create opportunities for success to build self-esteem and self-confidence, praise every student frequently for successful work, and provide motivating texts for reading and interesting topics for speaking and writing. Above all, the teacher should develop students' affective domain through multiple strategies instruction which ultimately enables them take control of their own learning and builds their self-efficacy, self-confidence, and self-esteem.

By and large, it appears that educating the heart is as important as educating the mind and educating the latter without the former will result in deficient and inadequate education. As Stern (1983) states, "The affective component contributes at least as much and often more to language learning than the cognitive skills" (p. 386). Similarly, Harris (1997) emphasizes the importance of both affective and cognitive components of language saying, "If we attend to the affective and cognitive components ... we may be able to increase the length of time students commit to language study and their chances of success in it" (p. 20). Likewise, Arnold (1999) points out, "Neither the cognitive nor the affective has the last word, and, indeed, neither can be separated from the other" (p. 1).



To conclude this section, it is clear that affect is just like the blood beneath the skin or the soul inside the flesh; therefore, it is fundamental for living in general and learning in particular. It is also necessary to all types of students at all levels, particularly those with learning disabilities.

#### **2.4 Models of learning strategies instruction**

A variety of models were developed for learning strategies instruction (e.g., Chamot and O'Malley, 1994; Collins, 1998; Duke, 2001; Fowler, 2003; Kiewra, 2002; Oxford, 1990; Santangelo, Harris and Graham, 2008; Wenden, 1985). These models emphasize that learning strategies should be brought to a conscious level in the learner's mind to enable her/him to implement these strategies independently in accordance with her/his needs and the requirements of the learning task. As Oxford (1990) states, "Learners need to learn how to learn, and teachers need to learn how to facilitate the process. Although learning is certainly part of the human condition, conscious skill in self-directed learning and in strategy use must be sharpened through training" (p. 201). This section presents the most popular models of learning strategies instruction.

Oxford (1990) proposed an eight-step model for learning strategies instruction in which the first five steps concern planning and preparation for strategy training, and the last three steps concern conducting, evaluating, and revising such training. The steps of this model are: (1) determining the learners' needs and the time available, (2) selecting strategies, (3) considering integration of strategy training, (4) considering motivational issues, (5) preparing materials and activities, (6) conducting informed training, (7) evaluating, and (8) revising the strategy training.

Chamot and O'Malley (1994) developed a five-phase model for teaching learning strategies. These phases are the following:

1. Preparation: In this phase, the teacher activates students' background knowledge about their current use of learning strategies. Activities in this phase include class discussions about strategies used for recent learning tasks, group or individual interviews about strategies used for particular tasks, think aloud sessions in which students describe their thought processes while they work on a task, and discussions of students' responses to learning strategies questionnaires.
2. Presentation: In this phase, the teacher explains and models learning strategies. S/he informs students about the

characteristics, usefulness, and applications of these strategies.

3. Practice: In this phase, the teacher gives students the opportunity to practice the learning strategies with an authentic learning task.
4. Evaluation: In this phase, the teacher provides students with an opportunity to evaluate their own success in using the learning strategies under focus, thus developing their metacognitive awareness of their own learning processes.
5. Expansion: In this phase, the students make personal decisions about the strategies that they have found most effective and apply these strategies to new contexts.

Collins (1998) offered a four-phase model for teaching strategic writing to struggling writers. These four phases are: (1) identifying a strategy worth teaching, (2) modeling the strategy, (3) helping students to try the strategy out with workshop-style teacher guidance, and (4) allowing students to use the strategy independently.

Duke (2001) proposed that teachers should follow these four steps for strategy instruction: (1) explicitly describing the strategy and stating when and how it should be used, (2)

modeling the use of the strategy in action, (3) collaborative use of the strategy, and (4) independent use of the strategy.

Fowler (2003) proposed a strategic instruction model (SIM) for students with learning disabilities. This SIM incorporates both strategic instruction and content enhancement to help these students meet performance gaps through learning strategies, and information demands through content enhancement routines. This model involves the following six steps:

1. Pretesting learners and encouraging them to become interested in learning the strategy: In this step, the teacher determines how much the learners already know about using the strategy and secures their commitment to learn this strategy. S/he also tells them what strategy they are going to learn and how this strategy can help them in skills development.
2. Describing the strategy: In this step, the teacher gives a clear explanation of the strategy, identifies real tasks where the learners can apply the strategy, and asks them if they can think of other work where the strategy might be beneficial.
3. Modeling the strategy: In this step, the teacher models the strategy through thinking aloud so that learners can understand what a person does while using the strategy.

4. Practicing the strategy: In this step, the teacher provides students with repeated opportunities to practice the strategy under her or his guidance.
5. Providing feedback: In this step, the teacher provides feedback to learners on their strategy use. Much of the feedback can be offered as learners become involved in thinking aloud about strategy use.
6. Promoting generalization: In this step, the learners apply the strategy in various situations with other tasks.

Vacca et al. (2006) suggested four steps for learning strategies instruction. These steps are: (1) creating awareness of the strategy, (2) modeling the strategy, (3) providing practice in the use of the strategy, and (4) applying the strategy in authentic situations.

Santangelo, Harris and Graham (2008) offered a six-phase model for explicitly teaching learning strategies to students with learning disabilities. These phases are:

1. Developing preskills: In this phase, students' prior knowledge about the task and strategy is assessed and remediation is provided when needed.

2. Discussing the strategy: In this phase, the strategy to be learned is described, a purpose for using the strategy is established, and the benefits of using the strategy are discussed.
3. Modeling the strategy: In this phase, the teacher models (while thinking out loud) how to use the strategy in context.
4. Memorizing the strategy: In this phase, students should be provided time to memorize the strategy until they are fluent in understanding each step. The use of mnemonics such as POWER (i.e., Plan, Organize, Write, Edit, and Revise) and graphic organizers can help them memorize the steps of the strategy.
5. Guided practice: In this phase, the teacher guides learners through a series of prompts to apply the strategy.
6. Independent practice: In this phase, the teacher allows for independent practice across new tasks and settings to foster generalization and maintenance of the strategy.

Oxford (2013) developed an eight-step model for affective and meta-affective strategy instruction. The steps of this model are: (1) paying attention to affect, (2) planning for affect, (3) obtaining and using resources for affect, (4) organizing learning for affect, (5) implementing plans for affect, (6) orchestrating

affective strategy use, (7) monitoring affect, and (8) evaluating affect.

In summary, many of the previously mentioned models show a somewhat remarkable similarity and agree that learning strategy instruction should run through steps in which the teacher gradually withdraws her/his support so that the student can eventually take total responsibility for the application of the strategy. These steps are: (1) raising students' awareness of the strategy by providing them with declarative, procedural, and conditional knowledge about it; (2) teacher modeling of the strategy in a contextualized task through thinking aloud; (3) students' cooperative use of the strategy in a novel task under the teacher's guidance; (4) student's independent use of the strategy in a new authentic task; and finally (5) student's evaluation of strategy use in relation to task performance.

## **2.5 Methods of detecting learning strategies**

Learning strategies are generally internal mental processes. They are for the most part invisible and unobservable, though some may be associated with observable behaviors. A student listening to an oral text, for example, may use selective attention, which is an unobservable strategy, to focus on the main ideas; and s/he

may take notes of these main ideas which is an observable strategy. The only way to find out whether a student is using selective attention is to ask her/him to verbalize inner processes or what takes place in the head (Chamot, 2004). Therefore, some techniques have been suggested to uncover and identify internal mental processes in general and internal learning strategies in particular. These techniques fall into two broad categories: (1) concurrent self-reports, and (2) retrospective self-reports. These two types of reports are discussed in the next subsections.

### **2.5.1 Concurrent self-reports**

Concurrent self-reports involve learners in thinking about their learning strategies via thinking-aloud while performing a task. Through such reports, learners become aware of the mental processes that occur during performing a specific task (Anderson and Vandergrift, 1996). To put it another way, this type of reporting helps learners to be aware of what occurs in their own minds during performing a task and what strategies they call into play to boost their own performance. However, learners may have difficulty verbalizing their own thoughts while doing the task because they think faster than they talk and their oral language proficiency level may not help them to express their



mental processes precisely and accurately. Furthermore, thinking-aloud may slow down the task's cognitive processes (Nielsen, Clemmensen and Yssing, 2002), and concurrent verbalization may be problematic "when the information is difficult to verbalize because of its form" (Branch, 2000, p. 379). Moreover, concurrent verbalization puts a cognitive load on the user, which may interfere or even compete with the cognitive requirements of the task (Karsenty, 2001; Makeown, Beck and Blake, 2009). Therefore, Ericsson and Simon (1993) concede that concurrently elicited verbal reports are not likely to be complete.

### **2.5.2 Retrospective self-reports**

Retrospective self-reports involve learners in thinking back and reporting on the strategies they believe they have used before, during, and after doing a specific task immediately after finishing it. This type of reporting can be elicited through such tools as interviews and questionnaires. These tools can provide basic information about students' awareness and use of learning strategies. As Ellis (1994) points out, "Interviews and questionnaires can require learners to report on the learning strategies they use in general or in relation to a specific activity" (p. 534). They also allow instructors to identify the cognitive

processes responsible for students' behavior. Moreover, Jacobs and Paris (1987) argue for the use of these tools to peer into the minds of students who are markedly shy.

Though retrospective reporting can make the invisible visible and the implicit explicit and provide valuable insights into students' learning strategies, the very act of trying to remember what was happening can be taxing to some learners, particularly those for whom retrospective recall is problematic. In addition, learners may fall into the trap of responding in the way they believe the instructor expects them to do, just to please her/him, whether they have answers or not. That is, in response to questionnaires learners may report using strategies that, in fact, they have not used. Furthermore, if a questionnaire is written in the FL, learners may lack adequate proficiency to comprehend questions or Likert-scaled statements and give inaccurate responses. Finally, certain types of learners may under- or over-estimate their use of learning strategies. In support of this, Meltzer, Katzir-Cohen, Miller and Roditi (2001) found that fourth through ninth graders with learning disabilities rated themselves as highly strategic on a self-report measure using a Likert-like scale and made reports with which their grades and teachers' reports did not concur.

Although the previously-mentioned types of reporting cognitive and metacognitive strategies lack standardization, they are the only ways available to teachers to get insights into unobservable learning strategies and to collect information from students about their learning strategies. As Grenfell and Harris (1999) point out, "It is not easy to get inside the 'black box' of the human brain and find out what is going on there. We work with what we can get, which, despite the limitations, provides food for thought" (p. 54).

It clear then that each type of reporting learning strategies has its merits and limitations. To overcome their limitations, these two types should be combined to identify students' learning strategies more accurately and precisely (e.g., interviews in conjunction with videotaped thinking-aloud protocols). Teachers should also provide students with training in thinking-aloud to enable them to describe their mental processes clearly and explicitly, allow them to use their native language for reporting, and give them prompts for thinking aloud.

## **2.6 Research on effective/ineffective learning strategies**

An abundant body of research examined the strategies successful language learners use to accomplish language learning tasks. As Ellis (1994) states, much of the research on language learning

strategies "has been based on the assumption that there are 'good' learning strategies" (p. 558). Rubin (1975) was among the first researchers who focused on strategies of successful language learners because, as she stated, once identified, such strategies could be made available to less successful learners so that they could increase their success rate. Her findings revealed that the good language learner was accurate guesser, had a strong persevering drive to communicate, was willing to make mistakes in order to learn or communicate, took advantage of all practice opportunities, monitored her or his own speech, and paid attention to meaning.

Later on, studies on effective and ineffective learning strategies focused on learning strategies used in specific language areas. In the area of reading, Hosenfeld (1977) found that successful L2 readers kept the meaning of the passage in mind, skipped words that they believed to be unimportant to the meaning of the sentence or text, read in broad phrases, and used context to determine the meaning of unknown words. Less successful readers, on the other hand, translated sentences word by word, rarely skipped words, and looked up unknown words in a glossary. Along the same line, Kaufman, Randlett and Price (1985) found that high comprehenders used more strategies than

low comprehenders when confronted with comprehension difficulties. They further found that although high- and low-comprehenders reported using equal amounts of concrete, observable strategies when reading (e.g., re-reading, slowing down reading pace), high comprehenders reported using significantly more strategies that involve complex, unobservable mental operations to repair their misunderstandings (e.g., visualizing, perspective-taking, making predictions, drawing inferences). They concluded that these findings provide evidence that good readers use different sets of strategies when confronted with a comprehension problem and that higher-order thinking strategies are required to achieve an accurate and thorough understanding of difficult passages.

In addition, Block (1986) found that more successful readers used global strategies such as anticipating content, recognizing text structure, identifying main ideas, using background knowledge, monitoring comprehension, and reacting to the text as a whole. In contrast, less successful readers used local strategies such as recognizing the meaning of individual words.

Besides, Barnett (1989) found that successful readers hypothesized about what might come next and guessed the

meaning of unknown words. Unsuccessful readers, on the other hand, focused on the meaning of individual words, paid attention to sentence structure, reread isolated difficult parts only, never or rarely hypothesized, and resisted skipping unknown words.

Furthermore, Pressley (1995) found that good readers and writers selectively and flexibly applied a vast array of strategies to every reading or writing event. In contrast, students who experienced difficulty with reading and writing typically used fewer strategies and their strategy use tended to be rigid rather than flexible.

Moreover, in their study of the behaviors of effective readers, Pressley and Afflerbach (1995) found that expert and highly skilled readers used metacognitive strategies before, during, and after reading.

Recent studies tend to support the findings of the previous studies conducted in the 1980s and 1990s. In a meta-analysis of research on reading strategies, Singhal (2001) concluded that it is "clear that there are indeed differences between successful or good readers, and less successful or poor readers in terms of strategy use" (p. 4). Specifically, successful readers had been found to rely primarily upon top-down strategies. In contrast,

less successful readers' strategies tended to be more local, reflecting a desire to treat reading as a decoding process, rather than a meaning-making process.

Saricoban (2002) also examined the strategy use of post-secondary ESL students and found that successful readers engaged in predicting and guessing activities, made use of their background knowledge related to the topic, guessed the meaning of unknown words, and skimmed and scanned the text. In contrast, less successful readers focused on individual words, verbs in particular. In the same vein, Lau (2006) examined the reading strategies used by good and poor Chinese readers in Hong Kong. The results from the study showed that good readers used more strategies during reading than did poor readers. Good readers were also more knowledgeable about reading strategies which enabled them to apply these strategies more effectively.

In the area of writing, Raimes (1987) examined ESL learners' composing behaviors at different levels through think-aloud protocols in order to describe their writing strategies. Her research findings revealed that skilled L2 writers engaged in more interaction with the text and were consistently involved in more strategies, including planning, rehearsing, rescanning,

revising, and editing. Simultaneously, they were well aware of the audience and the purpose of the task. In contrast, the unskilled L2 writers seemed to attach to their already produced text with the result that they failed to be flexible to edit or reformulate their writing. These findings are consistent with those of many other studies (e.g., de Bot, 1996; Schoonen and De Glopper, 1996). The findings of these studies revealed that more proficient writers paid more attention to higher processes while less proficient writers were more concerned with lower processes.

In the area of listening, Vandergrift (1997) compared the comprehension strategies of more- and less-skilled listeners. Students listened to several French texts and were prompted to think aloud during the process. The more skilled listeners used more metacognitive strategies, especially comprehension monitoring, than did their less skilled peers. In addition, more skilled listeners engaged in questioning for clarification, whereas the less skilled listeners used more translation.

In sum, it seems that there is a consensus among language learning researchers that proficient and successful language learners consciously engage in the use of cognitive strategies,



rely on deep-processing (i.e., top-down) ones of these strategies, and employ a repertoire of them flexibly to process information. There is also a consensus that the use of metacognitive strategies differentiates proficient from less proficient language learners.

### **2.7 Research on teaching learning strategies to students with learning disabilities**

A large body of research demonstrates the positive effects of strategy training on the language learning of all types of students. This section presents only the studies conducted with students with learning disabilities.

Malone and Mastropieri (1992) taught middle school students with learning disabilities how to self-question and summarize while reading. In the summarization condition, students were taught to ask and answer these two questions: (1) Who or what is the passage about? and (2) What is happening to who or what? In another condition, self-monitoring was added to the summarization condition, whereas a third condition served as a traditional instruction comparison condition. Both summarization conditions outperformed traditional instruction on free-recall measures of passage content, and students in the

summarization plus self-monitoring condition outperformed both comparison conditions on a transfer measure.

Rich and Blake (1994) implemented a comprehension intervention that included instruction in some comprehension strategies. The participants for their study consisted of five students with language/learning disabilities. These students received instruction in identifying main ideas, self-questioning, and paraphrasing. During the intervention, students kept daily journals evaluating their cognitive and affective behaviors. Reading outcomes were measured with expository passages excerpted by the researchers from informal reading inventories and students responded to eight questions about each passage. The researchers reported that all five students made improvements from the pretest to the posttest in listening comprehension with scores on the outcome measure ranging from 56–100% (2 students below 75% on the posttest). Four of the students also improved from pretest to posttest in reading comprehension with scores ranging from 63–100% on the posttest measure (1 student below 75% on the posttest).

Mendelsohn (1995) investigated the effects of listening strategies instruction on normal and poor listeners' comprehension in two

experiments. Four text comprehension strategies (question generation, summarizing, clarification, and predicting) were taught through direct instruction and reciprocal teaching. Dependent variables were strategic reading and listening comprehension tests. In the first experiment the subjects were 9 to 11-year-old poor readers from special schools for children with learning disabilities. In this experiment, the intervention program's texts and strategy instruction were presented in listening settings only. The subjects in the second experiment were 10-year-old children from regular elementary schools and 9 to 11-year-old children from special schools. They were also poor readers but their decoding performance was not as poor as in the subjects in experiment 1. In experiment 2, the intervention program involved text presentations in alternating reading and listening lessons. Clear effects of both programs were found on strategic reading and listening tests administered directly after the interventions. In the first experiment, maintenance test performance showed prolonged program benefits, whereas in the second experiment these maintenance effects were blurred by unexpected gains of the control groups, especially from regular schools.

Aarnoutse (1997) investigated the effectiveness of teaching comprehension strategies to learning disabled students. The subjects, 95 students from 6 special schools for learning disabilities, were chosen based on their very low scores on a decoding test, low scores on a reading comprehension test, and low or average scores on a listening comprehension test. These subjects were divided into an experimental group and a control group. Both groups were administered pretests, posttests, and retention tests. The 48 students in the experimental group were instructed in comprehension strategies in a listening program consisting of 20 lessons. The 47 students in the control group attended regular reading lessons which did not contain comprehension strategy instruction. Results indicated that students trained by the program performed better during the posttest on the strategic listening and reading tests than the control group, and the better performance was maintained on the strategy retention tests three months after the posttest.

In a synthesis of research on metacognition, Collins, Dickson, Simmons and Kameenui (1998) identified a body of research demonstrating that individuals with reading disabilities could learn to become effective and active readers through instruction aimed at increasing metacognitive skills. Based on their

synthesis of research, they recommended that it is crucial for adult literacy programs to incorporate the direct teaching of reading strategies in a way that helps adults with learning disabilities apply strategies to meet their specific reading needs.

Bryant, Vaughn, Linan-Thompson, Ugel and Hamff (2000) reported using collaborative strategic reading as part of a multicomponent reading comprehension intervention with students with reading disabilities, low-achieving students, and average-achieving students in the middle years. The findings revealed that all students' reading outcomes (i.e., word identification, fluency, and comprehension) increased significantly as a result of the intervention although a subgroup of very poor readers made little progress. Moreover, teachers reported that the percentage of their students who passed high-stakes tests increased from the previous year as a result of their participation in the intervention.

Jitendra, Hoppes and Xin (2000) taught middle-school students with disabilities a main idea identification strategy either with or without a monitoring component. The findings of their study revealed that students in the monitoring group outperformed

those in the control group on both near and far measures of reading comprehension.

Burchard and Swerdzewski's (2009) study of the effect of a postsecondary strategic learning course demonstrated that students with and without learning disabilities who participated in this course made statistically significant gains in metacognitive regulation and metacognitive awareness from the beginning to the end of the course. Course participants made greater gains in metacognitive regulation than did students in the general population at the university. The study also revealed that gains made by students with learning disabilities were not different from gains made by students without disabilities, suggesting that students with disabilities could benefit just as much as students without disabilities from participation in learning strategies courses.

Crabtree, Alber-Morgan and Konrad (2010) examined the effects of self-monitoring on the reading comprehension of three high school seniors with learning disabilities and attention problems. The self-monitoring intervention required the participants to read a story and stop reading at three pre-determined places in the text. At each stopping point, the participants used a form to

record the answers to five questions focusing on narrative story elements. Reading comprehension was measured by the number of story facts the participants were able to recall and the number of correct responses on a 10-item reading comprehension quiz. Findings demonstrated a functional relation between the self-monitoring intervention and reading comprehension performance.

In summary, it is clear that when students with learning disabilities were taught cognitive and/or metacognitive learning strategies and were given ample opportunities to use these strategies, they improved in their ability to process information, which in turn developed their major language skills. However, it is a known fact that each language skill involves different processes and needs different learning strategies. Therefore, the remaining chapters of this book will fully address the strategies related to each of the major language skills, namely, oral communication, reading comprehension, and written expression.

## **Chapter Three**

### **Teaching Communication Strategies to Students with Oral Communication Disabilities**

#### **3.0 Introduction**

The primary aim of teaching English as a foreign language is to develop students' communicative competence in this language, particularly oral communication skills. In the globalization era, English has become one of the most important languages of oral communication in today's world. As Lewis (2011) puts it, "In today's world where a high percentage of students need or will need to be able to speak English outside the classroom, there is an absolute necessity to develop communicative competence as an integral part of an effective EFL syllabus" (p. 54). Oral communication also forms the basis for literacy development. Students cannot write what they cannot say. Oral language is a precursor to written language even if we do not write exactly the way we speak (Williams and Roberts, 2011). Moreover, both teacher-student and student-student interactions are important sources for learning in the EFL classroom. Through such interactions, input can be made more comprehensible and



meaning can become clearer. In addition, oral communication makes language teaching and learning more thoughtful and turns the language classroom into a community of thinkers. Therefore, it can develop students' higher order thinking skills. As Logan (2007) states, "Communication facilitates thinking . . . . Dialogue and questions provoke new thoughts, new ideas, and new forms of language" (p. 104). Thus, for language learning and development of thinking to go hand-in-hand, students need to share their ideas with the teacher and classmates through oral communication.

In the global society, oral communication skills have also become essential for attaining and performing many high-level jobs. They are amongst the most sought after skills by employers. Many, if not all, employers rank these skills among the most important skills for graduates to possess upon their entry in the workplace. A variety of reports (e.g., Bauer, 1995; Howe, 2003; Wayne and Mitchell, 1992) also identify these skills as the most important workplace skills for employees. Therefore, "For the success of a student's future career," as Rathee and Rajain (2018) argue, "communication skills are indispensable" (p. 42).

Furthermore, oral communication skills are necessary for developing informed citizens who are capable of participation in the global society. Through oral communication, citizens also participate in everyday life and share perspectives for the benefit of the local society. In recognition of this, the European Parliament and the Council of the European Union (2006) recommend that lifelong learning skills should include communication in the mother tongue and communication in an international foreign language.

Besides what has been mentioned, oral communication is a vital part of all aspects of life. As Bakhtin (1984) argues, life by its very nature is dialogic and we need to freely engage in open ended dialogue to fully engage with life and learning. He states:

To live means to participate in dialogue: to ask questions, to heed, to respond, to agree, and so forth. In this dialogue a person participates wholly and throughout his whole life: with his eyes, lips, hands, soul, spirit, with his whole body and deeds. He invests his entire self in discourse, and this discourse enters into the dialogic fabric of human life, into the world symposium. (p. 293)

It is clear then that oral communication skills are vital for students' success within and beyond school. They are essential for academic, occupational, and personal success. As Pinto and

Bakken (2009) put it, "Communication skills are essential for everyday social and learning interactions" (p. 99). Freire (2000) goes so far to claim that "without communication there can be no true education" (p. 92).

Despite the importance of oral communication skills in all aspects of life, most of the students with learning disabilities fear and avoid communicating with others because they have trouble understanding others' speech and expressing themselves orally in a meaningful way (Griffiths, 2002; Newhall, 2012; Sujathamalini, 2014). More specifically, they experience difficulties with oral communication in the following areas:

- initiating and ending an interaction,
- expressing opinions adequately on everyday topics,
- requesting and giving clarification,
- telling a story or talking about an incident in sequence;
- identifying logical inconsistencies in one's interlocutor's speech acts,
- responding to open-ended questions,
- repairing one's own breakdowns during interaction,
- taking one's turn appropriately in interactions,
- keeping an interaction going,
- using appropriate gestures while speaking, and

- comprehending flowing speech acts.

In the Egyptian context, struggling EFL students, particularly those with learning disabilities, continue to experience the previously-mentioned difficulties in adolescence because of three reasons. The first reason is that teachers always view students as passive recipients of information. They do not interact with them; nor do they provide them with opportunities to interact with each other. That is, interaction is completely neglected in Egyptian classrooms. The second reason is that Egyptian students are always fearful of expressing their own opinions because teachers penalize them for their mistakes. Therefore, they prefer to be reticent to avoid humiliation, embarrassment, and criticism. This results in the vicious circle, "the less they speak, the less they improve their speaking skills, and the more they are afraid of speaking" (Jianing, 2007). The final but the most important reason is that communication strategies are completely overlooked in Egyptian classrooms.

"Most scholars today agree that with appropriate instruction and support, individuals with severe disabilities can learn to communicate effectively regardless of the nature and/or cause of their underlying impairments" (Pinto and Bakken, 2009, p. 107).

Based on this view and in light of the available literature, it is evident that to help students who struggle with oral communication overcome their difficulties, the best intervention is the teaching of communication strategies to these students. As Popescu and Cohen-Vida (2014) put it, "To develop the learners' communicative competence the teachers should expose them to and draw their attention to different communicative strategies" (p. 3492). Lewis (2011) also expresses the same recommendation as follows:

If we are to help students develop their communicative competence, it is essential that we expose them to and draw their attention to a variety of communicative strategies, give them opportunities to apply the strategies in similar contexts and give them structured feedback on their performance. (p. 54)

Besides, it is widely proved that more proficient speakers use learning strategies more consciously, purposefully, and regularly than less-proficient speakers. In this regard, O'Malley and Chamot (1990) found that high proficiency students used a greater variety of strategies in ways that helped them to complete oral tasks more successfully compared to low proficiency students who not only had fewer strategies but also used strategies that were inappropriate to the task. Along the same line, Chuanchaisit and Prapphal (2009) found that low-ability

students experienced difficulties in selecting the most appropriate strategies for many communicative contexts. In the same vein, Rachmawati (2013) found that high speaking achievers made greater attempts in terms of type, variety, and frequency of learning strategies than low achievers. Mistar, Zuhairi and Umamah (2014) also found that more proficient speakers reported using speaking strategies more frequently than less proficient ones. Moreover, Gani, Fajrina and Hanifa (2015) found that high performance speaking students had better balance in using all kinds of learning strategies (cognitive, metacognitive, affective, and social) for enhancing their speaking skills and that the same could not be found with low performance speaking students. They further found that high performance speaking students employed more learning strategies consciously and appropriately compared to the low performance ones. By the same token, Tahang, Sarmin, Yuliana and Taslim (2018) found that successful students applied six kinds of learning strategies in speaking performance, namely, social, metacognitive, affective, memory, cognitive, and compensation strategies.

In addition to what has already been mentioned, several researchers (e.g., Kosar and Bedir, 2014; O'Malley, Chamot,

Stewner-Manzanares, Kupper and Russo, 1985a) found that training students in the use of strategies had a positive effect on their performance in speaking tasks. More than that, many researchers (e.g., Bruen, 2001; Liao and Chiang, 2003; Oxford and Ehrman, 1995; Pietrzykowska, 2014; Xu, 2016) found a reciprocal relationship between strategy use and speaking ability.

The outcomes of the research studies mentioned before suggest that less proficient communicators, including those with learning disabilities, should be trained to use communication strategies more consciously, purposefully, and frequently to be effective communicators. These outcomes also imply that multiple communication strategies instruction is essential for building up the communicative competence of all types of students at all levels and for enabling them to communicate more confidently and effectively in various situations with different people.

Due to the great importance of communication strategies, the rest of this chapter will address these strategies from all aspects. It will also offer a four-step model for teaching these strategies to students with oral communication disabilities. Finally, it will review research on teaching communication strategies to students with learning disabilities.

### **3.1 Definition of communication strategies**

There are a number of definitions for communication strategies. From different perspectives, communication theorists have defined communication strategies in different ways. From a psycholinguistic perspective, these strategies have been defined as internal cognitive techniques used by a speaker to solve communication problems. In this respect, Corder (1981) defines these strategies as techniques employed by a speaker to express meaning when faced with difficulties. In a similar way, Færch and Kasper (1983) define the same strategies as "potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal" (p. 36). Likewise, Wenden (1986) defines them as techniques used by learners when there is a gap between their knowledge of the language and their communication intent. Along the same line, Bialystok (1990) defines them as "strategies [that] are used only when a speaker perceives that there is a problem which may interrupt communication" (p. 3).

From a sociolinguistic perspective, communication strategies are defined as techniques that both speakers and listeners use to solve problems during the course of communication. Tarone (1980), for example, defines them as "mutual attempts of two



interlocutors to agree on a meaning in situations where the requisite meaning structures do not seem to be shared" (p. 420). This sociolinguistic perspective suggests that communication strategies are not unique to speakers and that both speakers and listeners mutually use these strategies to solve problems while negotiating for meaning. As Kraat (1985) states, "What is said or done by a 'speaker' at any point in an interaction is often the result of what was said and done by both partners in earlier segments of that exchange. That, in turn, influences the subsequent behaviors that occur" (p. 21). Moreover, the listener's verbal and non-verbal behaviors also influence the speaker's behavior at any point in an interaction. For example, the listener's non-verbal behaviors (e.g., eye-gaze, body shifts, puzzled facial expressions, head shakes) make the speaker "shift style as he or she perceives the 'listener' to be reacting badly to a request; or become more explicit as he or she sees a puzzled look appear; or shift topic or begin to terminate the conversation perceiving that the partner is bored or inattentive" (Kraat, p. 135). The sociolinguistic perspective also suggests that communication strategies occur in non-problematic situations to enhance the effectiveness of communication. That is, speakers can employ these strategies to elaborate on and justify opinions with reasons and evidence.

From a psychosocial perspective, a broader definition of communication strategies is proposed by some scholars (e.g., Dornyei and Scott, 1997; Malasit and Sarobol, 2013) who believe that a speaker not only cooperates with her or his interlocutor to solve communication problems, but s/he also finds solutions to such problems without the help of others. In other words, they believe that communication requires the speaker to use inter- and intra-actional strategies.

It is clear then that there is no universally accepted definition of communication strategies because these definitions, as mentioned before, are derived from different theoretical perspectives. The psycholinguistic perspective views communication strategies as individual or unilateral techniques for overcoming communication barriers, and neglects the role of the partner despite the fact that "language is ... a living organism created by both speaker and hearer" (Tarone, 1981, p. 288) and that communication cannot occur in isolation from other people. In contrast, the sociolinguistic perspective views communication strategies as bilateral techniques between at least two partners, who mutually influence each other in a reactive and interactive way (Kraat, 1985). From a psychosocial perspective, a speaker not only cooperates with her or his interlocutor to solve

communication problems, but s/he also solves such problems by her- or himself during communication. It is clear then that the last standpoint merges both the psycho- and socio-linguistic perspectives in an attempt to overcome the limitations of both.

### **3.2 Classification of communication strategies**

There are many different taxonomies of communication strategies (e.g., Bialystok, 1990; Bygate, 2001; Dornyei and Scott, 1997; Færch and Kasper, 1983; Malasit and Sarobol, 2013; Nakatani, 2006). This section presents these taxonomies in a chronological order.

From a psycholinguistic perspective, Færch and Kasper (1983) classified communication strategies into two types: achievement strategies and reduction strategies. The former set of strategies consists of compensatory strategies and retrieval strategies. The latter set of strategies consists of formal reduction strategies (e.g., paraphrasing, overgeneralization) and functional reduction strategies (e.g., message abandonment, meaning replacement).

In her book, *Communication strategies: A psychological analysis of second-language use*, Bialystok (1990, pp. 132-134) developed a taxonomy of communication strategies that consists

of analysis- and control-based strategies. She further classified these two types of strategies into the substrategies mentioned below:

1. Analysis-based strategies
  - a. Circumlocution,
  - b. Paraphrase,
  - c. Transliteration,
  - d. Word coinage,
  - e. Mime (i.e., using a nonverbal behavior in place of a lexical item).
2. Control-based strategies
  - a. Language switch (i.e., using the native language term),
  - b. Ostensive definition (i.e., pointing to real objects).

From a psychosocial perspective, Dornyei and Scott (1997, p. 197) classified communication strategies into three main categories. These categories, along with sample strategies from the fifty-nine communication strategies identified by them, are mentioned below:

1. Direct strategies
  - a. Message reduction,
  - b. Circumlocution,
  - c. Approximation,

- d. Code-switching,
- e. Mime,
- f. Self-rephrasing,
- g. Self-repair,
- h. Other-repair.

## 2. Interactional strategies

- a. Appeals for help,
- b. Asking questions to check if the interlocutor is following the speaker,
- c. Asking for clarification,
- d. Asking for confirmation,
- e. Interpretive summary,
- f. Repairing the response of the interlocutor,
- g. Rephrasing the response of the interlocutor,
- h. Expanding the response of the interlocutor,
- i. Confirming the response of the interlocutor,
- j. Rejecting the response of the interlocutor.

## 3. Indirect strategies

- a. Use of fillers,
- b. Repeating a word or a string of words,
- c. Repeating something the interlocutor said to gain time,

- d. Use of verbal and non-verbal strategy markers to signal that the word or structure does not carry the intended meaning perfectly in the L2 code,
- e. Self-confirmation,
- f. Feigning understanding.

In compliance with the psycholinguistic perspective, Bygate (2001) identified two main categories of communication strategies: achievement strategies and reduction strategies. The following are the substrategies that fall under these two categories:

1. Achievement strategies
  - a. Guessing strategies, e.g., borrowing or foreignizing a mother-tongue word, literal translation, and coining or inventing a word,
  - b. Paraphrasing strategies, e.g., circumlocuting around a word when it is not known.
2. Reduction strategies
  - a. Avoidance strategies, e.g., changing one's own message to avoid using certain language items or to make it more manageable,
  - b. Compensatory strategies, e.g., organizing one's own message in order to buy thinking time.

In agreement with the psychosocial perspective, Nakatani (2006) developed an oral communication strategy inventory (OCSI) which consists of two parts. The first part comprises eight categories of strategies for coping with speaking problems, and the second part comprises seven categories of strategies for coping with listening problems. The following is a list of these strategies (pp. 155-157):

1. Strategies for coping with speaking problems
  - a. Social-affective strategies,
  - b. Fluency-oriented strategies,
  - c. Negotiation for meaning,
  - d. Accuracy-oriented strategies,
  - e. Message reduction and alteration strategies,
  - f. Nonverbal strategies,
  - g. Message abandonment strategies,
  - h. Thinking in the foreign language strategies.
2. Strategies for coping with listening problems
  - a. Meaning-negotiation strategies,
  - b. Fluency-maintaining strategies,
  - c. Scanning strategies,
  - d. Getting-the-gist strategies,
  - e. Nonverbal strategies,

- f. Affective strategies,
- g. Word-oriented strategies.

From a sociolinguistic perspective, Khamwan (2007) classified communication strategies into four types. These four types, along with language examples, are displayed in Table 1.

Table 1: Khamwan's classification of communication strategies (adapted from Khamwan, 2007, pp. 16-17)

Strategies	Language examples
1. Appeals for help	<ul style="list-style-type: none"> <li>• How do you say...?</li> <li>• What do you call... in English?</li> <li>• Could you tell me what is... called?</li> <li>• What does the word... mean?</li> </ul>
2. Repetition requests	<ul style="list-style-type: none"> <li>• Pardon?</li> <li>• Could you say that again, please?</li> <li>• Again, please?</li> <li>• What?</li> <li>• Excuse me?</li> </ul>
3. Clarification requests	<ul style="list-style-type: none"> <li>• What do you mean by...?</li> <li>• I'm not sure what you mean by saying ...?</li> <li>• It's not clear enough yet.</li> <li>• Could you make that clearer, please?</li> <li>• Could you tell me more?</li> </ul>
4. Comprehension checks	<ul style="list-style-type: none"> <li>• Am I correct?</li> <li>• Did you say...?</li> <li>• You mean...?</li> </ul>



In consonance with the psycholinguistic perspective, Dobao and Martínez (2007, p. 90) developed a classification of communication strategies. This classification consists of two major types of strategies. The substrategies that fall under these two strategies are listed below:

I. Avoidance strategies

1. Topic avoidance,
2. Message abandonment,
3. Semantic avoidance,
4. Message reduction.

II. Achievement strategies

1. Paraphrase
  - a. Approximation,
  - b. Word coinage,
  - c. Circumlocution.
2. Conscious transfer
  - a. Borrowing,
  - b. Language switch.
3. Mime.

In conformity with the psychosocial perspective, Douglas (2007, p. 332) developed a very simple classification of communication

strategies. This classification consists of nine strategies. These strategies are:

1. Asking for clarification (e.g., What?),
2. Asking someone to repeat something (e.g., Excuse me?),
3. Using fillers in order to gain time to process what the interlocutor has said (e.g., I mean, well),
4. Using conversation maintenance cues (e.g., right, yeah, okay),
5. Getting someone's attention (e.g., hey, say, so),
6. Using paraphrases for structures one cannot produce,
7. Appealing for assistance from the interlocutor,
8. Using formulaic expressions (e.g., How much does ... cost? How do you get to the ...?),
9. Using mime and nonverbal expressions to convey meaning.

In congruence with the psychosocial perspective, Mariani (2010, pp. 34-38) proposed a taxonomy which includes five main groups of communication strategies. The following are the substrategies that fall under these five groups:

1. Meaning-expression strategies
  - a. Using an all-purpose word,
  - b. Using a more general word instead of the specific one,
  - c. Using a synonym or an antonym of a word,

- d. Using examples instead of the general category,
  - e. Using definitions or descriptions,
  - f. Using approximations,
  - g. Paraphrasing,
  - h. Self-correcting, rephrasing, repairing incorrect or inappropriate utterances.
2. Meaning-negotiation strategies
- a. Asking for help,
  - b. Giving help.
3. Conversation management strategies
- a. Opening and closing a conversation,
  - b. Trying to keep the conversation open by showing interest and encouraging the interlocutor to talk,
  - c. Managing turn-taking,
  - d. Avoiding or changing the topic,
  - e. Using tactics to gain time and keep the conversation channel open.
4. Para- and extra-linguistic strategies
- a. Using intonation patterns,
  - b. Using non-verbal language.
5. Interaction-monitoring strategies

- a. Asking the interlocutor to correct or to comment on what has been said,
- b. Noticing the words that others use,
- c. Checking the reactions of other people when deciding to use new words and expressions,
- d. Checking if one's interpretation is correct,
- e. Apologizing for saying or doing something inappropriate and trying to correct (cultural) misunderstandings,
- f. Asking for clarification (e.g., asking one's interlocutor what one should say/do or should have said/done).

In line with the psychosocial perspective, Nguyet and Mai (2012) classified communication strategies into four types. These four types are: (1) checking for comprehension, (2) confirming, (3) asking for clarification, and (4) using fillers and hesitation devices.

In accordance with the psychosocial perspective, Malasit and Sarobol (2013, p. 805) developed a taxonomy of communication strategies that consists of two major types: (1) avoidance strategies, and (2) compensatory strategies. The following is a list of the substrategies they categorized under these two types of strategies:

1. Avoidance strategies

- a. Topic avoidance,
  - b. Message abandonment.
2. Compensatory strategies
- 2.1 Intra-actional strategies
- a. Word coinage,
  - b. Code-switching,
  - c. Foreignizing,
  - d. Use of non-verbal cues,
  - e. Self-repair,
  - f. Mumbling with inaudible voice,
  - g. Use of all-purpose words to extend a general, empty item to the exact word,
  - h. Approximation,
  - i. Circumlocution,
  - j. Literal translation,
  - k. Use of fillers/hesitation devices to gain time to think,
  - l. Repeating words or phrases of one's own speech,
  - m. Repeating something the interlocutor said to gain time,
  - n. Omission.
- 2.2 Interactional strategies
- a. Asking for repetition when having a comprehension difficulty,

- b. Requesting direct or indirect help from the interlocutor,
- c. Asking for clarification,
- d. Asking for confirmation,
- e. Checking the interlocutor's understanding,
- f. Expressing non-understanding to show one's own inability to understand messages.

To conclude this section, it is clear that there is no consensus on the classification of communication strategies because classifications are organized around various theoretical perspectives and research purposes. However, Bialystok (1990) believes:

The variety of taxonomies proposed in the literature differ primarily in terminology and overall categorizing principle rather than in the substance of the specific strategies. If we ignore, then, differences in the structure of the taxonomies by abolishing the various overall categories, then a core group of specific strategies that appear consistently across the taxonomies clearly emerges. (p. 61)

It is also worth noting that although language learners may not be encouraged to use some strategies (e.g., foreignizing mother-tongue words, approximation, and literal translation), these strategies, as Mariani (2010) argues, "can play a role in developing strategic competence" (p. 24) because they "help

speakers to 'stay tuned' and maybe give them a chance to make up for the lost parts in subsequent turns" (p. 34). Mariani further states:

There are often times when we need such strategies as a last resort, and indeed language learners and users often use them as a natural, intuitive, spontaneous way of coping with problems, but that does not mean that such strategies need become the focus of explicit attention or instruction. (p. 33)

### **3.3 Benefits of communication strategies**

The benefits of communication strategies are many. The foremost benefit of these strategies is that they are essential for the development of the communicative competence as they enable learners to overcome communication barriers and to cope with language limitations. As Savignon (1983) puts it:

The inclusion of strategic competence as a component of communicative competence at all levels is important because it demonstrates that regardless of experience and level of proficiency one never knows all a language. The ability to cope within limitations is an ever present component of communicative competence. (p. 46)

Tarone (1984) also argues that one of the aims of L2 teaching should be the development of the student's use of communication strategies as a way of enhancing their

communicative competence. Along the same line, Dornyei and Thurrell (1991) emphasize the importance of strategic competence for successful communication in the following way:

Strategic competence is relevant to both L1 and L2, since communication breakdowns occur and must be overcome not only in a foreign language but in one's mother tongue as well. ... A lack of strategic competence may account for situations when students with a firm knowledge of grammar and a wide range of vocabulary get stuck and are unable to carry out their communicative intent. ... On the other hand, there are learners who can communicate successfully with only one hundred words—they rely almost entirely on their strategic competence. (p.17)

Similarly, Dornyei and Scott (1997) conceive communication strategies to be "the key units in a general description of problem-management in L2 communication" (p. 179). Wagner and Firth (1997) echo this point by stating that communication strategies are a very prominent element in speech production and natural discourse. By the same token, Rabab'ah (2002) argues that communication strategies are essential for "transmitting and comprehending messages successfully" (p. 10). In support of this, many research studies (e.g., Dornyei, 1995; Larenas, 2011; Nakatani, 2010; Phaiboonnugulkij and Prapphal, 2013; Rabab'ah, 2015) provided evidence for the effectiveness of



communication strategies instruction in improving students' oral communicative ability and strategic competence. Si-Qing (1990) further found that there is a positive correlation between strategic competence and communicative competence.

Besides, communication strategies can "develop linguistic and sociolinguistic competence in the target language" (Tarone, 1983, p. 67) because they "encourage risk-taking and individual initiative and this is certainly a step towards linguistic and cognitive autonomy" (Mariani, 1994). They also serve as a means of maintaining interaction, thus providing students with opportunities to receive more input of the target language, which can in turn develop their linguistic and sociolinguistic competence. As Faucette (2001) puts it,

If learners soon give up without achievement or interactive strategies at their disposal, then it is unlikely they will develop their conversational ability. Through CS [communication strategies] use, the channel will remain open. Hence, learners receive more input, can stay in the conversation, and develop their ability. Communication strategies are the means by which learners can act on Hatch's (1978) advice that "Finally, and most important, the learner should be taught not to give up. (p. 6)

Similarly, Yang and Gai (2010) argue that communication strategies serve "less proficient learners to have the tools to maintain the conversation, resulting in the opportunity to receive more language input and improve their language ability" (p.73). In addition to keeping a conversation going and ensuring more input for students, de Quesada (2009) adds that the use of communication strategies produces pushed output, and this in turn can develop students' communicative ability and help them to manage conversations more effectively.

Furthermore, communication strategies are very important for enhancing students' self-confidence and building their security because they help them overcome communication barriers and enable them to take full advantage of their own communicative abilities and to maneuver in times of difficulty (Dornyei, 1995). This in turn motivates them to communicate in the foreign language and to remain in the conversation to achieve their communicative goals, rather than giving up their messages. In support of this, several researchers (e.g., Dornyei, 1995; Kongsom, 2016; Le, 2006; Nakatani, 2005) found that communication strategies instruction helped students to communicate more and enhanced their confidence in speaking in English.

Moreover, communication strategies can develop students' higher-order thinking skills as they allow them to exchange thoughts. This in turn broadens their perspectives, sharpens their own thoughts, and turns the language classroom into a community of thinkers.

Over and above, communication strategies bridge the gap between classroom and real-life communication and help students to overcome their communication problems in real life situations. If students lack these strategies, they will not be able to solve communication problems during daily life interactions; and as a result, they may avoid such interactions. Mariani (1994) expresses this in the following way:

Communication strategies train learners in the flexibility they need to cope with the unexpected and the unpredictable. At the same time, they help students get used to the non-exact communication, which is perhaps the real nature of all communication. In this way, they help to bridge the gap between the classroom and the outside reality, between formal and informal learning. (p. 57)

Finally, communication strategies are particularly useful to students with language learning disabilities who experience communication difficulties. This is simply because these strategies afford them a sense of security in language use and

extra room to maneuver in times of difficulty and increase their confidence to communicate in various ways and in a variety of settings. In support of this, Lam (2010) found that low-proficiency students did benefit from teaching communication strategies by "(a) reporting consistent increases in their frequency and variety of use of the whole range of target strategies ... and (b) making greater improvements, especially in the English score, in group discussion tasks than the high-proficiency students" (pp. 23-24).

### **3.4 A model for teaching communication strategies to students with oral communication disabilities**

Many communication scholars and researchers (e.g., Dornyei, 1995; Dornyei and Thurrell, 1991; Gladday, 2011; Manchón, 1988; Tarone, 1984) agree that students with and without learning disabilities are in need of communication strategies instruction to enable them to be effective communicators and participants in life. To meet the need of students with learning disabilities for such instruction, this section presents a multiple-strategies model for teaching these strategies to them to enable them to communicate efficiently and effectively and to repair communication breakdowns. This model is based on Wood, Bruner, and Ross's (1976) notion of scaffolding, Bandura's

(1977) social learning theory, and Long's (1981) interaction hypothesis. That is, the gradual release of responsibility from the teacher to the student lies at the heart of this model. To make this happen, the model proceeds through these four steps: (1) direct instruction of communication strategies, (2) application of communication strategies in teacher-student interaction, (3) application of communication strategies in student-student interaction, and (4) self-assessment of the use of communication strategies. These four steps are discussed in detail in the next subsections.

### **3.4.1 Direct instruction of communication strategies**

In this step, the teacher raises students' awareness of the communication strategies (one or more at a time until all are over throughout the course). S/he explains how, when, and why these strategies are used in oral communication. While doing so, s/he can make use of audio and video recordings of real conversations in different contexts. In advocacy of this step, the Department of Special Education and Communication Disorders (2016) argues that effective strategies instruction "goes well beyond merely presenting the steps in a strategy" and "provides students with the 'why' and 'how' of various strategy steps".

### **3.4.2 Application of communication strategies in teacher-student interaction**

Teacher-student interaction is a two-way process in which the teacher and the students participate in oral communication. This type of interaction is based on the concept of scaffolding introduced by Wood et al. (1976) and Vygotsky's (1978) zone of proximal development. In this type of interaction, the teacher interacts with students by using interactional patterns that elicit students' use of the communication strategies explained to them in step one. In other words, s/he supports students within their zone of proximal development to develop their strategic competence through the questions s/he asks, the speech modifications s/he makes, and the way s/he reacts to their responses. S/he also provides needed language to help them preempt communication breakdowns and extend their turns. All these in turn make communication strategies meaningful and functional to the students.

Moreover, students can absorb communication strategies through observation of the teacher's verbal behavior during this type of interaction. They notice the gap between the strategies they use and the strategies used by the teacher. When they realize that their message is not understood as intended, or that the teacher is

using a different strategy, they can modify their message and/or strategy accordingly. This in turn leads to the development of both the processes and outcomes of their interactions. As Hall and Verplaetse (2000) state, "It is in their interactions with each other that teachers and students work together to create the intellectual and practical activities that shape both the form and the content of the target language as well as the processes and outcomes of individual development" (p. 10).

More importantly, teacher-student interaction allows the teacher to continually and informally assess what students comprehend and express as well as the strategies they employ in expressing their own thoughts. This in turn allows the teacher to determine where scaffolding is needed to help students perfect their use of communication strategies. It also allows the teacher to give feedback to the students to help them maintain interaction and use the strategies under focus.

Furthermore, teacher-student interaction is extremely important for a positive relationship between students and teachers, which can in turn lead to better learning in general. In support of this, many researchers (e.g., Christophel, 1990; Gorham, 1988; Kelley and Gorham, 1988; Rodriguez, Plax and Kearney, 1996; Savage,

1998) found that teachers' verbal and non-verbal immediacy behaviors could lessen the psychological distance between themselves and their students, leading to greater learning and longer retention of information. Savage (1998), for example, found that students retained new information better when they interacted with the instructor. He further found that when teacher-student interactions elicited higher cognitive processes, students retained 80% to 85% of the new materials.

In recognition of the importance of teacher-student interaction, Rivers (2000b) states that "communication derives essentially from interaction" (p. xiii). Brown (2001) also asserts, "In the era of communicative language teaching, interaction is, in fact, the heart of communication: it is what communication is all about" (p. 165).

Overall, teacher-student interaction plays a key role in supporting students in attaining communication strategies and skills which could be impossible if students work on their own. It also has a positive effect on students' affective and cognitive outcomes. Moreover, it gives the instructor an opportunity to easily and quickly assess students' communication strategies and skills. However, for teacher-student interaction to harvest its



benefits, the teacher should avoid correcting students' errors explicitly and "treat the correction of linguistic errors as a pragmatic or interactional adjustment, not as a normative form of redress, for example, by restating the incorrect utterance in a correct manner rather than pointing explicitly to the error" (Kramsch, 1987, p. 23). This is simply because explicit error correction might make students feel embarrassed in front of their classmates and lead to their withdrawal from interaction. "Above all, criticism is usually counter-productive" (Gipps, 1994, p. 39).

Despite the importance of teacher-student interaction in scaffolding students' communication strategies and skills, the teacher should diminish such scaffolding as students begin to assume full control of the communication strategies under focus. S/he should move from this step to the next which is student-student interaction where students interact with each other in pairs or groups to achieve a clear communicative goal.

### **3.4.3 Application of communication strategies in student-student interaction**

This step is grounded in Vygotsky's (1962) social-constructivist theory and in the social-interactionist theory of language learning and development (Ellis, 1999; Gass, 2002; Long, 1981; Pica and

Doughty, 1985). In this step, the teacher gives students opportunities to use the communication strategies under focus in small-group interactional activities to achieve authentic communicative goals. Meanwhile, the teacher acts as a facilitator, offering suggestions and encouragement while following and observing students' interactions. S/he also assesses students' communicative competence, including their communication strategies, and (re)teaches weak areas in the first step (3.4.1) in the future.

Student-student interaction can play a key role in developing students' communication strategies and skills. In recognition of this, many applied linguists (e.g., Canale and Swain, 1980; Ellis, 1999; Hatch, 1978; Krashen, 1988; Long, 1985, 1996; Rivers, 2000a) assert that this type of interaction is essential for developing the learner's communicative competence of which strategic competence is an important part because it secures the reception of comprehensible input and the production of meaningful output. It also provides opportunities for actual practice in the use of communication strategies. As students negotiate for meaning and try to produce meaningful output, they use communication strategies to repair breakdowns and misunderstandings during the course of interaction. To name

only a few, they ask for help, repetition, clarification, and confirmation. They also use miming, nonverbal expressions to convey meaning and fillers to gain time to think. In this way, student-student interaction increases students' chances to use communication strategies in real situations which in turn develop their strategic competence. Students also receive feedback directly or indirectly from their interlocutors on communication strategies and language output, and modify the two based on this feedback.

In addition to allowing students to practice and apply communication strategies in real contexts, student-student interaction also plays an important role in developing students' linguistic competence. Through interaction, students can absorb grammatical forms, words, and expressions from each other, thus expanding their linguistic ability. In this regard, Hatch (1978) states, "One learns how to do conversation, one learns how to interact verbally, and out of this interaction syntactic structures are developed" (p. 404). In the same vein, Richards and Lockhart (1996) state:

Through interacting with other students in pairs or groups, students can be given the opportunity to draw on their linguistic resources in a nonthreatening situation and use them to complete different kinds of

talks. Indeed, it is through this kind of interaction that researchers believe many aspects of both linguistic and communicative competence are developed. (p. 152)

Strickland and Shanahan (2004) also assert that "[o]ral language development is facilitated when children have many opportunities to use language in interactions with adults and with one another" (p. 76). In support of the notion that student-student interaction develops students' linguistic competence, Mackey (1999) found a link between interaction and linguistic development. She further concluded that "[o]ne of the features that facilitate language development is learner participation in the interaction" (p. 573).

Furthermore, student-student interaction is a tremendously important means, if not the most important, for foreign language use. This is because it is difficult for learners to use the foreign language outside the classroom and because this type of interaction increases the amount of each student's participation time in language learning and her/his chances to use the foreign language for real purposes. This, in turn, leads to the development of linguistic and strategic competences. In support of this, Pica and Doughty (1985) found that individual students

appeared to have more opportunities to use the target language in groups than in teacher-fronted activities, through either taking more turns or producing more samples of their interlanguage. They further found that such opportunities had a positive effect on the development of their linguistic and strategic competences.

Moreover, student-student interaction encourages students, especially introvert ones who are irresolute to talk in front of the whole class or the teacher, to participate in communication activities using their available language skills. In this non-threatening atmosphere, students can speak freely and openly without being afraid of making mistakes. This atmosphere, according to Dornyei (1995), encourages students to take risks and use communicative strategies.

The importance of student-student interaction is not confined to the language learning, but extends to the development of thought and problem-solving abilities. It makes language learning more thoughtful and involves students in deep thinking, and this in turn leads to the development of their higher order thinking skills. This view is in line with the Vygotskian perspective which regards language learning as a social process and growth of mind as a product of interaction with other minds. Student-student

interaction has also been recognized by social cognition theorists as necessary to the development of higher mental processes. These theorists contend that such social interaction develops students' decision-making capabilities and sharpens their own thought because it allows them to exchange perspectives, weigh these perspectives, and select the best one based on reasoning. In support of this, Greene and Land (2000) found that peer interaction developed reflective thinking and problem solving skills. Anderson, Howe, Soden, Halliday and Low (2001) also found that peer interaction developed students' critical thinking skills.

Additional advantages of student-student interaction include developing students' self-confidence and social skills, establishing positive attitudes toward school, fostering motivation for learning, improving information retention, valuing students' past experiences and respecting their abilities, creating a sense of learning community that reduces learners' isolation and anxiety, preparing students to be effective citizens in a democratic society, and promoting their collaborative skills.

#### **3.4.4 Self-assessment of the use of communication strategies**

In this step, each student assesses the communication strategies s/he has employed during student-student interaction in relation to the quality of her/his oral performance. This in turn can generate her/his feelings of worth and build her/his self-efficacy and self-confidence. In addition, this step helps each student to:

1. recognize strengths and weaknesses in communication skills and strategies,
2. identify effective and ineffective communication strategies,
3. self-monitor communication behavior,
4. internalize effective communication strategies and standards for quality communication,
5. develop self-reflective and critical thinking skills, and
6. determine the next steps in learning.

To make it easy for the student to self-assess the communication strategies s/he has already used in relation to oral communication performance, the teacher should provide her/him with an assessment tool such as the one given in Figure 1.

Figure 1: A self-assessment tool of communication strategies

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Name: -----, Date: -----.

Topic of interaction: -----.

I. Check (✓) the box that indicates how you communicated with your peer(s)

1. I used a repertoire of strategies to communicate with my peer(s).

Yes

No

2. The communication strategies I used helped me to communicate effectively.

Yes

No

II. The communication strategies I found most useful were:

-----  
 -----  
 -----  
 -----.

III. The communication strategies I found difficult to use were:

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 -----  
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 -----.

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### **3.5 Research on teaching communication strategies to students with learning disabilities**

Numerous studies examined the effectiveness of communication and/or learning strategies in developing oral communication performance and strategic competence for normal students (e.g., Dadour and Robbins, 1996; Dornyei, 1995; Gan, Rafik-Galea and Chan, 2017; Khan, 2013; Kongsom, 2016; Kosar and Bedir, 2014; Larenas, 2011; Nakatani, 2010; Phaiboonnugulkij and Prapphal, 2013; Rabab'ah, 2015; Teng, 2012; Tian and Zhang, 2005; Yu, 2013). Yet, there is no research addressing the use of communication/learning strategies for developing learning disabled students' oral communication ability or strategic competence at the intermediate level and beyond. Research in this area is limited to investigating the effect of direct instruction in augmentative and alternative communication strategies with children with severe communication disabilities (see Snell, Chen and Hoove, 2006, 2018, for reviews of research in this area).

It appears then that there is a need for research studies on the effect of teaching communication strategies upon the oral communication skills of adolescents/adults with learning disabilities to test and develop the existing theoretical base.

## **Chapter Four**

### **Teaching Reading Strategies to Students with Comprehension Disabilities**

#### **4.0 Introduction**

Reading is the process of constructing meaning from a written text. As Wixson and Peters (1984) define it, reading is "the process of constructing meaning through the dynamic interaction among the reader's existing knowledge, the information suggested by the written language, and the context of the reading situation" (p. 4). Similarly, Durkin (1993) defines it as an "intentional thinking during which meaning is constructed through interactions between text and reader" (p. 5). Likewise, Harris and Hodges (1995) define it as "the construction of the meaning of a written text through a reciprocal interchange of ideas between the reader and the message in a particular text" (p. 39). By the same token, Shanahan et al. (2010) define it as "the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (p. 5).

As indicated, the previously-mentioned definitions of reading have at their core the idea that reading is comprehension and without comprehension the reader is not truly reading, but following words on a page from left to right. As Trehearne (2015) states, "Comprehension is what reading is all about. Decoding without comprehension is simply word barking" (p. 423). These definitions also have at their core the idea that comprehension results from the mental processes the reader employs to interact with the text. Readers who are successful in understanding what they read use various effective strategies to construct meaning from the text and to repair misunderstanding. In contrast, struggling readers, including students with reading disabilities, lack these strategies and strictly focus on decoding what they read. This, in turn, makes them just word barkers rather than successful readers because effective reading goes beyond decoding or deciphering words in a text.

Despite the fact that the essence of reading is comprehension and that comprehension is fundamental to success in education, most Egyptian students with and without learning disabilities face many difficulties in EFL reading comprehension. In support of this, El-Koumy (the author), found that approximately 70% of secondary school students without learning disabilities and more

than 98% of students with learning disabilities at the secondary school level in Egypt have reading comprehension difficulties in the following areas:

- identifying the relationship of each sentence to its predecessor in the text;
- identifying relationships between and among paragraphs in the text;
- identifying the logical connection among ideas in the text;
- inferring the author's purpose for writing the text;
- inferring ideas that are not explicitly stated in the text;
- inferring the author's attitude, tone, and bias within the text;
- inferring the author's assumptions that are not explicitly stated in the text;
- identifying similarities and differences among ideas;
- distinguishing relevant from irrelevant information;
- relating what is being read to background knowledge;
- identifying inconsistencies in text;
- identifying the author's viewpoint; and
- comparing and contrasting the main ideas in two texts on the same topic.

Much of the literature suggests that a prominent reason for the reading comprehension difficulties faced by students with

reading disabilities after the primary grades is the lack of appropriate comprehension strategies. Many reading scholars (e.g., Biancarosa and Snow, 2004; Bos and Anders, 1990; Fowler, 2003; Roberts, Torgesen, Boardman and Scammacca, 2008) agree that students with learning disabilities who continue to struggle with reading comprehension after the primary grades lack the effective reading strategies that enable them to comprehend what they read. Bos and Anders (1990), for example, argue that students with learning disabilities, who face reading difficulties in the intermediate and secondary grades, "need to use a cadre of cognitive and metacognitive strategies for negotiating informational text" (p. 166). In the same vein, Thompson (1993) claims that problems in comprehension are attributed to the lack of instruction in reading strategies and students who lack adequate and effective comprehension strategies struggle to achieve comprehension. By the same token, Roberts et al. (2008) affirm that in contrast to good readers, older students with learning disabilities do not employ effective reading strategies to repair comprehension breakdowns. They maintain:

Good readers monitor their understanding by linking new information with prior learning and, when comprehension breaks down, by deploying appropriate repair strategies, like adjusting their

reading rate or strategically rereading passages. Struggling readers, even those with adequate word-level skills and acceptable fluency, often fail to use these types of strategies, either because they do not monitor their comprehension or because they lack the necessary tools to identify and repair misunderstandings when they occur. (p. 66)

Research also showed that students with learning disabilities do not apply strategies to help themselves comprehend what they read (Englert et al., 2009; Englert and Thomas, 1987). More specifically, research revealed that these students experience serious difficulties in making inferences (Holmes, 1985), relating new information to background knowledge (Johnson, Graham and Harris, 1997), predicting and summarizing text ideas (Mastropieri and Scruggs, 1997), guessing the meaning of difficult words from the context (Meng, 2002), and using comprehension strategies across the reading process (Gersten, Fuchs, Williams and Baker, 2001; Mastropieri, Scruggs, Bakken and Whedon, 1996). In addition, research showed that students with learning disabilities cannot monitor their own comprehension (Bos, Anders, Filip and Jaffe, 1989; Fowler, 2003; Wong, 1994) and have less metacognitive knowledge and weaker control of their reading comprehension processes than

normal students (Baker and Brown, 1984; Garner, 1987; Hacker, 1998).

Another reason for the poor reading comprehension of students with learning disabilities, particularly in the Egyptian context, is that EFL teachers always focus on decoding skills, rather than comprehension. Therefore, Egyptian EFL students with learning disabilities and other struggling readers often do well with decoding but struggle with comprehension. They absolutely decode reading passages word by word, but they cannot make sense of entire paragraphs and passages. In other words, they cannot go beyond decoding words and locating explicit information in a text. Such mere decoding cannot actually lead to comprehension. In agreement with this inference, Schoenbach, Greenleaf, Cziko and Hurwitz (1999, cited in Herczog and Porter, 2010, p. 9) are of the opinion that mere decoding does not guarantee comprehension in the following way:

Most older students who struggle with reading do not have decoding problems; they struggle with comprehension. Consequently, these students do not need assistance with decoding. In fact, focusing on decoding skills with these students is counterproductive because it sends a message that reading is mainly about correct pronunciation, not understanding content. (p. 9)

To help students with learning disabilities overcome their reading comprehension difficulties, many reading scholars (e.g., Bongratz, Bradley, Fisel, Crcutt and Shoemaker, 2002; Carlisle and Rice, 2002; Cramer, Fate and Lueders, 2001; Graham and Bellert, 2004; Lysynchuk, Pressley and Vye, 1990; Marchand-Martella and Martella, 2012) recommend providing comprehension strategies instruction to these students to enable them to select and use appropriate and effective strategies to gain better understanding of what they read. Quoting Carlisle and Rice (2002), Graham and Bellert (2004, p. 274), for example, state:

Unless the challenge of incorporating strategy instruction productively into school systems is met, we will continue to experience the situation where "many of the instructional practices that have the most potential to make a meaningful difference for students with LD and other poor readers are seldom employed" (Carlisle & Rice 2002).

It is evident then that the use of comprehension strategies as an instructional intervention can improve the reading comprehension of students with learning disabilities. In support of this intervention, in their review and synthesis of research on reading comprehension interventions for students with learning disabilities, Gersten and Baker (1999) recommend that students



with learning disabilities "need to learn an array of strategies to enhance their understanding of the narrative and expository material they read" (p. 5). Likewise, in his meta-analysis study of the reading comprehension interventions conducted between 1985 and 2005 for students with learning disabilities, Sencibaugh (2005) concludes:

Impressive gains in reading for students with learning disabilities are possible (Torgesen et al., 2001; Vaughn et al., 2002) especially if the instructional process utilizes strategy instruction to assist the students with organizing the material. As revealed in the results of this study, strategy instruction strongly impacts the reading comprehension of students with learning disabilities based on the notion that students with learning disabilities are inactive learners with metacognitive deficits (Deshler, Ellis, & Lenz, 1996); therefore, they benefit greatly from training in such strategies as activating prior knowledge and organizing and summarizing text (Mastropieri & Scruggs, 1997). (p. 11)

Moreover, in her review of the reading comprehension interventions for students with reading disabilities between 2006 and 2011, Scott (2012) concludes that "extensive research has shown large effect sizes on reading comprehension of students with reading disabilities and reading difficulties when the students were given explicit instruction in

comprehension strategies" (p. 25). More than that, in their review of evidence-based strategies for improving the reading comprehension of secondary school students with learning disabilities, Watson, Gable, Gear and Hughes (2012) conclude:

Indeed, there is a substantial body of evidence to support the notion that reading strategies enhance student comprehension of text material (Bereiter & Bird, 1985; National Reading Panel, 2000; Pressley & Woloshyn, 1995; Williams, 2005). That same literature shows that academically successful students tend to rely on reading strategies more than their less successful counterparts (Chi & Bassok, 1989; Trabasso & Bouchard, 2002). (p. 82)

Over and above, research demonstrates that students with learning disabilities can be taught to successfully use reading comprehension strategies (e.g., Bakken, Mastropieri and Scruggs, 1997; Englert and Mariage, 1991; Gardill and Jitendra, 1999; Johnson, Graham and Harris, 1997; Nelson, Smith and Dodd, 1992). Therefore, the present chapter will deal with reading comprehension strategies from all aspects. It will also offer a four-step model for teaching these strategies to students with learning disabilities. Finally, it will address the reciprocal teaching method as an example of instructional methods for teaching multiple comprehension strategies.

#### **4.1 Definition of reading strategies**

Reading comprehension strategies are specific procedures used by readers to make sense of written texts. Sheorey and Mokhtari (2001) define these strategies as “deliberate, conscious procedures used by readers to enhance text comprehension” (p. 433). Pani (2004) also defines them as mental operations used by readers to make sense of what they read. In nearly the same words, Kamil et al. (2008) define these strategies as "procedures that readers use to help them make sense of texts" (p. 16). By the same token, Pilonieta (2010) defines them as "conscious, deliberate, and flexible plans readers use and adjust with a variety of texts to accomplish specific goals" (p. 152). Similarly, Trehearne (2015) defines them as "conscious plans...that good readers use to make sense of text when reading" (p. 446). According to Alabama Department of Education (2015), these strategies are "specific actions that readers use as they attempt to make sense of text" (p. 68). In essence, reading comprehension strategies are conscious procedures that help readers comprehend what they read and repair comprehension breakdowns when they occur. Thus, these strategies are a means to an end rather than the end itself.

## **4.2 Classification of reading strategies**

Reading comprehension strategies were classified differently by reading scholars. Some scholars (e.g., Levin and Pressley, 1981; Palincsar and Brown, 1984; Paris, Lipson and Wixson, 1983; Paris, Wasik and Turner, 1991; Pressley, 2000; Vaughn and Linan-Thompson, 2004) classified these strategies on the basis of the logical order in which they take place, i.e., pre-reading, while-reading, and post-reading strategies. The pre-reading strategies include, but are not limited to, setting goals for reading, activating prior knowledge by thinking about what is already known about the topic, making predictions, previewing, generating questions about the title of the text, and skimming. The while-reading strategies include, but are not limited to, guessing the meaning of words from the context, identifying the main ideas in the text, identifying supporting details, generating questions about information in the text, visualizing, making connections among ideas, clarification, making inferences, and note-taking. The post-reading strategies include, but are not limited to, summarizing, reviewing, elaborating, re-reading key points, and evaluating.

On the basis of the cognitive and metacognitive learning theories, some other reading scholars (e.g., Abbott, 2006, 2010; Aghaei and Pillaie, 2011; Eskey, 2005; Fowler, 2003; Lee-Thompson, 2008; Rao, 2003) classified reading strategies into two broad categories: cognitive strategies and metacognitive strategies. The cognitive strategies are further subdivided into bottom-up (local) strategies and top-down (global) strategies. The former type of cognitive strategies involves readers in breaking down the text into its component units of meaning. It includes, but not limited to, analyzing unknown words into morphemes to identify their meanings, analyzing sentences in the text to determine their meanings, scanning the text for explicitly stated information, rereading, and literal translation. The latter type of cognitive strategies involves readers in synthesizing the text by merging their thinking with the author's to create something new. It includes, but not limited to, predicting, previewing, relating text to prior knowledge or experience, guessing meaning from contexts, paraphrasing, drawing inferences, formulating questions, and summarizing. The metacognitive strategies involve readers in managing and evaluating their use of cognitive strategies. They include planning, comprehension monitoring, and evaluating one's own cognitive strategies.

In reference to the social constructivist theory, social reading theorists (e.g., Barton, 1994; Cook-Gumperz, 2006; Grabe, 2009; Green, 1990; Street, 1984) offered social reading strategies for developing reading comprehension as a social act. These social reading strategies include, but are not limited to, asking for clarification of confusing or conflicting parts of the text when they cannot be resolved on one's own, paired reading, collaborative strategic reading, jigsaw reading, peer interaction around the text, reciprocal teaching, small-group discussion of text, sharing prior knowledge and experiences related to the text, and asking for text evidence.

Proceeding from the affective learning theory, some reading scholars (e.g., Anderson, 1999; Baker and Boonkit, 2004; Guthrie, 2008; Guthrie and Knowles, 2001; Guthrie and Wigfield, 2000; Zeynali, Zeynali and Motlagh, 2015) came up with affective strategies for developing positive affect for reading and improving students' reading comprehension performance. These affective strategies include, but are not limited to, self-regulation of emotions and attitude toward reading, generating and maintaining motivation for reading, strengthening and maintaining self-efficacy beliefs about reading, lowering reading anxiety, rewarding oneself for a higher

level of comprehension, encouraging oneself during reading using positive self-talk, and reading about topics of interest.

The previously mentioned taxonomies of comprehension strategies appear to be complementary because reading is a highly complex activity, including cognitive, metacognitive, social, and affective aspects, and readers need to apply various types of strategies—before, during, and after reading—to comprehend various types of texts in various contexts. In a sense, the more various strategies a reader has at her or his disposal, the more likely s/he will comprehend what is being read in isolation and in social encounters.

### **4.3 Essential strategies for reading comprehension**

There are numerous reading strategies as mentioned earlier. Yet, there are some strategies that are essential to students with and without learning disabilities to achieve comprehension. In this respect, some reading scholars (e.g., Cunningham and Allington, 1994; Trehearne, 2015) identify reading comprehension strategies that are worth teaching from a theoretical point of view. Cunningham and Allington (1994), for example, suggest what they call "necessary strategies" that readers need to use for comprehending what they read. These strategies are: calling up

relevant background knowledge, predicting what will happen, making mental pictures, self-monitoring, re-reading, asking for help, identifying the most important ideas and events and seeing how they are related, questioning, drawing conclusions, making inferences, comparing and contrasting what is being read and what the reader already knows, guessing the meaning of unknown words, and summarizing what has been read. Along the same line, Hollas (2002) identifies seven strategies that a strategic reader should employ in content areas. These strategies are: predicting, visualizing, locating and connecting ideas, questioning, clarifying, summarizing, and evaluating what has been read. In the same vein, Trehearne (2015) categorizes eight reading strategies that can result in deep comprehension. These strategies are: monitoring comprehension, mental imagery, verbalization of text, predicting, summarizing, recognizing text structure, question generation, and question answering.

Some other reading scholars (e.g., Palincsar and Brown, 1984; Pressley, Johnson, Symons, McGoldrick and Kurita, 1989; Pressley, Levin and Ghatala, 1984; Swanson and De La Paz, 1998) identify reading strategies that promote comprehension based on research evidence. According to these scholars, effective strategies are those strategies supported by research



evidence. They further emphasize that recommended strategies must have proven their worth in studies that permit cause-and-effect conclusions. Swanson and De La Paz (1998), for example, point out that each recommended strategy should have been formally evaluated and found to be effective for improving learners' reading comprehension. They add that the compilation of the reading strategies should be inspired by contemporary reading research in explicit strategy instruction programs. Based upon this perspective, Palincsar and Brown (1984) identified four important reading strategies for teaching reading comprehension to special needs students. These strategies are: predicting, summarizing, clarifying, and question generation. The teaching of these four strategies is known as reciprocal teaching in the literature. They (Palincsar and Brown) conducted a series of studies in which they taught special education middle-school students to use these strategies over an extended period of time. These studies revealed that the teaching of this repertoire of strategies had beneficial effects on the reading performance of special needs students (see section 4.6.6).

In the same vein, Pressley, Johnson, Symons, McGoldrick and Kurita (1989) surveyed and reviewed relevant experimental studies that demonstrated the potency of a range of reading

comprehension strategies. They identified summarization, representational- and mnemonic-imagery, story grammar, question generation, question answering, prior-knowledge activation, and making inferences as being supported by a substantial evidence base.

By the same token, based on an analysis of more than 200 published studies from the past two decades, the National Reading Panel (2000) found eight reading strategies that were most effective and most promising for improving reading comprehension. These strategies are: comprehension monitoring, collaborative strategic reading, graphic and semantic organizers, story mapping, question answering, question generation, summarizing, and using multiple strategies. In addition to these eight strategies, the National Reading Panel found varying degrees of research support for several additional strategies, including prior knowledge activation, mental imagery, and mnemonics.

Likewise, in their review of the effective practices for developing reading comprehension, Duke and Pearson (2002) identified six reading strategies that research suggests for developing this skill. These strategies are prediction, think-aloud,

recognizing text structure, visual representations, summarization, and questioning. Furthermore, in their review of the essential elements of fostering and teaching reading comprehension, Duke, Pearson, Strachanm and Billman (2011) point out that the list of strategies that research indicated are worth teaching varies from one research review to another but often includes the following:

- setting purposes for reading;
- previewing and predicting;
- activating prior knowledge;
- monitoring, clarifying, and fixing;
- visualizing and creating visual representations;
- drawing inferences;
- self-questioning and thinking aloud;
- summarizing and retelling. (p. 64)

In essence, with the fact in mind that different terminologies are sometimes used for the same strategy, it seems that reading theoreticians and researchers agree to a great extent on the essential strategies for improving the reading comprehension of adolescent students with and without reading disabilities. It also seems that these strategies play a significant role in text comprehension because they all require the application of higher-level comprehension-building processes. Therefore, it is

highly recommended that teachers should devote specific attention to these strategies before shifting to other strategies.

#### **4.4 Benefits of reading strategies**

The importance of reading comprehension strategies is widely recognized in the literature. Foremost, these strategies are necessary for meaningful learning and deeper understanding from text to occur. As Alexander and Jetton (2000) point out, "Strategies are essential tools in learning. It is unfathomable to expect meaningful learning from text to occur without some evidence of strategic processing" (p. 295). Similarly, Thompson (2000) puts this benefit as follows:

Comprehension strategies are useful in helping students in the preparing, organizing, elaborating, rehearsing, and monitoring of text as it is being read. Student should be taught how to use comprehension strategies and typographical signals to understand the author's intended message. (p. 6)

In the same vein, Gooden (2012) asserts that teaching comprehension strategies helps students "become flexible thinkers who can approach a variety of texts with a repertoire of strategies, thus helping them to better comprehend those texts" (p. 17). In support of this, many studies (e.g., Crabtree, Alber-Morgan and Konrad, 2010; Gersten, Fuchs, Williams and Baker,

2001; Jitendra, Cole, Hoppes and Wilson, 1998; Jitendra, Hoppes and Xin, 2000; Rosenshine and Meister, 1994; Rosenshine, Meister and Chapman, 1996) showed that strategy instruction improved the reading comprehension of students with and without learning disabilities. Numerous studies (e.g., Arabsolghar and Elkins, 2001; Dreyer, 1998; Kozminsky and Kozminsky, 2001) also showed a positive relationship between reading strategy use and reading comprehension.

In addition, comprehension strategies instruction can promote self-regulation, foster independent reading, and lay the foundation for lifelong learning. This in turn can positively influence students' self-efficacy beliefs, help them to continually flourish, and encourage them to participate as thoughtful literate members in this complex world. In support of this, research studies revealed that comprehension strategies instruction developed independent readers (Kavani and Amjadiparvar, 2018; McCrudden, Perkins and Putney, 2005; Nash-Ditzel, 2010), enhanced self-efficacy beliefs about reading comprehension (McCrudden et al., 2005; Van Keer and Verhaeghe, 2005), fostered motivation for reading (Guthrie, Wigfield and VonSecker, 2000; Kavani and Amjadiparvar, 2018; Pressley,

1998; Wang, 2009), and promoted positive reading attitudes (Ballou, 2012; Oka and Paris, 1987; Stevens, 1988).

Above all, reading comprehension strategies instruction is particularly beneficial to struggling readers, including those with learning disabilities. Ruffin (2009) expresses this in the following way:

Students with learning disabilities often experience deficits in comprehension; therefore, reading comprehension strategies are relevant. Reading without comprehension seems pointless and not reading strategically or employing a technique to monitor comprehension is likely to add frustration and anxiety to the reader causing significant difficulty with understanding in the reading process. Students with learning disabilities must find meaningful ways to complete the task of gaining understanding from written text, and reading comprehension strategies offer avenues for improving or increasing reading comprehension. (p. 24)

Likewise, Pilonieta (2010) argues that "[i]nstruction in comprehension strategies is particularly important for struggling readers as they are unlikely to discover these strategies on their own" (p. 152). In support of teaching reading comprehension strategies to struggling readers, including those with learning disabilities, many studies provided evidence that training in these

strategies improved the reading comprehension of those students (for a review of these studies, see section 4.6.6 of this chapter).

#### **4.5 A model for teaching reading strategies to students with comprehension disabilities**

Reading comprehension strategies do not come naturally to students, particularly to those with learning disabilities. Therefore, these students need the teacher's support with a gradual reduction in the amount of this support so that they can eventually apply these strategies without assistance. In this sense, the author developed a four-step model for teaching and applying comprehension strategies based on Wood et al.'s (1976) notion of scaffolding, Bandura's (1977) social learning theory, and Vygotsky's (1978) zone of proximal development. These four steps are: (1) teacher modeling of reading comprehension strategies, (2) peer modeling of comprehension strategies, (3) independent use of comprehension strategies, and (4) self-assessment of the use of comprehension strategies. These steps are discussed in detail in the next subsections.

##### **4.5.1 Teacher modeling of reading comprehension strategies**

Teacher modeling lies at the heart of teaching reading strategies to students with learning disabilities. In this step, the teacher

assumes full responsibility for teaching the targeted strategies. S/he demonstrates the use of three comprehension strategies at a time across the three stages of the reading process (i.e., pre-, during-, and post- reading) in a real reading context, one for each stage, until all reading strategies are over throughout the course. In doing so, s/he thinks aloud to make the mental processes underlying each strategy overt and to help students gain insights into when, where, and how the strategy should be used. In this way, s/he can demystify the reading strategies by revealing the behind-the-scenes process required for each strategy. Meanwhile, the students observe the teacher's use of the strategy and listen to her/his thinking.

In support of teacher modeling of a variety of comprehension strategies across the three stages of the reading process (i.e., before, during, and after reading), analyses of readers' behaviors (e.g., Brown, Pressley, Van Meter and Schuder, 1996; Bryant, Ugel, Thompson and Hamff, 1999; Roberts et al., 2008) revealed that successful readers do not use a single potent strategy but incorporate and coordinate a variety of strategies across the stages of the reading process. Successful readers also reported using more reading strategies while performing reading tasks

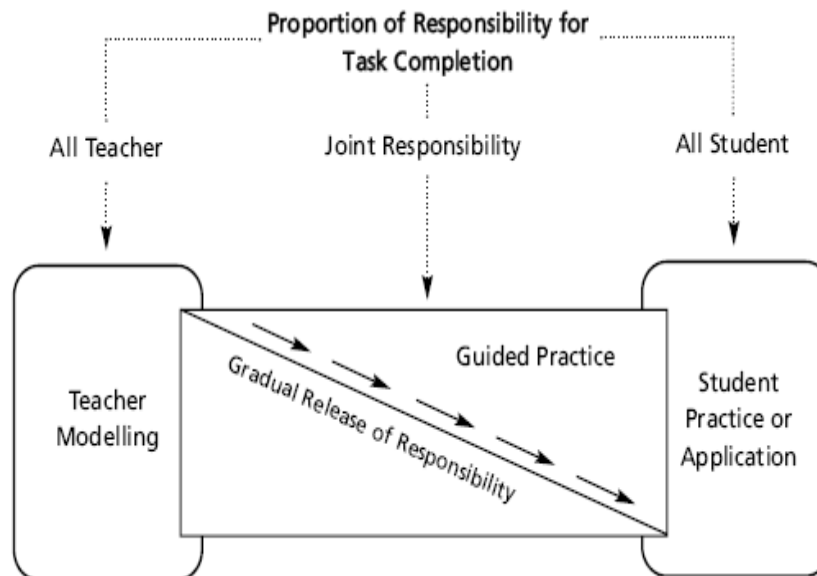


than less successful readers (Grabe and Stoller, 2002; Singhal, 2001; Stoller, 2002; Vacca, 2002).

For teacher modeling to be more effective, it should include discussion about the strategy under focus. Such discussion, as Lenz, Ellis and Scanlon (1996) argue, helps the teacher to determine how well the students understand when and where they should use the strategy and the steps of applying it. Blair, Rupley and Nichols (2007) add that teacher-student discussion during modeling allows students to get inside the teacher's mind so that they can efficiently and effectively use these strategies in their own reading.

Over and above, teacher modeling should be temporary just like scaffolding in construction engineering. As Nunan and Bailey (2009) put it from the construction engineering perspective, "The scaffold is there to help the workers reach the problem areas or unfinished areas that need attention. When those areas have been dealt with, the scaffolding is removed. It is an intentionally temporary structure" (p. 178). From the pedagogical perspective, the same notion is expressed diagrammatically by Pearson and Gallagher (1983) in Figure 2.

Figure 2: Gradual release of teacher responsibility (Pearson and Gallagher, 1983)



#### 4.5.2 Peer modeling of reading comprehension strategies

In this step, students alternately model the reading strategies under focus to each other while reading a new text in peer groups. This takes place in the form of a reciprocal dialogue in which peers take turns assuming the role of a teacher in leading the dialogue about a part of the text. While doing so, the teacher moves among peers to offer assistance whenever needed and to pay particular attention to the strategies they are using (or not using) to determine where her/his future modeling is needed.

In addition to increasing students' chances to observe and use reading strategies in real situations, peer modeling involves listening to each other's ideas and interpretations and providing evidence from the text to support one's thinking, thereby assisting each other in attaining higher levels of thinking and comprehension which will be impossible if students work individually. As Tovani (2004) points out, "Good readers use talk and collaboration with peers to extend their thinking about text" (p. 98). Peterson and Eeds (1990) also assert that:

Dialogue puts forward a new story line, puts events and relationships into a new light. Our basis for interpreting the text is broadened. In working together to disclose a deeper level of meaning, each participant's imagination is enriched and the potential for meaning construction is expanded. (p. 29)

Moreover, participation in the peer-led dialogue plays a key role in developing students' communication skills and fostering their self-confidence and self-efficacy. It also provides an opportunity for greater amounts of student verbalization which can promote students' linguistic competence. In support of the effectiveness of peer modeling, Palincsar, Brown and Martin (1987) found that peer interaction resulted in equal gains in reading comprehension comparable to interactions between the teacher and the students. Furthermore, Fuchs, Fuchs and Kazdan (1999) found a

statistically significant positive effect of peer-assisted learning strategies on the reading comprehension of high school students with serious reading problems. Van den Branden (2000) also found that students who engaged in conversation around texts had higher comprehension than those who did not negotiate the meaning of texts. She further explained that higher comprehension might have resulted from the challenges of explaining oneself to others or the collaborative effort to repair breakdowns in comprehension. Moreover, Chinn, Anderson and Waggoner (2001) found that text-based discussion among students increased higher level thinking and overall reading engagement more than recitation methods of interaction (e.g., Initiate-Respond-Evaluate).

#### **4.5.3 Independent use of reading comprehension strategies**

Independent use of the strategies under focus happens when the teacher is convinced that students can use these strategies on their own. In this step, each student independently applies the comprehension strategies—already modeled in the previous steps—to a new paragraph or text, and the teacher completely withdraws her/his support. That is, each student performs the strategies depending on her or his own without the help of others. While so doing, the teacher moves among individuals to

make sure that each student is engaging in using the strategies under focus.

#### **4.5.4 Self-assessment of the use of reading comprehension strategies**

In this step, each student assesses the reading strategies s/he has already employed across the various stages of the reading process (i.e., before, during, and after reading) in the previous step in relation to her/his own comprehension. This step is necessary for the student to know whether or not comprehension has occurred, and whether or not the strategies s/he employed were effective. It also develops her or his ability to take control of the reading process and fosters her or his self-reflection, self-efficacy, self-confidence, and self-esteem.

To make it easy for the student to self-assess the reading strategies s/he has already used, in relation to her/his own comprehension, the teacher should provide her/him with an assessment tool. If such a tool is developed in collaboration with students, they will gain a clearer understanding of how to use it and develop a sense of its ownership. After independent use of this tool, the teacher should read each student's responses to this tool and discuss them with her/him in an individual conference.

If the teacher has no time to develop a tool for self-assessment, s/he can select or adapt an existing tool such as the one presented in Figure 3.

Figure 3: A self-assessment tool of reading comprehension strategies (adapted from Williamson, McMunn and Reagan, 2004, p. 17)

---

Name: ----- Date: -----

Title of reading passage: -----

I. Check (✓) the box that indicates how you read.

1. I used a repertoire of reading comprehension strategies.

Yes

No

2. The strategies I used helped me to deeply comprehend what I read.

Yes

No

II. The reading strategies I found most useful were:

-----  
 -----  
 -----  
 -----

III. The reading strategies I found difficult to use were:

-----  
 -----  
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To conclude this section, there are two important considerations that should be taken into account when using the author's model for teaching reading comprehension strategies to students with reading comprehension disabilities. These considerations are the following:

**1. The teacher should model various reading strategies across the reading process**

It is widely recognized and proved that deep comprehension requires readers to apply and orchestrate a repertoire of strategies before, during, and after reading. As Williamson, McMunn and Reagan (2004) put it:

Before, during, and after reading, effective readers apply multiple strategies flexibly, selectively, independently, and reflectively. For example, they identify purposes in reading, make predictions, and check them as they read, and they ask insightful, reflective questions about what they are reading. They have a number of strategies they use and do not over rely upon one or two strategies. They also know how to use different strategies in different contexts. (p. 6)

With particular reference to students with comprehension disabilities and those with reading comprehension difficulties in general, the NSW Centre for Effective Reading (2013) expresses the same view in the following way:

Successful readers use multiple cognitive strategies in a flexible and personalised way to comprehend text. These readers also use metacognitive processes to regulate their use of strategies, monitor for comprehension breakdown and apply alternate strategies to improve their understanding. Students with disabilities and those with reading difficulties require explicit teaching to do this. (p. 113)

To put it another way, the more strategies a reader has at her or his disposal, the more likely she or he will be able to interact meaningfully with a given text and to better comprehend it. In support of the development of a repertoire of reading strategies for comprehension, research (e.g., Harris and Pressley, 1991; Kaufman, Randlett and Price, 1985; Pressley, 1995) indicates that successful readers apply a wide range of strategies to comprehend what they read and that the ability to coordinate and make associations among various reading strategies is a major distinction between good and poor readers.

In addition, many research studies showed that teaching a variety of reading strategies was more effective in improving reading comprehension and recall of information from texts than single strategy instruction (e.g., Baker, 2002; Brown, 2002; Klingner and Vaughn 1996; Palincsar and Brown, 1984; Pressley, 2002; Pressley and Wharton-McDonald, 1997;



Reutzel, Smith and Fawson, 2005; Sporer, Brunstein and Kieschke, 2009). Reutzel et al. (2005), for example, found that introducing a set of strategies briefly and then quickly moving students to applying or juggling multiple strategies simultaneously was more effective than spending several weeks focusing on a single strategy. In addition, several reviews of research on reciprocal teaching as a method of multiple-strategies comprehension instruction (e.g., Moore, 1988; Park, 2008; Rosenshine and Meister, 1994) revealed that teaching students a repertoire of strategies—from which they could draw during independent reading—led to improving the reading comprehension of all types of students, including those with learning/reading disabilities. Moreover, based on a review of research studies on reading strategies instruction, the National Reading Panel (2000) supports the same consideration in the following way:

Reading requires the coordinated and flexible use of several different kinds of strategies. Considerable success has been found in improving comprehension by instructing students on the use of more than one strategy during the course of reading. Skilled reading involves an ongoing adaptation of multiple cognitive processes....Being strategic is much more than knowing the individual strategies. When faced with a comprehension problem, a good strategy user

will coordinate strategies and shift strategies as it is appropriate to do so. (p. 4-47)

The National Reading Panel's report on effective reading instruction practices also demonstrated the value and usefulness of teaching a variety of reading comprehension strategies to students of all ages as follows:

The empirical evidence reviewed favors the conclusion that teaching of a variety of reading comprehension strategies leads to increased learning of the strategies, to specific transfer of learning, to increased memory and understanding of new passages, and, in some cases, to general improvements in comprehension. (NRP, 2000, p. 4-51)

Furthermore, on the basis of their review of research evidence on effective intervention practices for improving adolescent literacy, Kamil et al. (2008) concluded that "multiple-strategy training results in better comprehension than single-strategy training" (p. 17).

## **2. Reading strategies instruction should occur in authentic reading contexts during regular classroom activities**

The teacher should integrate reading strategies instruction with the authentic tasks and materials used in the regular reading

program because this makes the strategies more engaging and more meaningful and encourages their transfer to similar tasks beyond the classroom. Along this line of thinking, many practitioners and researchers recommend teaching learning strategies in authentic contexts that are relevant and appropriate for their use. O'Malley (1987), for example, asserts that strategy training should be interwoven into regular L2 activities and be undertaken over a long period of time (a semester or a year) rather than taught as a separate, short intervention. Ehrman, Leaver and Oxford (2003) go so far as to state, "A given learning strategy is neither good nor bad; it is essentially neutral until it is considered in context" (p. 315). Specifically, Pilonieta (2010) argues that authentic texts are more engaging to students and support reading comprehension strategy instruction. As experimental evidence for this argument, Takallou (2011) found that the students who were taught reading strategies through authentic reading materials performed better than those who used non-authentic materials.

With the previously mentioned considerations in mind, it appears that multiple reading strategies instruction in authentic reading contexts will be highly effective for students with learning disabilities. In this light, the next section will address

reciprocal teaching as a multiple-strategies method that takes these two considerations into account.

## **4.6 Reciprocal teaching**

### **4.6.1 Definition of reciprocal teaching**

Reciprocal teaching (RT) is a multiple-strategies method for teaching reading comprehension. This method is particularly developed for struggling readers and framed around shifting the responsibility gradually and systematically from the teacher to the students, thus enabling the struggling reader to internalize the use of the four strategies of this method and assume total responsibility for implementing them independently and effectively for all reading assignments.

### **4.6.2 Reciprocal teaching strategies**

The four strategies that traditionally constitute reciprocal teaching are: questioning, clarifying, summarizing, and predicting. In Palincsar and Brown's (1984) view, these four strategies provide a dual function; that is, they embody both comprehension-monitoring and comprehension-fostering activities. The role of each of these strategies is explained in the following subsections.

#### **4.6.2.1 Questioning**

Questioning draws students' attention to the main ideas and urges them to check on understanding of what they are reading (King, Biggs and Lipsky, 1984). It also promotes higher-order thinking (Bates, Galloway, Homer and Riise, 2014) and improves comprehension level (Bugg and McDaniel, 2012). It moreover provides more opportunities to interact with the text and strengthens information retention (Graham and Hebert, 2010, Swanson and De La Paz, 1998). Furthermore, questioning is an effective strategy that can be used with students of all ages and levels. Specifically, struggling and learning disabled readers can increase their reading comprehension via self-questioning (Clark, Deshler, Schumaker and Alley, 1984). In support of the benefits of question generation, research showed that training in question and answer relationship benefited average and lower level performing readers (Raphael and Pearson, 1985). Moreover, Wong and Jones (1982) found that eighth- and ninth-grade students with learning disabilities who were taught to use the self-questioning strategy performed better on a number of measures—including gist recall, idea unit identification, and factual recall—than students who received no training. Davey and McBride's (1986) study also showed that students' reading

comprehension in the question-generation group was better than students in the read-reread group. Furthermore, Rost and Ross (1991) found that "prior training of learners in specific questioning strategies can exert an effect on their subsequent behavior in interactions and can influence their immediate comprehension of a text as well" (p. 235). In addition, Taboada (2012) found that text-based question generation "contributes to ELLs' [English language learners'] reading comprehension and conceptual knowledge in the content area of science" (p. 87).

#### **4.6.2.2 Clarifying**

Clarification is needed when confusing information is encountered, difficult concepts are presented, or ideas are not understood. Readers use this strategy to clarify what is unclear when comprehension is not progressing before excessive breakdowns occur. This strategy also supports readers' efforts to monitor their comprehension and engages them in a critical evaluation of their own comprehension. These potentials can, in turn, improve their reading comprehension. This is exactly what was found by Pracejus (1974).

#### **4.6.2.3 Summarizing**

Summarizing a text "requires readers to sift through large units of text, differentiate important from unimportant ideas, and then synthesize those ideas and create a new coherent text that stands for, by substantive criteria, the original" (Dole, Duffy, Roehler and Pearson, 1991, p. 244). Thus, teaching students to summarize what they read can improve their overall comprehension of text. In support of this strategy as one of the effective strategies for improving reading comprehension, Gajria and Salvia (1992) found that middle school students with learning disabilities who were trained to summarize expository prose passages performed better on multiple choice questions than those in a no-treatment comparison group and that the summarization strategy was maintained over time and students generalized its use to other tasks. Graham and Hebert (2010) also found that writing summaries about texts was associated with improvements in reading comprehension. They also found that writing summaries about a text was "better than simply reading it, reading and rereading it, reading and studying it" (p. 16).

#### **4.6.2.4 Predicting**

Prediction occurs when students anticipate what they will meet in the text or the next paragraph. The literature confirms that this

strategy is effective for fostering reading comprehension. When readers make predictions about what is going to be next, they tap into their own prior knowledge. This in turn activates their schema which deepens their understanding of the textual information and improves their retention of this information. If such schema is not activated, students may fail to comprehend text material (McNeil, 1992). In support of this, research (e.g., Alfaki and Siddiek, 2013; Langer 1984) has shown that prior knowledge activation enhances reading comprehension.

Prediction also allows students of varying abilities to contribute their ideas and guides them to set purposes for reading (Hashey and Connors, 2003; Oczuks, 2003). It moreover motivates readers to read actively and helps to build their independence. These potentials can, in turn, lead to the improvement of the reading comprehension of struggling readers, including those with reading comprehension disabilities. In support of this, many research studies revealed that this strategy, whether used alone or in combination with other reading strategies, could improve struggling readers' comprehension (El-Koumy, 2006; Fabrikant, Siekierski and Williams, 1999; Sears, Carpenter and Burstein, 1994; Tancock, 1994; Van Riper, 2010; Wulandari, Sukirlan and Sudirman, 2014).



As mentioned before, there are four main strategies that traditionally constitute reciprocal teaching. Yet, these strategies have had many adaptations and extensions over time. Many practitioners and researchers (e.g., Coley, DePinto, Craig and Gardner, 1993; Hacker and Tenent, 2002; Marks et al., 1993; Meyer, 2010) have adapted these strategies to suit their local context, subject area and student learning needs. Meyer (2010), for example, extended these strategies to include orientating; connecting the text to other texts, events, and experiences; and reflecting on the reading process. Whatever the strategies used in reciprocal teaching, these strategies involve students in multiple comprehension processes that help them to derive meaning from texts and to monitor their comprehension.

#### **4.6.3 Theoretical foundations of reciprocal teaching**

Reciprocal teaching reflects the learning principles derived from Vygotsky's social development theory which holds that social interaction is fundamental to cognitive development. As Vygotsky (1981) states, "[A]ll higher mental functions are internalized social relationships" (p. 164). Vygotsky further argues that learning occurs in the zone of proximal development as a result of teachers' or more capable peers' assistance through which students internalize cognitive skills. Such internalization

occurs by moving gradually from the other-directed to self-directed learning (Vygotsky, 1997).

Reciprocal teaching is also rooted in the cognitive learning theory which emphasizes the internal processes of learning, including information processing strategies (e.g., analyzing, synthesizing, inferring), storage and retrieval strategies (e.g., categorizing, mnemonicizing), and meaning construction strategies (e.g., questioning, summarizing, clarifying, and predicting). This theory also assumes that developing learners' internal learning strategies improves their learning outcomes. In addition, reciprocal teaching is grounded in Bandura's (1977) social cognitive theory which holds that people learn by observing others' behaviors.

#### **4.6.4 Benefits of reciprocal teaching**

The advantages of reciprocal teaching are many. These advantages include: (1) building students' comprehension skills through cognitive strategies, (2) integrating language skills, (3) developing students' social skills, (4) developing students' oral language skills, and (5) allowing the teacher to assess students' reading comprehension in a non-threatening atmosphere.

In addition to the previously mentioned benefits, reciprocal teaching meets the needs of struggling readers who have basic decoding skills, but lack reading comprehension skills. It is the first formal instructional method targeted at struggling readers (Palinscar and Brown, 1984). More specifically, the four strategies that constitute reciprocal teaching best address the deficiencies of poor comprehenders (Hart and Speece, 1998). In support of this, in a research synthesis of twenty-nine studies, Gajria, Jitendra, Sood and Sacks (2007) found that students with learning disabilities—though good at text decoding—were unable to relate new information to prior knowledge, exhibited no self-monitoring skills for reading, and could not comprehend what they read. Yet, when they were exposed to reciprocal teaching, notable improvements in their reading comprehension were recorded.

#### **4.6.5 Procedures of reciprocal teaching**

The procedures of reciprocal teaching start with the teacher's reading of the first paragraph of a text and demonstrating the use of the four strategies through thinking aloud and dialoguing with students. After that, the teacher partly relinquishes control to the students and asks them in peer groups to take turns in reading and applying the RT strategies to the next paragraphs of the text.

At that time, the teacher moves among peers to provide guidance and assistance tailored to the needs of the current dialogue leader and her/his partner. Next, each student applies the four strategies independently to a new text. Lastly, each student self-assesses her/his use of the four strategies in relation to the comprehension of the text already read (adapted from Palincsar and Brown, 1984).

#### **4.6.6 Research on the use of reciprocal teaching with learning/reading disabled students**

Reciprocal teaching has been demonstrated as an effective teaching method in a variety of settings by numerous researchers with students of varying levels and abilities. However, this section offers a review of reciprocal teaching studies with struggling readers in general and disabled readers in particular.

Originally, Palincsar and Brown (1984), the developers of reciprocal teaching, investigated the effects of this method on the reading comprehension of struggling readers in two experimental studies. In the first study, they investigated the change RT made in the reading of expository text for seventh graders with adequate decoding but poor comprehension. Comparison groups participated in a locating information intervention or unmet

control. Participants in the RT group (n=6) met in pairs and received 20 lessons over a four-week period in reading expository passages averaging 1500 words each. These RT students became gradually more proficient at implementing the cognitive strategies taught to them. During daily reading assessments following instruction, they made striking improvements in their ability to answer comprehension questions about the passages they read. In addition, their abilities to summarize and detect anomalous information in text were significantly improved. Moreover, all the six students significantly improved from pre to post-test in their ability to answer comprehension questions and to identify text incongruities. These changes were maintained over time. On standardized tests of reading achievement, four of the six RT students made substantial gains averaging 15 months' growth. In contrast, students in the comparison groups evidenced no corresponding change. Palincsar and Brown concluded that the RT intervention accelerated the progress of the lower-achieving readers. They also concluded that students with disabilities in the RT group improved to the level set by the average readers, whereas marginalized readers in the other two groups did not.

In their second study, Palincsar and Brown (1984) moved the RT intervention into the classroom (i.e., resource room instruction) with the regular teachers in the facilitator's role. Intervention materials and procedures were identical to the first study. In early lessons, the teacher tended to retain a pivotal role in RT, with students interacting with her/him rather than with one another. By lesson 10, however, student-participants acted as agents of their own learning with teacher's redirection of discourse only as needed. Students in the RT condition improved their ability to summarize, answer comprehension questions, and state main ideas. The quality of their text-centered discourse also improved.

The use of reciprocal teaching to improve the standardized reading comprehension performance of poor readers was further studied by Lysynchuk, Pressley and Vye (1990). In their study, 72 grade four and seven students in Canada participated in 13 sessions of reciprocal teaching for reading instruction. Those students, as characterized by their teachers, were adequate decoders but poor comprehenders. All of them received scores below the 50th percentile on standardized achievement tests on the comprehension subtest. Of the 72 students, 36 were assigned to the reciprocal teaching intervention, while others worked in

small groups, with the teacher offering assistance if needed in decoding and passage understanding. Thirteen sessions were administered to both groups with daily dependent measures being taken (i.e., retelling and questions) and pre and post standardized reading measures (i.e., Gates-MacGinitie Reading Comprehension Test). Results revealed that the mean pretest to posttest gain for the reciprocal teaching students was significant with a 9.97 percentile point gain, whereas the control group received a 1.63 percentile point increase which was not significant.

Westera and Moore (1995) investigated the effect of reciprocal teaching on the reading comprehension of 46 high school students in New Zealand. These students were adequate decoders but scored the lowest of 300 students on a standardized comprehension test. Eleven of the 46 students served as the control group. The rest of the students were divided into two groups where one group received between 12 and 16 sessions and the other group received 6 to 8 sessions of reciprocal teaching instruction. An analysis of pretest-posttest scores revealed that the extended reciprocal teaching group outperformed the control group significantly. Ninety-five percent of the extended strategy group gained an average of more than

one age equivalent year in reading comprehension performance over the five-week period. The short strategy group showed gains of 47% in reading comprehension where the control group demonstrated gains of 45%.

Klingner and Vaughn (1996) used reciprocal teaching as an intervention for poor decoders with learning disabilities at the middle school level. A sample size of 26 students was treated with 15 sessions of reciprocal teaching. These students were randomly assigned to one of two groups: reciprocal teaching with cooperative tutoring or reciprocal teaching with cross-age tutoring. Three sessions were used for strategy instruction, while the remaining 12 sessions were used for implementing reciprocal teaching. The instruments used as dependent measures included the Gates-MacGinitie standardized reading tests and teacher-made comprehension questions on reading passages as developed by Palincsar and Brown (1984). The results indicated that reciprocal teaching improved reading comprehension even with only minimal adult support. The researchers concluded that reciprocal teaching was especially important to ESL learners with disabilities as it improved their metacognitive skills and gave them voice to what they were doing while they were reading.



Alfassi (1998) investigated the effects of reciprocal teaching on high school remedial reading students' comprehension. The participants of the study were 75 freshman high school students enrolled in Chapter I remedial reading classes selected from two high schools in a suburban school district composed largely of middle-class families. These students were poor comprehenders but adequate decoders. They performed at least 2 years below grade level in reading comprehension before the beginning of the study. They were divided into an experimental group and a control group. In five intact reading classes, the experimental group students (n=53) received reciprocal teaching instruction, while the control group students (n=22) received traditional instruction in three reading classes. At the completion of 20 days of intervention, all students entered a maintenance phase lasting 2 days in which they read and answered the questions related to five reading assessment passages. The results of these experimenter-designed reading tests showed that reciprocal teaching was superior to traditional methods of remedial reading in fostering reading comprehension.

Brand-Gruwel, Aarnoutse and Van Den Bos (1998) investigated the effects of reciprocal teaching on the comprehension of students with poor decoding skills and poor reading

comprehension. One hundred fifty-seven fourth-grade students participated in the study; half of them received the reciprocal teaching intervention program and the other half acted as a control group and received their regular reading instruction. The intervention program consisted of twenty 45-minute lessons, ten of which were reading lessons, five were listening lessons, and five were integrated reading and listening lessons. During the lessons clarifying, questioning, summarizing, and predicting strategies were first explicitly taught and modeled by the teacher. They were then practiced through reciprocal teaching in small groups of students. The results showed that students who received explicit and reciprocal training performed better on tests of comprehension than students in the control group.

Hart and Speece (1998) used reciprocal teaching with college students who were at risk of academic failure and compared them to students who participated in cooperative learning groups not trained to use reciprocal teaching strategies. The reciprocal teaching groups performed significantly better than the cooperative groups on reading comprehension and strategy acquisition measures. Moreover, the poorer readers in the reciprocal teaching groups performed significantly better than the poorer readers in the cooperative groups.

Johnson-Glenberg (2000) conducted a study to determine the effects of reciprocal teaching on the reading comprehension of students with poor comprehension skills. The sample of the study consisted of fifty-nine third, fourth, and fifth graders from three different schools. Over a ten-week period, twenty-two students received reciprocal teaching intervention, twenty-three students received visualizing-verbalizing intervention where they formed mental images in their minds of important text segments and then verbalized their understanding, and fourteen students were untreated and served as the control group. Both strategy groups made statistically significant gains that were greater than the control group on four measures including word recognition, question generation, explicit open-ended questions, and visual open-ended questions.

Lederer (2000) examined the effects of reciprocal teaching on the reading comprehension of inclusive students of whom some were identified as learning disabled. The sample consisted of 128 students in fourth, fifth, and sixth grades. At each grade level, two classes were inclusive (i.e., general education and special education students) and the other two were non-inclusive (i.e., general education students only). The inclusive classes at the three grade levels participated as the experimental group (n= 63)

and the non-inclusive classes acted as the control group (n=65). The experimenter/researcher administered 15 reciprocal teaching sessions to the experimental group across the three grade levels. The instructional procedure was the same at each grade level. Results indicated that the experimental group scored higher on comprehension measures than the control group at all grade levels. These results suggest that reciprocal teaching is an effective whole class intervention that can improve the reading comprehension of students with learning disabilities in inclusive classrooms.

Seo and Park (2000) examined the effects of reciprocal teaching on the reading comprehension and reading strategies of primary school level students with reading disabilities. The subjects of the study were twenty 2nd and 3rd grade reading disabled students. These subjects were divided into two groups: experimental and control. The experimental group students received explicit instruction in the four reciprocal teaching strategies (i.e., summarizing, questioning, predicting, and clarifying), while the control group students received traditional instruction. The results of the study revealed significant differences between the experimental group and the control

group in reading comprehension and reading strategies use in favor of the former group.

A multiple-baseline across groups design was employed by Kelly, Moore and Tuck (2001) to measure the effects of reciprocal teaching. Eighteen poor readers in fourth and fifth grades were selected to participate in the study in an urban school in New Zealand. Three groups were formed: two received the reciprocal teaching intervention (n= 6 each), and one received regular reading instruction (n= 6). The results showed that both groups receiving the reciprocal teaching intervention made significant gains in reading comprehension based on daily teacher-made comprehension tests. These gains were not achieved by the third group who received regular reading instruction.

Fung, Wilkinson and Moore (2003) used reciprocal teaching with intermediate-level students in heterogeneous groups of students with and without limited English proficiency (LEP). Students with LEP participated in discussions of texts either in their first language (Chinese) or English. The statistical analysis employed was multiple t-tests for non-independent samples to analyze whether posttest scores of the strategy classes as a whole

were significantly higher than pretest scores, compared to a class that did not use the reciprocal teaching method. The results indicated that reciprocal teaching was highly effective for fostering and strengthening reading comprehension skills even though students were poor decoders.

Diehl (2005) investigated the effects of reciprocal teaching on the strategy acquisition and reading comprehension of fourth-grade struggling readers. Six fourth-grade struggling readers from Glendale School participated in the study. Specifically, these students were selected because they could decode words adequately but comprehended text poorly. These students participated in 20 sessions following the reciprocal teaching framework (i.e., a reading intervention program that incorporates direct instruction in four comprehension strategies: questioning, predicting, clarifying, and monitoring). The teacher explicitly demonstrated how, when, and why to apply each strategy while reading a text. After these initial demonstrations, the teacher slowly withdrew her support as the students began to take turns modeling the strategies and offering feedback to each other. Results indicated that direct strategy instruction appeared to affect strategy acquisition which then led to improvement in the students' abilities to comprehend what they read.

Gomaa (2015) investigated the effect of reciprocal teaching on the reading comprehension of reading disabled students. The subjects for the study were sixty-six 5th grade EFL students with reading disabilities. These subjects were divided into an experimental group (n= 33) and a control group (n= 33). The experimental group students received reading comprehension instruction through reciprocal teaching, while the control group students received regular reading comprehension instruction. The findings from the study indicated that reciprocal teaching was more effective in improving reading comprehension than regular reading comprehension instruction.

To sum up, the previously-mentioned studies on reciprocal teaching reveal that reading strategies can successfully be taught to struggling readers, including those with learning/reading disabilities, and that the use of multiple strategies can effectively improve their reading comprehension. These studies also provide evidence of the effectiveness of reciprocal teaching as an intervention for students experiencing reading comprehension difficulties in a variety of contexts, including regular classrooms where teachers are forced to provide instruction to diverse populations of students.

## **Chapter Five**

### **Teaching Writing Strategies to Students with Written Expression Disabilities**

#### **5.0 Introduction**

We live today in an electronic information age where computers are used for learning and communication. Therefore, writing in English has become essential to enable students to meet the challenges of this age and to use its new communication technologies for learning and communication. In this respect, Björk and Räisänen (1997) argue that writing is an urgent need today because of the development of computer communication and the mobility of both students and faculty. In addition, Stirling (2003) claims that writing is a very important skill for EFL students as they need to write in English in various areas of their academic life. She adds that this skill is an important means for communication with people all over the world and it gives students more self-confidence to experiment with language. Graham and Perin (2007b) also contend that the "writing skill is a predictor of academic success and a basic requirement for participation in civic life and in the global economy" (p. 3). By



the same token, Nik, Hamzah and Rafidee (2010) state that writing, particularly in English, is essential for attaining academic degrees; therefore, students should acquire and achieve a satisfactory level of writing proficiency.

Over and above, the National Commission on Writing for America's Families, Schools, and Colleges (2004) asserts that writing is an essential skill for employment and promotion when entering the workforce. Similarly, Graham and Harris (2011) state that the writing skill is needed for attaining jobs. They maintain that nineteen out of twenty students with learning disabilities are not good writers and this puts them at an academic disadvantage and makes them less likely to attain jobs. In essence, writing is essential to students with and without learning disabilities for both academic and professional success.

Despite the fact that the importance of writing is widely recognized as mentioned earlier, most students with learning disabilities experience difficulties in expressing themselves in writing. More specifically, many researchers (e.g., Englert and Raphael, 1988; Gleason, 1999; Graham and Harris, 1989b, 1991; Houck and Billingsley, 1989; Schumaker and Deshler, 2003; Thomas, Englert and Gregg, 1987; Troia, 2007; Wong, 2000)

found that learning disabled students experience difficulties in expressing and organizing ideas on paper in a coherent, meaningful, and logical way. They further found that those students lose track of what they put on paper and spend too much time on producing legible handwriting and proper spelling, rather than ideas.

The aforementioned difficulties experienced by students with learning disabilities are attributable, in part, to their deficiencies in executing and regulating the writing process—especially planning, drafting, and revising—because they write without strategies that can help them carry out this process (Golley, 2015; Graham and Harris, 1997, 2009; Graham, Harris and Troia, 1998; Troia, 2007). To put it another way, students with learning disabilities just recall and write without using strategies that help them plan, generate, organize, and revise their own writing. This reason is expressed by Golley (2015) in the following way:

Students with learning disabilities often struggle with writing. They lack the appropriate strategies to use while writing, which leaves them frustrated and unwilling to continue writing. Teachers need to find strategies that will help their students become more engaged and excited about their writing. Finding effective strategies for planning, composing, and

revising writing pieces will help students with learning disabilities become more proficient writers.... In order for students with learning disabilities to become better writers, they need to be given appropriate strategies in planning, composing, and revising written pieces. (p. iii)

In support of the previously-mentioned reason, research showed that struggling writers, including students with writing disabilities, dived into writing assignments without planning or setting writing goals (Wong, 1988, 1994, 2000), wrote without strategies for generating and organizing ideas (Graham and Harris, 2005; MacArthur, Ferretti, Okolo and Cavalier, 2001), experienced difficulty in self-monitoring their writing (Hacker, Plumb, Butterfield, Quathamer and Heineken, 1994), and lacked strategies for revising what they had written (MacArthur, Ferretti, Okolo and Cavalier, 2001; Peterson-Karlan and Parette, 2007).

Another reason that accounts for the writing difficulties faced by students with learning disabilities in the Egyptian context is that their teachers focus only on discrete skills and value product over process. They teach the students more bits of language and completely neglect the writing process. They also measure their students' writing against criteria of micro-structural elements

such as handwriting, grammar, and spelling. Therefore, students spend too much time producing legible handwriting and proper spelling. As they become over involved in producing legible handwriting and properly spelled words, they neglect the generation and organization of ideas. They also focus more on the revision of these micro-structural elements to make their pieces of writing look better. As Troia, (2007) puts it, "A strong emphasis on mechanics by teachers who work with struggling writers serves to bias their students' views of writing, leading them to believe that text appearance is paramount" (p. 135). In support of the negative effect of heavy emphasis on the micro-skills of writing, in a meta-analysis of what works in teaching composition, Hillocks (1984) concluded that students in the writing programs which emphasized mechanics and grammar achieved significantly lower qualitative and quantitative gains in writing than students who received instruction that emphasized the process of writing. He further concluded that students in product-driven treatments came to dislike writing, while students in writing process treatments developed positive attitudes towards writing.

Still another reason that leads to the impoverished writing performance of students with learning disabilities is that they

lack genre-specific strategies (Troia, 2007; Wong, 1997). In support of this reason, Barenbaum, Newcomer and Nodine (1987) found that stories written by students with learning disabilities lacked even the most basic story parts such as characters and goals. Gleason (1999) also found that students with learning disabilities had trouble with all genres of writing in general and the persuasive genre in particular.

To overcome the writing difficulties experienced by struggling writers, including those with learning disabilities., many writing scholars and researchers (e.g., Golley, 2015; Graham and Harris, 1993b; Graham, Harris and Mason, 2005; Harris, Graham and Mason, 2006; Troia and Graham, 2002; Troia, Graham and Harris, 1999) suggest incorporating the teaching of writing strategies across the writing process to enable these students to be effective writers. Golley (2015), for example, states, "Teaching students with learning disabilities to use strategies to help them plan and organize their writing will help them become more effective writers and will enable them to clearly express their thoughts and ideas" (p. 20).

It is also evident from the review of research that the use of writing strategies as an instructional intervention for improving

the writing performance of learning disabled students is firmly established. Many research studies (e.g., Graham and Harris, 1989a, 1996, 2000; Graham, Harris, MacArthur and Schwartz, 1991; Graham, Harris and Troia, 1998; Sawyer, Graham and Harris, 1992; Troia, Graham and Harris, 1999) found that writing strategies instruction improved the various aspects of the writing performance of students with learning disabilities. In addition, several meta-analytic reviews (e.g., Graham, McKeown, Kiuahara and Harris, 2012; Graham and Perin, 2007a; Rogers and Graham, 2008) revealed that students with learning disabilities who received instruction in writing strategies performed better in writing than students who received writing instruction through other methods.

In light of what has been mentioned earlier, it appears that students with learning disabilities are in need of the writing strategies that good writers use across the writing process to enable them to carry out all the phases of this process, namely, planning, drafting, revising, and editing. For each of these phases, there are a number of specific writing strategies that can assist students to carry it out successfully. Therefore, teaching students with writing disabilities to use these strategies, through a gradual release of teacher's responsibility, can enable them to

clearly express their thoughts and ideas. With this in view, the remainder of the present chapter will deal with writing strategies from all aspects. It will also offer a four-phase model for teaching these strategies to students with learning disabilities. Finally, it will review research on the impact of writing strategies instruction on the writing performance of these students.

### **5.1 Definition of writing strategies**

There are many definitions of writing strategies. From different theoretical perspectives, scholars define writing strategies in different ways. From a psycholinguistic perspective, writing strategies are defined as mental actions or behaviors consciously made by the writer to solve the problems posed by a writing task (Mu and Carrington, 2007; Sasaki, 2004; Wong, 2005). As Sasaki (2004) puts it, writing strategies are "writer's mental behaviour[s] employed to achieve a goal in the ill structured ... activity of writing" (p. 541). In line with the cognitive process theory, writing strategies are defined as a sequence of mental processes a writer goes through in the act of producing a written text. As Torrance, Thomas and Robinson (2000) point out, writing strategies are "the sequence in which a writer engages in planning, composing, revising and other writing related

activities" (p. 182). In agreement with the social constructivist theory, sociolinguists view writing strategies as social actions or behaviors (e.g., writing with others, sharing writing with others, evaluating one another's writing) that writers engage in to overcome writing difficulties and produce a piece of writing well-suited to purpose of writing and intended audience. In this sense, Dudley-Marling and Paugh (2009) state, "Writing is an inherently social activity" (p. 7).

It is evident that the existing definitions of writing strategies are narrow. Each of these definitions conceptualizes writing strategies from a purely one perspective and neglects other perspectives. Therefore, it appears that there is a need for a multifaceted definition of writing strategies to overcome the limitations of these definitions. This comprehensive view is actually reflected in some of the existing classifications of these strategies (e.g., Baker and Boonkit, 2004; Chen, 2011; Mu, 2005; Riazi, 1997) which comprise cognitive, metacognitive, social, and affective writing strategies. These classifications, among many others, will be addressed in the next section.



## **5.2 Classification of writing strategies**

There are many different taxonomies of writing strategies. Some writing scholars (e.g., Geladari and Mastrothanasis, 2011; Wenden, 1991b) classified writing strategies on the basis of the cognitive and metacognitive theories of learning. Wenden (1991b), for example, categorized ESL writing strategies into cognitive and metacognitive strategies. According to her, cognitive writing strategies are the mental operations that writers use to obtain, retrieve, and use information in writing, while metacognitive strategies are the procedures used to regulate the writing process. She believes that metacognitive strategies are directly responsible for the execution of a writing task and that cognitive strategies are auxiliary ones that aid in the implementation of metacognitive strategies. She further divided each of these two main types of strategies into sub-strategies as follows:

### **I. Cognitive writing strategies**

#### **1. Clarification**

- a. Self-questioning,
- b. Hypothesizing,
- c. Defining terms,
- d. Comparing.

2. Retrieving
  - a. Rereading aloud or silently what has been written,
  - b. Writing in a lead-in word or expression,
  - c. Rereading the assigned topic,
  - d. Self-questioning,
  - e. Writing till the idea would come,
  - f. Summarizing what has been written,
  - g. Thinking in one's native language.
3. Resourcing
  - a. Asking researcher,
  - b. Referring to dictionary.
4. Deferring
5. Avoidance
6. Verification

## II. Metacognitive writing strategies

1. Planning,
2. Monitoring,
3. Evaluation.

Some other writing scholars (e.g., Chen, 2011; Graham et al., 2012) classified writing strategies on the basis of the basic phases identified by the process theory of writing. Chen (2011),

for example, identified twelve writing strategy groups and twenty eight individual strategies across the three basic stages of the writing process (pre-writing, writing, and revising). Table 2 presents these strategies.

Table 2: Classification of writing strategies (adapted from Chen, 2011, p. 246)

Writing stage	Strategy group	Individual strategy
Pre-writing	Metacognitive	Planning, Identifying, Overviewing, Organizing.
	Cognitive	Resourcing, Translating.
While-writing	Metacognitive	Goal-setting, Self-monitoring, Organizing, Overviewing.
	Cognitive	Repeating, Recognizing, Translating, Resourcing.
	Memory	Using new words that have been heard or read into the writing context
	Social	Peer-cooperating
	Compensation	Approximating, Using synonyms.

Table 2 (continued)

Revising	Metacognitive	Goal-setting, Self-monitoring, Paying attention, Identifying.
	Cognitive	Resourcing, Repeating.
	Memory	Using keywords that summarize the topic
	Social	Teacher-cooperating, Peer-cooperating.
	Affective	Self-rewarding

Continuing on the line of classifying writing strategies on the basis of the basic stages of the writing process, Graham et al. (2012, p. 16) identified ten writing strategies across five stages of the writing process: planning, drafting, sharing, evaluating, revising and editing. These strategies are the following:

1. Planning

- a. Using the POW strategy which stands for Pick ideas, Organize notes, and Write more,
- b. Ordering ideas/outlining.

2. Drafting

- a. Imitation,
  - b. Sentence generation.
3. Sharing
- a. Peer sharing,
  - b. Author's Chair (i.e., a strategy where students receive only positive feedback from their peers to enhance writing motivation and morale).
4. Evaluating
- a. Self-evaluating,
  - b. Self-monitoring.
5. Revising and editing
- a. Peer revising,
  - b. Using the COPS strategy which stands for Capitalization, Organization, Punctuation, and Spelling.

Still, some writing scholars (e.g., Li-xia, 2016; Mu, 2005) classified writing strategies by taking rhetorical, social constructionist and cognitive-processing theories into account in their taxonomies of these strategies. Mu (2005, p. 9), for example, categorized these strategies into rhetorical,

metacognitive, cognitive, communicative, and social/affective strategies, each of which involves sub-strategies as follows:

1. Rhetorical strategies
  - a. Organization,
  - b. Use of L1,
  - c. Formatting/Modelling,
  - d. Comparing different rhetorical conventions.
2. Meta-cognitive strategies
  - a. Planning,
  - b. Monitoring,
  - c. Evaluating.
3. Cognitive strategies
  - a. Generating ideas,
  - b. Revising,
  - c. Elaborating,
  - d. Clarification,
  - e. Retrieving (i.e., getting information from memory),
  - f. Rehearsing,
  - g. Summarizing.
4. Communicative strategies
  - a. Avoidance,
  - b. Reduction,

- c. Sense of readers (i.e., anticipating readers' response).
5. Social/affective strategies
- a. Resourcing,
  - b. Getting feedback,
  - c. Assigning goals,
  - d. Resting/deferring (i.e., reducing anxiety).

In addition, some writing researchers (e.g., Arndt, 1987; Baker and Boonkit, 2004; Victori, 1995) identified writing strategies based on interviews, think-aloud protocol analysis, and questionnaires. Arndt (1987), for example, identified eight categories of writing strategies. These strategies are: local planning (i.e., deciding what to write about), global planning (i.e., deciding how to organize the text as a whole), rehearsing, repeating, re-reading, questioning, revision, and editing. On the same basis as that of Arndt, Victori (1995) identified seven categories of writing strategies. These categories are: planning, monitoring, evaluating, resourcing, repeating, reduction, and use of L1 strategies. Along the same line, Riazi (1997, p. 122) classified writing strategies into macro- and micro-strategies on the basis of students' perceptions of their own writing strategies. He then divided students' macro strategies into cognitive, metacognitive, social strategies, and search strategies. These four

macro-level strategies are subdivided into fourteen micro-level strategies as follows:

1. Cognitive strategies
  - a. Note-taking,
  - b. Elaboration,
  - c. Use of mother tongue knowledge and skill transfer from L1,
  - d. Inferencing,
  - e. Drafting (i.e., revising and editing).
2. Metacognitive strategies
  - a. Assigning goals,
  - b. Planning,
  - c. Rationalizing appropriate formats,
  - d. Monitoring and evaluation.
3. Social strategies
  - a. Appealing for clarifications,
  - b. Getting feedback from professors and peers.
4. Search strategies
  - a. Searching and using libraries (e.g., books, journals, ERIC),
  - b. Using guidelines,
  - c. Using others' writing as a model.



By the same token and for the same reasons, Baker and Boonkit (2004) classified writing strategies into seven categories. Six of these categories were actually used by successful writers, whereas only one of these categories (i.e., negative strategies) was adopted by unsuccessful writers. Baker and Boonkit argue that this last category is also needed because "learners should be made aware of less 'effective' strategies that may hinder their success" (p. 321). The following is their inventory of writing strategies:

1. Cognitive Strategies,
2. Meta-cognitive strategies,
3. Memory strategies,
4. Compensatory strategies,
5. Affective strategies,
6. Social strategies,
7. Negative strategies.

It is then obvious that different writing scholars used different theories to classify writing strategies. However, "such multiplicity of categorizations have no doubt helped to build a composite picture of the writers' behaviours while writing" (Peñuelas, 2012, p. 84).

### **5.3 Benefits of writing strategies**

The importance of writing strategies is widely emphasized in the literature. Many benefits of these strategies have been suggested by numerous authors and researchers (e.g., Bos, 1988; Cihak and Castle, 2011; Grabe and Kaplan, 1996; Graham and Harris, 1993a, 1996; Graham, Harris, MacArthur and Schwartz, 1991; Harris and Pressley, 1991; Santos, 2010; Sawyer, Graham and Harris, 1992; Schmidt, Deshler, Schumaker and Alley, 1988/1989). These benefits include:

- providing students with effective ways for overcoming their writing difficulties;
- facilitating the execution of planning, drafting, and revising one's writing;
- helping students generate and organize ideas;
- developing students' self-confidence as independent writers;
- enhancing motivation and positive attitudes towards writing;
- removing writing anxiety;
- promoting students' critical reflection;
- improving written expression proficiency;
- developing a sense of audience for writing;
- enabling students to take control of their writing; and
- creating lifelong writers.

To the previously-mentioned list of benefits, Santangelo, Harris and Graham (2008) add that writing strategies instruction has been shown to be an effective instructional intervention for students with learning disabilities. They further mention a number of reasons why these strategies are especially beneficial to these students in the following way:

First, they help simplify and organize the complex tasks such as planning, generating, and revising text. Second, they define a course of action for successfully completing all, or part, of a writing assignment. Third, they make the mental operations that occur during planning, composing, evaluating, and revising visible and concrete. This is particularly salient because contemporary approaches to writing instruction (e.g., Writer's Workshop) encourage students to plan, draft, edit, revise, and publish their written work, yet surprisingly little attention is devoted to explicitly teaching these processes (Graham & Harris, 1997). Finally, strategies enhance students' knowledge about writing genres and devices, the writing process, and their capabilities as writers. (p. 81)

In support of the benefits of writing strategies, many researchers (e.g., De la Paz, 1999b; Fidalgo, Torrance and García, 2008; Graham, Harris and Larsen, 2001; Graham, Harris and Mason, 2005; Graham, Harris and Troia, 2000; Graham, Macarthur, Schwartz and Pagevoth, 1992; Wong, Wong and Blenkinsop, 1989) found that writing strategies instruction improved both the

quantity and quality of the writing of students with and without learning disabilities. Fidalgo, Torrance and García (2008), for example, found that strategy-based instruction impacted student writing beyond a short-term experimental context or classroom. They concluded that the results of their study provided a "robust evidence that strategy-focused instruction delivered to sixth-grade students results in an increased tendency to pre-plan and in improvements in text quality that persist at least until eighth grade" (p. 688).

Due to the previously-mentioned benefits of writing strategies to students with and without writing disabilities, the next section will offer a multiple-strategies model for teaching these strategies across the writing process to students with written expression disabilities.

#### **5.4 A model for teaching writing strategies to students with written expression disabilities**

In this section, the author proposes a four-phase model for teaching writing strategies across the writing process through a gradual release of responsibility from the teacher to the student. In this model, the teacher systematically demonstrates the use of one of the strategies for each stage of the writing process (i.e.,

one at a time per each stage) while creating a piece of writing. The selection of the strategies to be demonstrated depends on the genre of the topic. Next, the students (in pairs or small groups) apply the strategies already modeled to them to jointly compose a new a piece of writing on the same genre under teacher's guidance and assistance. After that, each student writes independently about another topic of the same genre. Finally, each student self-assesses the strategies s/he has already employed in relation to her/his writing performance. These four phases are the next topics of discussion.

#### **5.4.1 Teacher modeling of writing strategies**

Teacher modeling is the core of teaching writing strategies because it makes the invisible visible and the implicit explicit to the students. This instructional strategy is rooted in Wood et al.'s (1976) notion of scaffolding and Vygotsky's (1978) zone of proximal development.

At this phase, the teacher demonstrates the strategies good writers employ across the stages of the writing process (one for each stage). To cover all the necessary strategies for effective writing, the teacher should shift from one genre to another until all are over throughout the course.

In advocacy of teacher modeling of writing strategies at each stage of the writing process, many writing scholars (e.g., Dowell, Storey and Gleason, 1994; Gambrell and Chasen, 1991; Gleason and Isaacson, 2001; Golley, 2015; MacArthur and Philippakos, 2010; Wolf and Gearhart, 1994) argue that modeling the writing strategies that good writers use across the writing process is the most effective way for improving the process and product of writing for students with learning disabilities. Accordingly, this modeling phase is divided into four substages. These substages are: planning, drafting, revising, and editing. The teacher modeling of writing strategies at these substages is explained in the following subsections.

#### **5.4.1.1 Planning**

At this substage, the teacher models how to plan for the topic at hand. S/he first of all sets a purpose and identifies an audience for writing. S/he then demonstrates the use of one of the strategies for generating ideas about this topic (e.g., brainstorming, note making, mind mapping). After that, s/he demonstrates the use of another strategy for organizing the ideas s/he has already generated according to the genre of the topic (e.g., semantic mapping, story mapping, venn diagramming, listing, tree-mapping). While modeling, the

teacher makes the invisible visible by thinking aloud and verbalizing everything that goes in her/his mind. Meanwhile, the students observe, listen, and ask for clarification if they don't understand anything.

In addition to demonstrating the use of strategies for generating and organizing ideas, the teacher may also explain and demonstrate the use of planning tools such as the 'Planning Think Sheet' which contains a series of sequential questions as prompts for planning. These questions include "Who am I writing for?" "Why am I writing?" "What do I know?" "How can I group my ideas?" and "How will I organize my ideas?" (Englert, Raphael and Anderson, 1992).

#### **5.4.1.2 Drafting**

At this substage, the teacher models the strategies of elaborating on the ideas s/he has generated in the planning substage (one per topic until all are over throughout the course) to write a draft about the topic at hand. While writing this draft, the teacher places her/his thoughts on a board or a chart paper and writes without worrying about form. In doing so, s/he demonstrates the use of an elaboration strategy that fits the genre of the topic s/he is writing about (e.g., persuading, describing, comparing,

contrasting, narrating, informing, explaining, convincing). The use of the selected strategy should be accompanied by thinking aloud to make the reasoning behind what the teacher does explicit.

#### **5.4.1.3 Revising**

Once the teacher has finished the first draft, s/he models how to revise this draft in terms of the purpose and genre of writing. S/he verbalizes how to add, substitute, delete, modify, rearrange and expand ideas to make the final draft understandable to the reader. S/he also demonstrates the use of strategies such as asking for clarification, self-questioning, and sharing the draft in a writing group.

In addition to demonstrating the use of revision strategies, the teacher may also explain and demonstrate the use of a prompting sheet that guides students to revise what they have written in terms of purpose, audience, and genre of writing. Such a prompting sheet should contain questions such as the following (Poway Unified School District, n.d.):

- Is my purpose clear to the reader?
- Did I clearly maintain for that purpose throughout the essay?



- Does all my supporting information clearly relate to my purpose?
- Did I organize my ideas to best fulfill my purpose?
- Is the level of detail appropriate to the audience (not too general or too specific)?
- Are my ideas presented in a logical order that will be evident to the reader?
- Did I say what I mean and mean what I say?
- Is my tone and style appropriate to the audience?
- What misconceptions might readers have about my topic and/or my approach to it? How can I dispel these misconceptions?
- Did I follow the genre of the topic I am writing about?
- Did I use clear transitions to help the reader follow my sequence of thought?
- Did I maintain balance among my points, developing each to the same extent?
- Did I separate ideas into paragraphs with clear topic sentences?
- Do ideas flow from one to another in a way that fits the genre under focus?
- Do paragraphs create a chain?
- Is old and new information balanced and manipulated?

#### **5.4.1.4 Editing**

At this final substage of the teacher modeling, the teacher models proofreading the final draft. S/he proofreads the first paragraph of this draft and corrects only the mistakes that are likely to hinder the reader from understanding and following the writer's ideas so as not to lead students to view micro features of written texts as more important than macro features. S/he also explains the reasons for her/his corrections. Then s/he asks one or more of the students to proofread other paragraphs of this draft to identify and correct similar mistakes under her/his guidance.

#### **5.4.2 Joint application of writing strategies**

Once the previous phase has been fulfilled, the students are now ready to work—but not independently yet. They co-operate in small groups to apply the strategies already modeled to them in order to compose a new a piece of writing on the same genre. While doing so, the teacher keeps all groups on track, helps them by turn to implement the strategies already modeled to them, and guides them to elaborate on their own ideas to fully explore the topic they are working with. This step is rooted in Bandura's (1977) social learning theory which holds that people learn by

observing the behavior of others, and the social constructivist theory which stresses the importance of the social context and interaction with others for cognitive development.

### **5.4.3 Independent application of writing strategies**

Armed with the writing strategies modeled and practiced in the previous phases, the students can now work individually and independently to produce a new a piece of writing on the same genre. At this phase, each student writes on a new topic of her/his own choice and applies the strategies modeled and practiced in the previous phases. While doing so, the teacher should move among students to identify their points of weakness for future modeling.

### **5.4.4 Self-assessment of the use of writing strategies**

At this phase, each student self-assesses the strategies s/he has already employed—before, during, and after writing—in relation to her/his writing performance on the independent task. This phase is necessary because it helps the learner to identify her/his own strengths and weaknesses in writing strategies and writing performance. For this phase to be effective, the information obtained through self-assessment should be discussed with the teacher in individual conferences. Accordingly, students need "a

safe environment in which they can be honest about their own performance [and strategies] without the fear that they will expose information which can be used against them" (Boud, 1995, p. 182).

To help students carry out this phase, Sturomski (1997) suggests providing students with prompts in the form of questions to guide them in self-assessing the strategies they have already used to complete the writing task. In the same vein, Finch and Sampson (2003) assert that providing each student with an assessment tool makes it easy for her/him to self-assess the writing strategies s/he has used across the writing process.

To conclude this section, there are two important considerations that should be taken into account when using the previously mentioned model to help students with learning disabilities at the intermediate level and beyond to improve their writing. These two considerations are the following:

**1. The teacher should model multiple writing strategies across the writing process according to genre requirements**

It is widely recognized that effective writers apply a set of writing strategies selectively and independently before, during, and after writing. Therefore, students with learning disabilities

should be taught strategies for each stage of writing (Golley, 2015). Although these strategies are modeled singly, the teacher should teach students how to coordinate them across the writing process. While demonstrating the coordinated use of these strategies, the teacher should use strategies that complete each other across the various stages of the writing process. If there are many strategies that can be used for achieving the same purpose within the same stage of the writing process, the teacher should model one of these strategies at a time, until all of these strategies are over throughout the course.

In advocacy of embedding strategy instruction into the process of writing during teacher modeling, Danoff, Harris and Graham (1993) argue that such incorporation of strategy instruction into the writing process helps students to use writing strategies in the context in which they are expected to apply them, thus "increasing the likelihood that they will see the relevance of the strategies and be more likely to maintain and generalize their use" (p. 296). Chalk, Hagan-Burke and Burke (2005) also state, "Many students with learning disabilities (LD) exhibit deficiencies in the writing process. In order to achieve an adequate level of writing competence, these students

must apply strategies that enable them to effectively plan, organize, write, and revise a written product" (p. 75). Along the same line, Graham and Harris (2009) affirm that the teaching of writing strategies that help students with the stages of the writing process can result in marked increases in the quality of their writing. In the same vein, Graham et al. (2012) argue that the teaching a repertoire of writing strategies for carrying out the writing process helps students to become effective writers. They express this idea in the following way:

Teachers can help students become effective writers by teaching a variety of strategies for carrying out each component of the writing process and by supporting students in applying the strategies until they are able to do so independently. Over time, students will develop a repertoire of strategies for writing. Teachers should explain and model the fluid nature in which the components of the writing process work together, so that students can learn to apply strategies flexibly—separately or in combination—when they write. (p. 12)

In support of incorporating strategy instruction into the writing process, in their meta-analysis of writing instruction for adolescent students with and without learning disabilities Graham and Perin (2007b) found that "[e]xplicitly teaching adolescents strategies for planning, revising, and/or editing has

a strong impact on the quality of their writing" (p. 15). They further found that such "strategy instruction has [not only] been found especially effective for adolescents who have difficulty writing, but it is also a powerful technique for adolescents in general" (p. 15).

Central to multiple strategies instruction across the writing process is the explicit genre instruction and the application of writing strategies pertinent to the genre of the topic at hand. Such explicit genre instruction should occur across the various stages of the writing process by explaining genre features and demonstrating the use of the strategies that comply with the genre of the topic at hand. While planning, the teacher should demonstrate the use of a sort of graphic organizers that best suits the genre of the topic s/he is working with (e.g., sequence charts, story maps, spider maps, Venn diagrams, tree maps) to record and organize ideas. During drafting, the teacher should demonstrate the elaboration of ideas already presented in the graphic organizer by providing supporting details through a genre-specific strategy (e.g., persuading, argumentating, describing, comparing, contrasting, narrating) that fits the topic prompt at hand. For example, if the topic prompt is persuasive (i.e., requires support or opposition for one side of an issue) the

strategy of writing should proceed as follows: (1) introducing the issue to the reader, (2) offering opinions in favor of or against the issue at hand, and (3) providing evidence that clearly supports the claim already made to align the reader with this particular position. On the other hand, if the topic prompt is argumentative (i.e., debatable with two sides: for and against), the strategy of writing should proceed as follows: (1) introducing the issue to the reader, (2) offering opinions in favor of and against the issue at hand, and (3) summarizing the strengths and limitations of both sides.

While demonstrating the use of the writing strategies that are consistent with genre requirements over time (one genre at a time until all are over throughout the course), the teacher verbalizes her/his thoughts as well as the genre conventions. After that, s/he checks to see if the organizational pattern fits the purpose and the genre of the topic during revision. S/he then shifts to another genre until the students know how to apply the most common genre-specific strategies. After that, s/he moves to multigenre topics according to students' needs and highlights the recursive nature of the various stages of the writing process.



In support of explicitly teaching writing strategies for different genres, several researchers (e.g., Graham, Harris and Mason, 2005; Harris, Graham and Mason, 2006; MacArthur and Philippakos, 2010; Wong, 1997) found that genre-specific strategies enhanced the writing performance of struggling writers, including those with learning disabilities.

## **2. The teacher should gradually release the responsibility of writing to the students**

The gradual release of responsibility from the teacher to the student lies at the heart of this model. As the model proceeds, the responsibility shifts more and more to the student who ends up with full responsibility for writing. In each writing session, the teacher gradually reduces control to enable the student to make progress and gain independence in using the writing strategies under focus. The teacher is in control of the writing event when s/he models the strategies to the student. This control is withdrawn gradually and systematically passing responsibility to the students as they become able to apply the strategies independently. In other words, the teacher shifts gradually from the role of a scaffolder to the role of an observer of student performance and the role of the student increases as that of the teacher diminishes. This is exactly the same as the

use of scaffolding in construction engineering. As Leong, Bodrova, Hensen and Henninger (1999) explain:

When you build a building, you build a scaffold with the size and shape of the building in mind. In the initial stages, the contractor provides more scaffolding than later, when the walls are established and the foundation is secure. If the scaffolding is removed too early, the building will also suffer. If the scaffolding is not removed, the contractor cannot build another building. In teaching, we provide more support at the beginning stages of the skill/concept formation. If we remove the support too early the child may have incomplete or incorrect understanding. If we leave the supports too long, the child will not be encouraged to move on to new learning. (p. 3)

The above quote suggests that the teacher should make sure that s/he does not release responsibility to the students too early. In some cases, this means that s/he "may need to model an entire strategy or parts of a strategy again before students can work independently" (Graham et al., 2012, p. 17).

### **5.5 Research on teaching writing strategies to students with learning disabilities**

The teaching of writing strategies has been demonstrated as an effective writing intervention for students of all ages and abilities. However, this section only offers a review of writing

strategies research in the area of learning disabilities. In this area, Graham and Harris (1989a) investigated the effect of story grammar instruction on the story writing of students with learning disabilities. Twenty-two students with learning disabilities in the fifth and sixth grades were taught narrative text-structure in order to improve the overall quality of their stories. The students were instructed in small groups in their resource rooms on these eight story-grammar elements: main character, locale, time, starter event, goal, action, ending, and reaction. The results of the study indicated that the inclusion of story-grammar elements at the posttest was significantly higher than at pretest for twenty of the twenty-two students. In addition, the average of all students' writing quality scores increased from 2.14 on the pretest to 2.91 on the posttest.

MacArthur, Graham and Schwartz (1991) investigated the effect of revision strategy instruction on the narratives written by students with learning disabilities. The participants for the study consisted of four classes who were randomly assigned to an experimental group and a control group. The experimental students received explicit instruction, modeling, and guided practice in the collaborative use of the strategy. The students of the control group used the strategy individually. To assess

writing and revision quality, two writing assignments were administered as a pre and post-test. The final drafts were assessed on overall quality and number of revisions. Revisions were categorized by text level, impact on meaning, and quality. The results of the post-test showed that the peer response students produced texts of higher quality and made more and better revisions than the students who used the strategy individually. Transcripts of peer interactions suggested that the performance of the peer response students was mediated by use of the strategy. In addition, results of a metacognitive interview on the knowledge of criteria for good writing indicated that the peer response students demonstrated greater awareness of criteria for evaluating writing.

Danoff, Harris and Graham (1993) examined the effectiveness of embedding strategy instruction in the context of a process approach to writing in inclusive classrooms. Through a series of extended mini-lessons during writers' workshop, a sample of fourth and fifth grade students with and without learning disabilities were taught a strategy for planning narrative writing as well as procedures for regulating their use of the strategy and the writing process. The findings of the study revealed a positive effect of this intervention on the writing of both students with

and without learning disabilities. The schematic structure of their stories improved substantially following instruction and remained improved over time and with a different teacher. The quality of what was written also improved for all but two of the students following instruction. Data collected during instruction demonstrated that the best results were obtained when all stages and components of instruction were enacted. Finally, Danoff et al. concluded that "incorporating strategy instruction into a process approach to writing can meaningfully augment students' composition skills" (p. 319).

Stoddard and MacArthur (1993) examined the effects of an approach that integrated strategy-instruction, peer response, and word processing on the revision of narratives of six learning disabled students (aged 13-15 years). These students used a revision strategy consisting of questions which incorporated criteria for evaluation (e.g., "Does the text follow a logical sequence?" "Where could more details be added?"), and an overall strategy for regulating the revision process (i.e., a prompting sheet with key words for the revision of meaning and mechanical errors). They also received explicit instruction, modeling, and guided practice in the use of the strategy. Moreover, they were instructed in rules for regulating the

interaction process. Pre- and post-test performances on writing and revision tasks were compared. On the pre-tests, the students made few substantive revisions and did not improve the quality of their papers by revising them. On the post-tests all students made more substantive revisions, the proportion of revisions rated as improvements increased from 47% to 83%. Second revised drafts were rated as significantly better than first drafts. Furthermore, the overall quality of final drafts increased substantially from pre-tests to post-tests.

Hallenbeck (1995) adapted the cognitive strategy in writing (CSIW) program, which had been effectively used with elementary students with learning disabilities, to an older population of students. The CSIW embodies these three guiding principles: (1) effective writing is seen a holistic enterprise involving the processes of planning, organizing, writing, revising, and editing; (2) teachers scaffold students' use of specific writing strategies; and (3) students write for authentic purposes and real audiences and collaborate with each other. Subjects included seven junior high and high school students with learning disabilities who demonstrated difficulties with written expression. The students learned CSIW and practiced the strategies on two text structures (one required explaining a

process and the other required discussing what they knew about a topic) over the course of a school year. Pretest and posttest assessments of overall quality, structure-specific primary traits, paper length, and reader sensitivity indicated improvement in students' writing during the school year. T-tests demonstrated that students showed significant improvement on all measures of writing ability.

Dellerman, Coirier and Marchand (1996) examined the effects of planning on the argumentative writing of non-proficient writers. They hypothesized that the quality of an argumentative text would be dependent on prior planning of the argumentative relationships (logical, thematic, and directional) and the writer's proficiency. They also expected that planning would be most beneficial to non-proficient writers on the basis of the assumptions that planning could improve the organization of information and increase the available cognitive resources for high-level processes. The participants were asked to complete a constrained argumentative composition based on 13 arguments that were provided in 30 minutes. The results showed that planning focused on logical relationships had a significant effect on the argumentative texts produced by non-proficient writers.

Wong (1997) investigated the effect of genre instruction on the writing of adolescents with learning disabilities. Fifteen students with learning disabilities in the ninth, eighth, and tenth grades were taught how to write three different genres of expository essays (reportive, persuasive, and compare/contrast) over a three-year period (one per year). Within each intervention, the writing process was explained to the students through thinking aloud, emphasizing the recursive nature of the various stages of planning, writing, and revising. Throughout the writing process, students received assistance from members of the intervention team in articulating their communicative intent and ideas, structuring sentences, and choosing appropriate words. The results of the study indicated that across the three types of essays, the students were able to increase their mean scores for writing clarity and other genre-specific variables (e.g., thematic salience, organization of ideas) from pretest to posttest. Wong attributed these results to the following three reasons:

1. use of one appropriate way of instructing adolescents with learning disabilities and low achievers to write one particular genre,
2. focused and intensive nature of the writing instruction, and
3. use of interactive dialogues in conferences between students and intervention researchers.



Gersten, Baker and Edwards (1999) summarized research on effective instruction in expressive writing for students with learning disabilities. Expressive writing was defined as writing for the purpose of displaying knowledge or supporting self-expression. The findings revealed that the following three components reliably and consistently led to improved outcomes in teaching expressive writing to students with learning disabilities:

1. explicitly teaching writing strategies across the writing process,
2. explicitly teaching the critical dimensions of different writing genres, and
3. providing feedback to students on the quality of their writing.

De La Paz (1999a) investigated the effect of self-regulated strategy instruction on the writing outcomes of students with and without learning disabilities. She taught middle school students with and without learning disabilities a strategy for planning and writing expository texts using the self-regulated strategy development model, developed by Harris and Graham (1996), within a general education setting. All of the students were taught how to plan for the expository writing genre by their

general education teachers who followed scripted lesson plans. The intervention included strategies to help students plan in response to the assessment prompt and to encourage them to continue planning while writing their essays. The results of the study indicated that all of the students generated pre-writing plans and approximately half of their plans were appropriately relevant to the topic prompt. All of the students increased the length of their essays, and the students with learning disabilities increased the length of their essays by 250 percent. All of the students also doubled and/or tripled the average number of functional expository elements (e.g., premise, reason) in their essays. These positive gains were maintained four weeks later.

Troia, Graham and Harris (1999) examined the effect of teaching the planning strategy on the writing of students with learning disabilities. The subjects of the study consisted of three fifth-grade students with learning disabilities. These students were individually taught how to plan for narrative and expository essays over a three-week period. Instruction in the planning strategy followed the self-regulated strategy development model, and the students were instructed to set goals, brainstorm ideas, sequence their ideas, and complete self-selected homework assignments. The intervention also included the use of acronyms

and mnemonics to help students within the planning process. The results of the study indicated that students dramatically changed their pre-writing planning behavior, and this positively impacted their writing. They increased their planning time and devoted as much time to their planning as they did to writing. They also increased the length of their stories and made an average gain of 3.1 points on their story-grammar scores (i.e., inclusion of basic story elements) from 7.1 at baseline to 10.2 at post-instruction. In addition, they generalized these effects to writing persuasive essays and made an average gain of 3.8 points on the number of expository elements (e.g., premise, line of argument) from 7.0 at baseline to 10.8 at post-instruction. These positive effects were maintained three weeks later.

Gersten and Baker (2001) conducted a meta-analysis of 13 studies conducted with learning disabled students to determine the impact of writing strategy interventions on the writing of these students and to identify instructional components associated with the best writing outcomes for them. This meta-analysis revealed overall weighted effect sizes ranging from 0.41 to 1.17 with an aggregate effect size of 0.81, which represents a large effect favoring the selected interventions, for varied measures of writing including standardized writing tests, quality

ratings of student papers, and scores on trait and genre structure rubrics. Based on the results of their meta-analysis, Gersten and Baker identified five components that appeared to be associated with strong positive writing outcomes in the set of studies they examined. These components are:

1. explicit teacher modeling of the writing process and composing strategies,
2. peer collaboration and teacher conferencing to gain informative feedback,
3. use of procedural prompts (e.g., graphic organizers, mnemonics, outlines, checklists) to facilitate planning and revising,
4. limiting barriers produced by poor text transcription (e.g., dictating), and
5. self-regulation.

ERIC Clearinghouse on Disabilities and Gifted Education (2002) conducted a meta-analysis of research on teaching expressive writing to students with learning disabilities. All the interventions analyzed were multifaceted and involved students in writing everyday as part of the curriculum. This meta-analysis identified several factors that were critical to effective writing instruction to students with learning disabilities. These factors

are: (1) adherence to a basic framework of planning, writing, and revision; (2) explicit instruction of critical steps in the writing process and features of the writing genre; and (3) provision of feedback.

Chalk, Hagan-Burke and Burke (2005) examined the effects of the self-regulated strategy development (SRSD) model on the writing performance of 15 high school sophomores with learning disabilities. These students were taught to apply the SRSD model to self-regulate their use of the writing strategies and the writing process. The results of the study indicated that "students benefited from an approach to writing that helped them develop strategies for brainstorming, semantic webbing, setting goals, and revising" (p 86). The repeated ANOVA revealed a significant main effect, indicating that the quality of writing improved over time ( $F(10, 140) = 21.5, p = 0.000$ ). Follow-up trend analysis revealed a linear trend ( $F(1, 14) = 115.9, p = 0.000$ ) with an eta squared explaining 89% of the variance.

Sundeen (2007) examined the effects of explicitly teaching the mind-mapping strategy for planning and organizing descriptive essays upon the quality of written products of high school students with learning disabilities. The subjects for the study

were eleven eleventh grade students with learning disabilities seeking a standard diploma. These students received explicit instruction in the use of mind-mapping for planning and organizing descriptive essays during prewriting and drafting. This intervention occurred before and during writing in response to 66 prompts over a period of 17 weeks during the spring semester of the school year. Pre- and post-tests were administered to students. Following the post-test, interviews were conducted with the participant teacher and the students. Pre and post-test data indicated that students' writing quality did improve. The participant teacher reported during her interview that improvements in students' writing did occur as a result of using the mind-mapping strategy. The teacher also expressed her wish to teach this strategy to her future students. In addition, most of the students reported during their interviews that they felt that learning mind-mapping helped them to become better writers.

MacArthur and Philippakos (2010) taught six adolescent students (three with learning disabilities in writing and three average writers) to plan, write, and revise compare-contrast essays. The results showed that all the students made significant

improvements in compare–contrast text structure and writing quality.

Cihak and Castle (2011) investigated the effect of explicit strategy instruction on the writing of students with and without learning disabilities. Forty eighth-grade students with and without learning disabilities in an inclusive classroom participated in the study. Five students without disabilities were dropped from the data analysis because of absenteeism during the posttest probe. The intervention targeted expository essays. A repeated-measures ANOVA indicated that both students with and without disabilities made significant improvements in expository writing skills as measured on the state's criterion reference test for written expression. Improvements in the quality of writing emerged after students had received the writing intervention. In pretest analysis, students with disabilities lacked the writing skills of how to create a topic sentence, how to use supporting details, how to use transitions, and how to conclude a composition. In posttest analysis, students with and without disabilities made significant writing improvements. They demonstrated the skills of writing a topic sentence, supporting the topic with details, and using transitional and concluding sentences. They also wrote expository essays

that were qualitatively better and free from mechanical errors and language misuse.

In sum, it is evident from the previous research studies that teaching writing strategies is an effective intervention for improving the writing of students with learning disabilities. However, most of these studies focused almost exclusively on a single strategy treatment within one stage of the writing process. Therefore, it seems that there is a need to adopt the author's multiple-strategies model because it enables disabled writers to cope with the demands of various phases of the writing process and the demands of various writing genres, which can result in more significant improvement in their writing performance.



## References

- Aarnoutse, C. (1997). *Teaching reading comprehension strategies to very poor decoders in a listening situation*. [ERIC Document Number: ED406658]. Retrieved from <http://www.eric.ed.gov>.
- Abbott, M. (2006). ESL reading strategies: Differences in Arabic and Mandarin speaker test performance. *Language Learning*, 56(4), 633-670.
- Abbott, M. (2010). An introspective study of Arabic and Mandarin-speakers reading comprehension strategies. *TESL Canada Journal/Revue TESL Du Canada*, 28(1), 14-40.
- Aghaei, R., and Pillaie, S. (2011). On the explicit instruction of cognitive and metacognitive reading strategies in reading performance and self-efficacy. *The Iranian EFL Journal*, 7(5), 98-118.
- Agran, M., Blanchard, C., Wehmeyer, M., and Hughes, C. (2001). Teaching students to self-regulate their behavior: The differential effects of student vs. teacher-delivered reinforcement. *Research in Developmental Disabilities*, 22, 319-332.
- Alabama Department of Education (2015). *Foundations for beginning reading: Modules for professional learning*. Montgomery, AL.: Alabama Reading Initiative.
- Alexander, P.A., and Jetton, T. L. (2000). Learning from text: A multidimensional and developmental perspective. In Kamil, M. L., Mosenthal, P. B., Pearson, P. D., and Barr, R. (eds.), *Handbook of reading research, Vol. 3* (pp. 285-310). Mahwah, NJ: Lawrence Erlbaum.
- Alfaki, I., and Siddiek, A. (2013). The role of background knowledge in enhancing reading comprehension. *World Journal of English Language*, 3(4), 42-66.
- Alfassi, M. (1998). Reading for meaning: The efficacy of reciprocal teaching in fostering reading comprehension in high school students in remedial reading classes. *American Educational Research Journal*, 35(2), 309-332.

- Alfassi, M., Weiss, I., and Lifshitz, H. (2009). The efficacy of reciprocal teaching in fostering the reading literacy of students with intellectual disabilities. *European Journal of Special Needs Education, 24*(3), 291-305.
- Allsopp, D. H., Minskoff, E. H., and Bolt, L. (2005). Individualized course-specific strategy instruction for college students with learning disabilities and ADHD: Lessons learned from a model demonstration project. *Learning Disabilities Research and Practice, 20*(2), 103-118.
- Allwright, D. (1984). Why don't learners learn what teachers teach? The interaction hypothesis. In D. M. Singleton and D. G. Little (eds.), *Language learning in formal and informal contexts*. Dublin, Ireland: Irish Association for Applied Linguistics.
- American Psychiatric Association (APA). (2000). Diagnostic and statistical manual of mental disorders: DSM-IV-TR (4th edition). Washington, D. C.: American Psychiatric Association.
- Anderson, A., Howe, C., Soden, R., Halliday, J., and Low, J. (2001). Peer interaction and the learning of critical thinking skills in further education students. *Instructional Science, 29*, 1-32.
- Anderson, N. (1999). *Exploring second language reading: Issues and strategies*. Toronto: Heinle & Heinle Publishers.
- Anderson, N. (2002). *The role of metacognition in second language teaching and learning*. [ERIC Document Number: ED463659]. Retrieved from <http://www.eric.ed.gov>.
- Anderson, N. (2003). Metacognitive reading strategies increase L2 performance. *The Language Teacher, 27*, 20-22.
- Anderson, N. (2005). L2 learning strategies. In E. Hinkel (ed.), *Handbook of research in second language teaching and learning* (pp. 757-771). Mahwah, NJ: Lawrence Erlbaum.

- Anderson, N., and Vandergrift, L. (1996). Increasing metacognitive awareness in the L2 classroom by using think-aloud protocols and other verbal report formats. In R. L. Oxford (ed.), *Language learning strategies around the world: Cross-cultural perspectives* (pp. 3-18). National Foreign Language Resource Center. Manoa: University of Hawai'i Press.
- Andrade, H., and Boulay, B. (2003). Gender and the role of rubric-referenced self-assessment in learning to write. *Journal of Educational Research*, 97(1), 21-34.
- Andrade, H., and Du, Y. (2005). Knowing what counts and thinking about quality: students report on how they use rubrics, *Practical Assessment, Research and Evaluation*, 10(4). Retrieved from <http://PAREonline.net/getvn.asp?v=10&n=3>.
- Andrade, H., and Du, Y. (2007). Student responses to criteria-referenced self-assessment. *Assessment and Evaluation in Higher Education*, 32(2), 159-181.
- Arabsolghar, F., and Elkins, J. (2001). Teachers' expectations about students' use of reading strategies, knowledge and behavior in Grades 3, 5 and 7. *Journal of Research in Reading*, 2, 154-162.
- Arndt, V. (1987). Six writers in search of texts: A protocol-based study of L1 and L2 writing. *ELT Journal*, 41, 257-267.
- Arnold, J. (1999). *Affect in language learning*. Cambridge: Cambridge University Press.
- Arries, J. F. (1999). Learning disabilities and foreign languages: A curriculum approach to the design of inclusive courses. *The Modern Language Journal*, 83, 98-110.
- Asaro-Saddler, K. (2008). *The effects of planning instruction and self-regulation training on the writing performance of young writers with autism spectrum disorders*. New York: State University of New York at Albany. Retrieved from <http://search.proquest.com/docview/304356319>.
- Asaro-Saddler, K., and Saddler, B. (2010). Planning instruction and self-regulation training: Effects on writers with autism spectrum disorders. *Exceptional Children*, 77(1), 107-124.

- Asato, M. (2003). *Challenge and change for EFL oral communication instruction*. [ERIC Document No. ED 475020]. Retrieved from <http://www.eric.ed.gov>.
- Ashby, F. G., Isen, A., and Turken, A. (1999). A neuropsychological theory of positive affect and its influence on cognition. *Psychological Review*, 106, 529–550.
- Baker, L. (2002). Metacognition in comprehension instruction. In C. Block and M. Pressley (Eds.), *Comprehension instruction: Research based best practices* (pp. 77-95). New York: Guilford Press.
- Baker, L. and Brown, A. L. (1984). Metacognitive skills and reading. In P. D. Pearson, R. Barr, M. L. Kamil, and P. Mosenthal (eds.), *Handbook of reading research* (pp. 353-394). White Plains, NY: Longman.
- Baker, S., Gerstein, R., and Graham, S. (2003). Teaching expressive writing to students with learning disabilities: Research-based applications and examples. *Journal of Learning Disabilities*, 36, 109-123.
- Baker, W., and Boonkit, K. (2004). Learning strategies in reading and writing: EAP contexts. *RELC Journal*, 35(3), 299-328.
- Bakhtin, M. (1984). *Problems of Dostoevsky's poetics*. (ed. and trans. by C. Emerson), Minneapolis, MN: University of Minnesota Press.
- Bakken, J., Mastropieri, M., and Scruggs, T. (1997). Reading comprehension of expository science material and students with learning disabilities: A comparison of strategies. *The Journal of Special Education*, 31, 300-324.
- Ballou, A. (2012). *Using explicit strategy instruction to improve reading comprehension*. Retrieved from [https://fisherpub.sjfc.edu/education\\_ETD\\_masters/221](https://fisherpub.sjfc.edu/education_ETD_masters/221).
- Bandura, A. (1977). *Social learning theory*. New Jersey: Prentice-Hall, Inc.
- Barenbaum, E., Newcomer, P., and Nodine, B. (1987). Children's ability to write stories as a function of variation in task, age, and development level. *Learning Disability Quarterly*, 7, 175-188.

- Barnett, M. (1989). Teaching reading strategies: How methodology affects course articulation. *Foreign Language Annals*, 21, 109-121.
- Barton, D. (1994). The social impact of literacy. In L. Verhoevan (ed.), *Functional literacy: Theoretical issues and educational implications* (pp. 185-198). Amsterdam: John Benjamins.
- Bates, S., Galloway, R., Homer, D., and Riise, J. (2014). Assessing the quality of a student-generated question repository. *Physical Review Special Topics - Physics Education Research*, 10(2), 1-11.
- Bauer, T. N. (1995). How three factions rank job and applicant attributes. *Journal of Career Planning and Employment*, 55(1), 43-46.
- Beckman, P. (2002). Strategy instruction. [ERIC Document Number: ED474302]. Retrieved from <http://www.eric.ed.gov>.
- Bereiter, C., and Bird, M. (1985). Use of thinking aloud in identification and teaching of reading comprehension strategies. *Cognition and Instruction*, 2(2), 131-156.
- Bereiter, C., and Scardamalia, M. (1987). *The psychology of written composition*. Hillsdale, NJ: Lawrence Erlbaum.
- Bernhardt, E. B. (1991). *Reading development in a second language: Theoretical, research, and classroom perspectives*. Norwood, N.J.: Ablex.
- Bialystok, E. (1990). *Communication strategies: A psychological analysis of second language use*. Oxford: Basil Blackwell.
- Biancarosa, G., and Snow, C. E. (2006). Reading next: A vision for action and research in middle and high school literacy — A report from Carnegie Corporation of New York (2nd ed.). Washington, D. C.: Alliance for Excellent Education.
- Björk, L., and Räisänen, C. (1997). *Academic writing: A university writing course*. Lund: Student literature.
- Black, P., Harrison, C., Lee, C., Marshall, B., and Wiliam, D. (2003). *Assessment for learning: Putting it into practice*. Buckingham, UK: Open University Press.
- Black, P., and Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education*, 5(1), 7-74.

- Blair, T. R., Rupley, W. H., and Nichols, W. (2007). The effective teacher of reading: Considering the "what" and "how" of instruction. *Reading Teacher*, 60, 432-438.
- Blanche, P., and Merino, B. (1989). Self-assessment of foreign-language skills: implications for teachers and researchers. *Language Learning*, 39(3), 313-340.
- Block, E. (1986). The comprehension strategies of second language readers. *TESOL Quarterly*, 20(3), 463-94.
- Boardman, A., Roberts, G., Vaughn, S., Wexler, J., Murray, C., and Kosanovich, M. (2008). *Effective instruction for adolescent struggling readers: A practice brief*. Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Bolitho, R., Carter, R., Hughes, R., Ivanic, R., Masuhara, H., and Tomlinson, B. (2003). Ten questions about language awareness. *ELT Journal*, 57(3), 251-259.
- Bongratz, K., Bradley, J., Fisel, K., Crcutt, J., and Shoemaker, A. (2002). *Improving student comprehension skills through the use of reading strategies*. [ERIC Document No. ED471073]. Retrieved from <http://www.eric.ed.gov>.
- Bos, C. (1988). Process-oriented writing: Instructional implications for mildly handicapped students. *Exceptional Children*, 54, 521-527.
- Bos, C., and Anders, P. (1990). Interactive teaching and learning: Instructional practices for teaching content and strategic knowledge. In T. E. Scruggs and B. Y. L. Wong (eds.), *Intervention Research in Learning Disabilities* (pp. 166-185). New York: Springer.
- Bos, C., and Fili, D. (1984). Comprehension monitoring in learning disabled and average students. *Journal of Learning Disabilities*, 17, 229-233.
- Boud, D. (1995). *Enhancing learning through self-assessment*. London: Kogan Page.
- Boud, D. (2000). Sustainable assessment: Rethinking assessment for the learning society. *Studies in Continuing Education*, 22, (2), 151-167.

- Boud, D., Cohen, R., and Sampson, J. (1999). Peer learning and assessment. *Assessment and Evaluation in Higher Education*, 24, (4), 413-426.
- Branch, J. L. (2000). The trouble with think alouds: Generating data using concurrent verbal protocols. In A. Kublik (ed.), *Dimensions of a global information science*. Edmonton, Alberta: Canadian Association for Information Science.
- Brand-Gruwel, S., Aarnoutse, C., and Van Den Bos, K. (1998). Improving text comprehension strategies in reading and listening settings. *Learning and Instruction* 8(1), 63-81.
- Brown, A., and Campione, J. (1986). Psychological theory and the study of learning disabilities. *American Psychologist*, 41(10), 1059-1068.
- Brown, A., and Palincsar, A. (1982). Inducing strategic learning from texts by means of informed, self control training. *Topics in Learning and Learning Disabilities*, 2, 1-17.
- Brown, A., and Palincsar, A. (1985). *Reciprocal teaching of comprehension strategies: A natural history of one program for enhancing learning*. Urbana: University of Illinois Center for the Study of Reading.
- Brown, D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). New York: Addison Wesley Longman, Inc.
- Brown, K., and Hood, S. (1997). *Writing matters: Writing skills and strategies for students of English*. Cambridge, UK: Cambridge University Press.
- Brown, R. (2002). Straddling two worlds: Self-directed comprehension instruction for middle schoolers. In C. Block and M. Pressley (eds.), *Comprehension instruction: Research based best practices* (pp. 337-350). New York: Guilford Press.
- Brown, R., Pressley, M., Van Meter, P., and Schuder, T. (1996). A quasi-experimental validation of transactional strategies instruction with previously low-achieving second-grade readers. *Journal of Educational Psychology*, 88, 18-37.

- Bruen, J. (2001). Strategies for success: Profiling the effective learner of German. *Foreign Language Annals*, 34, 216-225.
- Bryant, D., Ugel, N., Thompson, S., and Hamff, A. (1999). Instructional strategies for content-area reading instruction. *Intervention in School and Clinic*, 34, 293-302.
- Bryant, D., Vaughn, S., Linan-Thompson, S., Ugel, N., and Hamff, A. (2000). Reading outcomes for students with and without learning disabilities in general education middle school content area classes. *Learning Disability Quarterly*, 23(3), 24-38.
- Bugg, J., and McDaniel, M. (2012). Selective benefits of question self generation and answering for remembering expository text. *Journal of Educational Psychology*, 104(4), 922-913.
- Burchard, M., and Swerdzewski, P. (2009). Learning effectiveness of a strategic learning course, *Journal of College Reading and Learning*, 40(1), 14-21.
- Bygate, M. (2001). Speaking. In R. Carter and D. Nunan (eds.) *Cambridge guide to teaching English to speakers of other languages* (pp. 14-20). Cambridge: Cambridge University Press.
- Campbell, K., Mothersbaugh, D., Brammer, C., and Taylor, T. (2001). Peer versus self-assessment of oral business presentation performance. *Business Communication Quarterly*, 64(3), 23-42.
- Canale, M., and Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1(1), 1-47.
- Carlisle, I. and Rice, M. (2002). *Improving reading comprehension: Research-based principles and practices*. Baltimore, Maryland: York Press.
- Chalk, J., Hagan-Burke, S., and Burke, M. (2005). The effects of self-regulated strategy development on the writing process for high school students with learning disabilities. *Learning Disability Quarterly*, 28(1), 75-87.
- Chamot, A. U. (1987). *The learning strategies of ESL students*. Prentice Hall, New Jersey.
- Chamot, A. U. (2004). Issues in language learning strategy research and teaching. *Electronic Journal of Foreign Language Teaching*, 1(1), 14-20.



- Chamot, A. U. (2005). Language learning strategy instruction: Current issues and research. *Annual Review of Applied Linguistics*, 25, 112-130.
- Chamot, A.U., Barnhardt, S., El-Dinary, P., and Robbins, J. (1996). Methods for teaching learning strategies in the foreign language classroom. In R. Oxford (ed.), *Language learning strategies around the world: Cross-cultural perspectives* (pp. 175-187). Manoa: University of Hawaii Press.
- Chamot, A. U., and Küpper, L. (1989). Learning strategies in foreign language instruction. *Foreign Language Annals*, 22, 13-24.
- Chamot, A. U., and O'Malley, J. M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach*. White Plains, NY: Addison Wesley Longman.
- Chan, D. (1998). Perceived competence of students with learning difficulties in Hong Kong. In D. W. Chan (ed.), *Helping students with learning difficulties*. Hong Kong: Chinese University Press.
- Chan, D., and Lan, K. (2003). Reading strategy use and motivation among Chinese good and poor readers in Hong Kong. *Journal of Research in Reading*, 2, 177-190.
- Chen, Y. (2011). Study of the writing strategies used by Chinese non-English majors. *Theory and Practice in Language Studies*, 1(3), 245-251.
- Cheng, P. W. (1998). Primary teachers percentages and understanding of learning difficulties. In D.W. Chan (ed.), *Helping students with learning difficulties*. Hong Kong: Chinese University Press.
- Chevalier, T., Parrila, R., Ritchie, K., and Deacon, S. (2015). The role of metacognitive reading strategies, metacognitive study and learning strategies, and behavioral study and learning strategies in predicting academic success in students with and without a history of reading difficulties. *Journal of Learning Disabilities*, 50(1), 34-48.
- Chinn, C. A., Anderson, R. C., and Waggoner, M. A. (2001). Patterns of discourse in two kinds of literature discussion. *Reading Research Quarterly*, 36(4), 378-411.

- Christophel, D. (1990). The relationship among teacher immediacy behaviors, student motivation, and learning, *Communication Education*, 39, 323-240.
- Chuanchaisit, S., and Prapphal, K. (2009). A study of English communication strategies of Thai University students. *MANUSYA Journal of Humanities*, 17, 100-126.
- Cihak, D., and Castle, K. (2011). Improving expository writing skills with explicit and strategy instructional methods in inclusive middle school classrooms. *International Journal of Special Education*, 26(3), 106-113.
- Clark, F., Deshler, D., Schumaker, J., and Alley, G. (1984). Visual imagery and self-questioning: Strategies to improve comprehension of written materials. *Journal of Learning Disabilities*, 17(3), 145-149.
- Cohen, A. (1998). *Strategies in learning and using a second language*. Harlow, Essex: Longman.
- Cohen, A., Weaver, S., and Li, T-Y. (1996). The impact of strategies-based instruction on speaking a foreign language. In A. D. Cohen (ed.), *Strategies in learning and using a second language* (107-156). London: Longman.
- Coley, J., DePinto, T., Craig, S., and Gardner, R. (1993). From college to classroom: Three teachers' accounts of their adaptations of reciprocal teaching. *The Elementary School Journal*, 94(2), 255-266.
- Collins, J. L. (1998). *Strategies for struggling writers*. New York: Guilford.
- Collins, V. L., Dickson, S. V., Simmons, D. C., and Kameenui, E. J. (1998). *Metacognition and its relation to reading comprehension: A synthesis of the research*. Eugene, OR: National Center to Improve the Tools of Educators, University of Oregon.
- Commonwealth of Australia (1992). *Disability discrimination act*. Australian Government, Canberra.
- Commonwealth of Australia (2005). *Disability standards for education*. Australian Government, Canberra.

- Comstock, R., and Kamara, C. (2003). *Adult language/learning disability: Issues and resources*. [ERIC Document Number: ED482311]. Retrieved from <http://www.eric.ed.gov>.
- Conley, D. (2007). *Redefining college readiness*. Retrieved from [www.ctdhe.org/info/pdfs/2010](http://www.ctdhe.org/info/pdfs/2010).
- Cook-Gumperz, J. (2006). The social construction of literacy. In J. Cook-Gumperz (ed.), *The social construction of literacy* (pp. 1-18). New York: Cambridge University Press.
- Corder, S. P. (1981). *Error analysis and interlanguage*. Oxford: Oxford University Press.
- Corley, M., and Taymans, J. (2002). *Adults with learning disabilities: A review of the literature*. Retrieved from [www.ncsall.net/?id=575](http://www.ncsall.net/?id=575).
- Coronado-Aliegro, J. (2006). *The effect of self-assessment on the self-efficacy of students studying Spanish as a foreign language*. Doctoral dissertation, University of Pittsburgh. Retrieved from [http://challenger.library.pitt.edu/ETD/available/etd12012006-121145/unrestricted/Coronado-AliegroJ2\\_etd2006.pdf](http://challenger.library.pitt.edu/ETD/available/etd12012006-121145/unrestricted/Coronado-AliegroJ2_etd2006.pdf).
- Cortiella, C., and Horowitz, S. H. (2014). *The state of learning disabilities: Facts, trends, and emerging issues* (3rd ed.). New York, NY: National Center for Learning Disabilities. Retrieved from <http://www.nclld.org/wp-content/uploads/2014/11/2014-State-of-LD.pdf>.
- Crabtree, T., Alber-Morgan, S. R., and Konrad, M. (2010). The effects of self-monitoring of story elements on the reading comprehension of high school seniors with learning disabilities. *Education and Treatment of Children*, 33, 187-203.
- Cramer, C., Fate, J., and Lueders, K. (2001). *Improving reading achievement through the implementation of reading strategies*. [ERIC Document Number: ED454503]. Retrieved from <http://www.eric.ed.gov>.
- Cresswell, A. (2000). Self-monitoring in student writing: Developing learner responsibility. *ELT Journal*, 54, 244-253.
- Crookes, G. (1989). Planning and inter-language variation. *Studies in Second Language Acquisition*, 11, 367-383.

- Crookes, G., and Schmidt, R. W. (1991). Motivation: Reopening the research agenda. *Language Learning*, 41(4), 469-512.
- Cunningham, P. M., and Allington, R. L. (1994). *Classrooms that work: They can all read and write*. New York: Harper Collins.
- Dadour, S., and Robbins, J. (1996). University-level studies using strategy instruction to improve speaking ability in Egypt and Japan. In R. L. Oxford (ed.), *Language learning motivation: Pathways to the new century* (pp. 157-166). Hawaii: University of Hawaii Press.
- Danoff, B., Harris, K. R., and Graham, S. (1993). Incorporating strategy instruction within the writing process in the regular classroom: Effects on the writing of students with and without learning disabilities. *Journal of Reading Behavior*, 25, 295-319.
- Davey, B., and McBride, S. (1986). Generating self-questions after reading: A comprehension assist for elementary students. *Journal of Education Research*, 80(1), 43-46.
- de Bot, K. (1996). Review article: The psycholinguistics of the output hypothesis. *Language Learning*, 46, 529-555.
- DeFoe, M. (1999). *Using directed reading thinking activity strategies to teach students reading comprehension skills in middle grades language arts*. [ERIC Document Number: ED432011]. Retrieved from <http://www.eric.ed.gov>.
- De La Paz, S. (1999a). Self-regulated strategy instruction in regular education settings: improving outcomes for students with and without learning disabilities. *Learning Disabilities Research and Practice*, 14(2), 92-106.
- De la Paz, S. (1999b). Teaching writing strategies and self-regulation procedures to middle school students with learning disabilities. *Focus on Exceptional Children*, 31(5), 1-16.
- De La Paz, S. (2007). Managing cognitive demands for writing: Comparing the effects of instructional components in strategy instruction. *Reading & Writing Quarterly*, 23, 249-266.
- De La Paz, S., and Graham, S. (2002). Explicitly teaching strategies, skills, and knowledge: Writing instruction in middle school classrooms. *Journal of Educational Psychology*, 94(4), 687-698.

- De La Paz, S., Swanson, P., and Graham, S. (1998). Contribution of executive control to the revising problems of students with writing and learning difficulties. *Journal of Educational Psychology*, 90, 448-460.
- Dellerman, P., Coirier, P., and Marchand, E. (1996). Planning and expertise in argumentative composition. In G. Rijlaarsdam, H. V. d. Bergh, and M. Couzijn (eds.), *Theories, models and methodology in writing research* (pp. 182-195). Amsterdam: Amsterdam University Press.
- Demuth, K. and Smith, F. (1987). The foreign language requirement: An alternative program. *Foreign Language Annals*, 20(1), 67-77.
- Department of Child and Adolescent Psychiatry (2014). *Learning difficulties*. Retrieved from [https://www.imh.com.sg/uploadedFiles/Clinical\\_Services/Community-basedServices](https://www.imh.com.sg/uploadedFiles/Clinical_Services/Community-basedServices).
- Department of Education (2006). *Guidance for schools: Recording children with special educational needs*. Retrieved from [www.deni.gov.uk](http://www.deni.gov.uk).
- Department of Health (2001). *Valuing people: A new strategy for learning disability for the 21st century*. London: Department of Health.
- Department of Health (2009). *Valuing people now: A new three year strategy for people with learning disabilities--making it happen for everyone*. London: Department of Health.
- Department of Health (2010). *Raising our sights: Services for adults with profound intellectual and multiple disabilities*. London: Department of Health.
- Department of Special Education and Communication Disorders (2016). *Teaching strategies*. College of Education and Human Sciences, University of Nebraska–Lincoln. Retrieved from <http://cehs.unl.edu/secd/teaching-strategies>.
- de Quesada, S. (2009). Communicative tasks and interaction can contribute to language acquisition. Retrieved from [http://pirnhua.udep.edu.pe/bitstream/handle/123456789/1413/MAE\\_EDUC\\_074.pdf?sequence=1](http://pirnhua.udep.edu.pe/bitstream/handle/123456789/1413/MAE_EDUC_074.pdf?sequence=1).

- Diehl, H. L. (2005). The effects of the reciprocal teaching framework on strategy acquisition of fourth-grade struggling readers. *Dissertation Abstracts International*, 66(04A), 1259.
- Dieten, Anne-Mieke Janssen-van (1992). *Self-Assessment in second language learning. An empirical investigation into self-assessment by adult learners of Dutch*. Ph.D. dissertation, Katholieke Universiteit, Nijmegen, The Netherlands.
- DiFino, S., and Lombardino, L. (2004). Language learning disabilities: The ultimate foreign language challenge. *Foreign Language Annals*, 37(3), 390-400.
- Disability Discrimination Act* (1992). Retrieved from [http://www.austlii.edu.au/au/legis/cth/consol\\_act/dda199226](http://www.austlii.edu.au/au/legis/cth/consol_act/dda199226).
- Dobao, A., and Martínez, I. (2007). Negotiating meaning in interaction between English and Spanish speakers via communicative strategies. *Atlantis*, 29(1), 87-105.
- Dodd, A. (1995). Engaging students: What I learned along the way. *Educational Leadership*, 53, 65-68.
- Dole, J. A., Duffy, G. G., Roehler, L.R., and Pearson, P. D. (1991). Moving from the old to the new: Research on reading comprehension instruction. *Review of Educational Research*, 61, 239-264.
- Dole, J. A., Nokes, J. D., and Drits, D. (2009). Cognitive strategy instruction. In S. E. Israel and G. G. Duffy (eds.), *Handbook of research on reading comprehension* (pp. 347-372). New York: Routledge.
- Donnelly, M. (1987). *At-risk students*. Eric Digest, Series Number 21.
- Dornyei, Z. (1995). On the teachability of communication strategies. *TESOL Quarterly*, 29(1), 55-85.
- Dornyei, Z. (2008). New ways of motivating foreign language learners: Generating vision. *Links*, 38, 3-4.
- Dornyei, Z., and Scott, M. (1995). *Communication strategies: What are they and they not?* Paper presented at the Annual Conference of the American Association for Applied Linguistics, Long Beach, CA.

- Dornyei, Z., and Scott, M. (1997). Communication strategies in a second language: Definitions and taxonomies. *Language Learning*, 47(1), 173-210.
- Dornyei, Z., and Thurrell, S. (1991). Strategic competence and how to teach it. *ELT Journal*, 45(1), 16-23.
- Dornyei, Z., and Thurrell, S. (1992). *Conversation and dialogues in action*. New York: Prentice Hall.
- Dornyei, Z., and Thurrell, S. (1994). Teaching conversational skills intensively: Course content and rationale. *ELT Journal*, 48(1), 40-49.
- Douglas, H. (2007) *Teaching by principles: An interactive approach to language pedagogy*. New York. Pearson Education.
- Dowell, H. A., Storey, K., and Gleason, M. M. (1994). A comparison of programs designed to improve the descriptive writing of students labeled learning disabled. *Developmental Disabilities Bulletin*, 22(1), 73-91.
- Downey, D., and Snyder, L. (2000). College students with LLD: The phonological core as risk for failure in foreign language classes. *Topics in Language Disorders*, 21(1), 82-92.
- Downey, D., and Snyder, L. (2001). Curricular accommodations for college students with language learning disabilities. *Topics in Language Disorders*, 21(2), 55-67.
- Dreyer, C. (1998). Improving students' reading comprehension by means of strategy instruction. *Journal for Language Teaching*, 31, 18-29.
- DSF Literacy and Clinical Services (2014). *Understanding learning difficulties: A practical guide*. DSF Literacy Services: AUSPELD.
- Dudley-Marling, C., and Paugh, P. (2009). *A classroom teacher's guide to struggling writers*. Portsmouth, NH: Heinemann
- Duke, N. K., and Pearson, P. D. (2002). Effective practices for developing reading comprehension. In A. E. Farstrup and S. J. Samuels (eds.), *What research has to say about reading instruction* (3rd ed., pp. 205–242). Newark, DE: International Reading Association.

- Duke, N. K., Pearson, P. D., Strachan, S.L., and Billman, A. K. (2011). Essential elements of fostering and teaching reading comprehension. In S. J. Samuels and A. E. Farstrup (eds.), *What research has to say about reading instruction* (4th ed., pp. 51-93). Newark, DE: International Reading Association.
- Dunlap, L., Dunlap, G., Koegel, L., and Koegel, R. (1991). Using self-monitoring to increase independence. *Teaching Exceptional Children*, 23, 17-22.
- Durkin, D. (1993). *Teaching them to read* (6<sup>th</sup> ed.). Needham, MA: Allyn & Bacon.
- Ehrman, M. E., Leaver, B. L., and Oxford, R. L. (2003). A brief overview of individual differences in second language learning. *System*, 31, 313-330.
- El-Koumy, Abdel Salam A. (2001). *Effects of student self-assessment on knowledge achievement and academic thinking*. [ERIC Document No. ED452731]. Retrieved from <http://www.eric.ed.gov>.
- El-Koumy, Abdel Salam A. (2004a). *Effect of self-assessment of writing processes versus products on EFL students' writing*. [ERIC Document No. ED490559]. Retrieved from <http://www.eric.ed.gov>.
- El-Koumy, Abdel Salam A. (2004b). *Language performance assessment: Current trends in theory and research*. [ERIC Document No. ED490574]. Retrieved from <http://www.eric.ed.gov>.
- El-Koumy, Abdel Salam A. (2004c). *Metacognition and reading comprehension: Current trends in theory and research*. [ERIC Document No. ED490569]. Retrieved from <http://www.eric.ed.gov>.
- El-Koumy, Abdel Salam A. (2006). *The effects of the directed reading-thinking activity on EFL students' referential and inferential comprehension*. [ERIC Document No. ED502645]. Retrieved from <http://www.eric.ed.gov>.



- El-Koumy, Abdel Salam A. (2009). *The effect of classroom performance assessment on EFL students' basic and inferential reading skills*. [ERIC Document No. ED514530]. Retrieved from <http://www.eric.ed.gov>.
- El-Koumy, Abdel Salam A. (2010). *Student self-assessment in higher education: Alone or plus?* Paper presented at the CPLA Conference, October 29-30, 2010, Lebanese American University, Lebanon. [ERIC Document No. ED513289]. Retrieved from <http://www.eric.ed.gov>.
- Ellis, M. (1999). Self-assessment: Discovering yourself and making the best choice for you! *Black Collegian*, 30, 30-33.
- Ellis, N. (1988). Reading, phonological skills, and short-term memory: Interactive tributaries of development. *Journal of Research in Reading*, 13(2), 107-122.
- Ellis, R. (1987). Interlanguage variability in narrative discourse: Style shifting in the use of the past tense. *Studies in Second Language Acquisition*, 9, 1-20.
- Ellis, R. (1990). *Instructed second language acquisition: Learning in the classroom*. Oxford: Basil Blackwell Ltd.
- Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press.
- Ellis, R. (1999). *Learning a second language through interaction*. Amsterdam: John Benjamins.
- Englert, C., and Mariage, T. (1991). Making students partners in the comprehension process: Organizing the reading "POSSE." *Learning Disability Quarterly*, 14, 123-138.
- Englert, C., Mariage, T., Okolo, C., Shankland, R., Moxley, K., Courtad, C., ... and Shin-Yuan, C. (2009). The learning-to-learn strategies of adolescent students with disabilities: Highlighting, notetaking, planning, and writing expository texts. *Assessment for Effective Intervention*, 4(3), 147-161.
- Englert, C., and Raphael, T. (1988). Constructing well-formed prose: Process, structure, and metacognitive knowledge. *Exceptional Children*, 54(6), 513-520.

- Englert, C., Raphael, T., and Anderson, L. (1992). Socially mediated instruction: Improving students' knowledge and talk about writing. *Elementary School Journal*, 92, 411-449.
- Englert, C., Raphael, T., Anderson, L., Anthony, H., and Stevens, D. (1991). Making strategies and self-talk visible: Writing instruction in regular and special education classrooms. *American Educational Research Journal*, 28(2), 337-372.
- Englert, C., and Thomas, C. (1987). Sensitivity to text structure in reading and writing: A comparison between learning disabled and non-learning disabled students. *Learning Disability Quarterly*, 10, 93-105.
- ERIC Clearinghouse on Disabilities and Gifted Education (2002). *Strengthening the second 'R': Helping students with disabilities prepare well-written compositions*. [ERIC Document Number: ED464444]. Retrieved from <http://www.eric.ed.gov>.
- Ericsson, K., and Simon, H. (1984). *Protocol analysis: Verbal reports as data*. Cambridge, MA: MIT.
- Ericsson, K., and Simon, H. (1993). *Protocol analysis: Verbal reports as data* (rev. ed.). Cambridge, MA: MIT.
- Eskey, D. (2005). Reading in a second language. In E. Hinkel (ed.), *Handbook of research in second language teaching and learning* (pp. 563-359). Mahwah, NJ: Lawrence Erlbaum Associates.
- Estrada, C., Isen, A., and Young, M. (1997). Positive affect facilitates integration of information and decreases anchoring in reasoning among physicians. *Organizational Behavior and Human Decision Processes*, 72, 117-135.
- European Parliament and Council of the European Union (2006). *Recommendation of the European Parliament and the Council of 18 December 2006 on key competences for lifelong learning*. Document (2006/962/EC). Brussels: Eurydice.
- Fabrikant, W., Siekierski, N., and Williams, C. (1999). *Improving students' inferential and literal reading comprehension*. [ERIC Document Number: ED433497]. Retrieved from <http://www.eric.ed.gov>.

- Faerch, C. and G. Kasper (1983). Plans and strategies in foreign language communication. In C. Færch & G. Kasper (eds.), *Strategies in interlanguage communication* (pp. 20-60). London: Longman.
- Faerch, C., and Kasper, G. (1984). Two ways of defining communication strategies. *Language Learning*, 34(1), 45-63.
- Faerch, C., and Kasper, G. (1986). Strategic competence in foreign language teaching. In G. Kasper. (ed.), *Learning, teaching and communication in the foreign language classroom* (pp. 179-193). Aarhus: Aarhus University Press.
- Falchikov, N., and Boud, D. (1989). Student self-assessment in higher education: A meta-analysis. *Review of Educational Research*, 59(4), 395-430.
- Farrell, T., and Marrard, C. (2006). The use of reception strategies by learners of French as a foreign language. *The Modern Language Journal*, 90(3), 338-352.
- Faucette, P. (2001). A pedagogical perspective on communication strategies: Benefits of training and an analysis of English language teaching materials. *Second Language Studies*, 19(2), 1-40.
- Fidalgo, R., Torrance, M., and García, J. N. (2008). The long term effects of strategy-focussed writing instruction for grade six students. *Contemporary Educational Psychology*. 33, 672-693.
- Fiedorowicz, C., Benezra, E., MacDonald, W., McElgunn, B., Wilson, A., and Kaplan, B. (2001). Neurobiological basis of learning disabilities: An update. *Learning Disabilities: A Multidisciplinary Journal*, 11(2), 61-74.
- Finch, A. E., and Sampson, K. (2003). *It's up to you*. Seoul: Chonghab English Publishing.
- Firkins, A., Forey, G., and Sengupta, S. (2007). Teaching writing to low proficiency EFL students. *ELT Journal*, 61(4), 341-352.
- Fisher, D. and Frey, N. (2014). *Better learning through structured teaching* (2nd ed.). Alexandria, VA: ASCD.
- Flavell, J. H. (1976). Metacognitive aspects of problem solving. *The nature of intelligence*, 12, 231-235.

- Florida Department of Education (1995). *Collaborative language and speech services: Alternative classroom treatment*. Tallahassee, FL: Author.
- Fowler, J. (2003). *Learning disabilities training: A new approach*. London, ON: Literacy Link South Central. Retrieved from [www.nald.ca/library/research/ldtrain/cover.htm](http://www.nald.ca/library/research/ldtrain/cover.htm).
- Fowler, J., and Hunt, J. (2004). *Learning disabilities training, phase II: screening tools, strategies, and employment*. Retrieved from [www.nald.ca/library/research/ldtrain/tools/cover.htm](http://www.nald.ca/library/research/ldtrain/tools/cover.htm).
- Freire, P. (2000). *Pedagogy of the oppressed: 30th anniversary edition*. New York: Continuum.
- Fuchs, D., Fuchs, L. S., Mathes, P. G., and Simmons, D. C. (1997). Peer-Assisted Learning Strategies: Making classrooms more responsive to diversity. *American Educational Research Journal*, 34(1), 174-206.
- Fuchs, L. S., Fuchs, D., and Kazdan, S. (1999). Effects of peer-assisted learning strategies on high school students with serious reading problems. *Remedial and Special Education*, 20(5), 309-318.
- Fung, I., Wilkinson, I., and Moore, D. (2003). L1-assisted reciprocal teaching to improve ESL students' comprehension of English expository text. *Learning and Instruction*, 13(1), 1-31.
- Gajria, M., Jitendra, A., Sood, S., and Sacks, G. (2007). Improving comprehension of expository text in students with LD: A research synthesis. *Learning Disabilities*, 40(3), 210-225.
- Gajria, M., and Salvia, J. (1992). The effects of summarization instruction on text comprehension of students with learning disabilities. *Exceptional Children*, 58, 508-516.
- Gambrell, L. B., and Chasen, S. P. (1991). Explicit story structure instruction and the narrative writing of fourth- and fifth-grade below-average readers. *Reading Research & Instruction*, 31, 54-62.

- Gan, L., Rafik-Galea, S., and Chan, H. (2017). Effect of oral communication strategies training on the development of Malaysian English as a second language learners' strategic competence. *International Journal of Education and Literacy Studies*, 5(4), 57-77.
- Ganschow, L., and Schneider, E. (2005). At-risk students and the study of a foreign language in school. *Fact Sheet*, 25, 2005.
- Ganschow, L., and Schneider, E. (2006). *Assisting students with foreign language learning difficulties in School*. Baltimore, MD: International Dyslexia Association.
- Ganschow, L., and Sparks, R. (1995). Effects of direct instruction in Spanish phonology on the native language skills and foreign language aptitude of at-risk foreign language learners. *Journal of Learning Disabilities*, 28, 107-120.
- Ganschow, L., Sparks, R., and Javorsky, J. (1998). Foreign language learning difficulties: A historical perspective. *Journal of Learning Disabilities*, 31(3), 1-18.
- Ganschow, L., Sparks, R., Javorsky, J., Pohlman, J., and Bishop-Marbury, A. (1991). Identifying native language difficulties among foreign language learners in college: A foreign language learning disability? *Journal of Learning Disabilities*, 24(9), 530-541.
- Gardill, M., and Jitendra, A. (1999). Advanced story map instruction: Effects on reading comprehension of students with learning disabilities. *The Journal of Special Education*, 33, 2-17.
- Gardner, R. C. (2001). Integrative motivation and second language acquisition. In Z. Dornyei and R. W. Schmidt (eds.), *Motivation and second language acquisition* (pp. 1-19). Honolulu: University of Hawaii, Second Language Teaching and Curriculum Center.
- Gardner, R. C. (2010). *Motivation and second language acquisition: The socioeducational model*. New York: Peter Lang.
- Garner, R. (1987). *Metacognition and reading comprehension*. Norwood, NJ: Ablex.

- Gass, S. M. (2002). An interactionist perspective on second language acquisition. In Kaplan, R. B. (ed.), *The Oxford handbook of applied linguistics* (pp. 170-181). Oxford: Oxford University Press.
- Geladari A., and Mastrothanas, K. (2011). The employment of cognitive and metacognitive strategies in bilingual pupils' creative writing. *Major Trends in Theoretical and Applied Linguistics*, 3, 97-113.
- Gerber, P. (1998). Characteristics of adults with specific learning disabilities. In Lenz, B.K., Sturmski, N.A., and Corley, M.A. (eds.), *Serving adults with learning disabilities: Implications for effective practice* (pp. 8-19). U.S.: Department of Education, Office of Vocational and Adult Education. National Adult Literacy and Learning Disabilities Center, Academy for Educational Development.
- Gerber, P., and Reiff, H. (1994). *Learning disabilities in adulthood: Persisting problems and evolving issues*. Austin, TX: PRO-ED.
- Gerber, P., Schnieders, C., Paradise, L., Reiff, H., Ginsberg, R., and Popp, P. (1990). Persisting problems of adults with learning disabilities: Self-reported comparisons from their school-age and adult years. *Journal of Learning Disabilities*, 23(9), 570-573.
- Gersten, R., and Baker, S. (1999). Reading comprehension instruction for students with learning disabilities: A research synthesis. Retrieved from <http://www.ldonline.org>.
- Gersten, R., and Baker, S. (2000). The professional knowledge base on instructional practices that support cognitive growth for English-language learners. In R. Gersten, E. Schiller, and S. Vaughn (eds.), *Contemporary special education research syntheses of the knowledge base on critical instructional issues*. Mahwah, NJ: Lawrence Erlbaum.
- Gersten, R., and Baker, S. (2001). Teaching expressive writing to students with learning disabilities: A meta-analysis. *The Elementary School Journal*, 101(3), 251-272.

- Gersten, R., Baker, S., and Edwards, L. (1999). *Teaching expressive writing to students with learning disabilities*. Arlington, VA.: ERIC Clearinghouse on Disabilities and Gifted Education, Council for Exceptional Children.
- Gersten, R., Fuchs, L., Williams, J., and Baker, S. (2001). Teaching reading comprehension strategies to students with learning disabilities: A review of research. *Review of Educational Research*, 71(2), 279-320.
- Gillberg, C., and Soderstrom, H. (2003). Learning disability. *The Lancet*, 362, 811-821.
- Gipps, C. V. (1994). *Beyond testing: Towards a theory of educational assessment*. Washington, D. C.: The Falmer Press.
- Gladdy, A. (2011). Strategies for enhancing the communicative competence of students with learning disabilities. *Mediterranean Journal of Social Sciences*, 2(5), 19-22.
- Gleason, M. M. (1999). The role of evidence in argumentative writing. *Reading & Writing Quarterly*, 15, 81-106.
- Gleason, M. M., and Isaacson, S. (2001). Using the new basals to teach the writing process: Modifications for students with learning problems. *Reading & Writing Quarterly*, 17, 75-92.
- Goddard, Y. L., and Sendi, C. (2008). Effects of self-monitoring on the narrative and expository writing of four fourth-grade students with learning disabilities. *Reading and Writing Quarterly: Overcoming Learning Difficulties*, 24(4), 408-433.
- Goh, C. (1998). How learners with different listening abilities use comprehension strategies and tactics. *Language Teaching Research*, 2, 124- 47.
- Golley, A. (2015). *Teaching writing for students with learning disabilities in an inclusive classroom setting: A curriculum development project*. Retrieved from <http://digitalcommons.brockport.edu/cgi/viewcontent.cgi?article=1282&context=surc>.

- Gomaa, o. (2015). The effect of reciprocal teaching intervention strategy on reading comprehension skills of 5th grade elementary school students with reading disabilities. *International Journal of Psycho-Educational Sciences*, 4(2), 39-45.
- Gooden, S. H. (2012). Comprehension strategies teachers use when they read. *Journal of Reading Education*, 37(2), 16-20.
- Gorham, J. (1988). The relationship between verbal teaching immediacy behaviors and student learning. *Communication Education*, 17(1), 40-53.
- Gottlieb, Margo (2000). Portfolio practices in elementary and secondary schools: Towards learner-directed assessment. In G. Ekbatani and H. Pierson (eds.), *Learner-directed assessment in ESL* (pp. 89-126). London: Lawrence Erlbaum.
- Grabe, W. (2009). *Reading in a second language*. Cambridge: Cambridge University Press.
- Grabe, W., and Kaplan, R. B. (1996). *Theory and practice of writing*. London, New York: Longman.
- Grabe, W., and Stoller, F. (2002). *Teaching and researching reading*. London: Pearson Education.
- Graham, L., and Bailey, J. (2007). Learning disabilities and difficulties: An Australian conspectus. *Journal of Learning Disabilities*, 40(5), 386-391.
- Graham, L. and Bellert, A. (2004). Difficulties in reading comprehension for students with learning disabilities. In B. Y. L. Wong (ed.), *Learning about learning disabilities* (pp. 251-280). Amsterdam: Elsevier Academic Press.
- Graham, S. (1990). The role of production factors in learning disabled students' compositions. *Journal of Educational Psychology*, 82, 781-791.
- Graham, S., Bollinger, A., Booth Olson, C., D'Aoust, C., MacArthur, C., McCutchen, D., and Olinghouse, N. (2012). *Teaching elementary school students to be effective writers: A practice guide*. Washington, D. C.: National Center for Education Evaluation and Regional Assistance.



- Graham, S., and Harris, K. (1989a). A components analysis of cognitive strategy instruction: Effects on learning disabled students' compositions and self-efficacy. *Journal of Educational Psychology*, 81, 353-361.
- Graham, S., and Harris, K. (1989b). Improving learning disabled students' skills at composing essays: Self-instructional strategy training. *Exceptional Children*, 56(3), 201-214.
- Graham, S., and Harris, K. (1991). Self-instructional strategy development: Programmatic research in writing. In B. Y. L. Wong (ed.), *Contemporary intervention research in learning disabilities: An international perspective* (pp. 47-64). New York: Springer-Verlag.
- Graham, S., and Harris, K. (1993a). Self-regulated strategy development: Helping students with learning problems develop as writers. *Elementary School Journal*, 94, 169-181.
- Graham, S., and Harris, K. (1993b). Teaching writing strategies to students with learning disabilities: Issues and recommendations. In L.J. Meltzer (ed.), *Strategy assessment and instruction for students with learning disabilities: From theory to practice* (pp. 271-292). Austin, TX: Pro-Ed.
- Graham, S., and Harris, K. (1996). Self-regulation and strategy instruction for students who find writing and learning challenging: In M. Levy, and S. Ransdell (eds.), *The science of writing: Theories, methods, individual differences, and applications* (pp. 347-360). Hillsdale, NJ: Erlbaum.
- Graham, S., and Harris, K. (1997). Self-regulation and writing: Where do we go from here? *Contemporary Educational Psychology*, 22, 102-114.
- Graham, S., and Harris, K. (1999). Assessment and intervention in overcoming writing difficulties: An illustration from the self-regulated strategy development model. *Language, Speech, and Hearing Services in Schools*, 30, 255-264.
- Graham, S., and Harris, K. (2000). The role of self-regulation and transcription skills in writing and writing development. *Educational Psychologists*, 35, 3-12.

- Graham, S., and Harris, K. (2005). *Writing better: Effective strategies for teaching students with learning difficulties*. Baltimore: Brookes Publishing Company.
- Graham, S., and Harris, K. (2006). Students with learning disabilities and the process of writing: A meta-analysis of SRSD Studies. In H. L. Swanson, K. R. Harris, and S. Graham (eds.), *Handbook of learning disabilities*. New York: Guilford.
- Graham, S., and Harris, K. (2009). Almost 30 years of writing research: Making sense of it all with the wrath of Khan. *Learning Disabilities Research and Practice*, 24(2), 58-68.
- Graham, S., and Harris, K. (2011). Writing and students with disabilities. In J. M. Kauffman, and D. P. Hallahan (eds.), *Handbook of special education* (pp. 422-433). New York, NY: Routledge.
- Graham, S., Harris, K., and Fink, B. (2000). Is handwriting causally related to learning to write? Treatment of handwriting problems in beginning writers. *Journal of Educational Psychology*, 92, 620-633.
- Graham, S., Harris, K., and Fink, B. (2002). Contribution of spelling instruction to the spelling, writing, and reading of poor spellers. *Journal of Educational Psychology*, 94, 669-686.
- Graham, S., Harris, K., and Larsen, L. (2001). Prevention and intervention of writing difficulties for students with learning disabilities. *University of Maryland Learning Disabilities Research & Practice*, 16(2), 74-84.
- Graham, S., Harris, K., MacArthur, C., and Schwartz, S. (1991). Writing and writing instruction with students with learning disabilities: A review of a program of research. *Learning Disabilities Quarterly*, 14, 89-114.
- Graham, S., Harris, K., and Mason, L. (2005). Improving the writing performance, knowledge, and self-efficacy of struggling young writers: The effects of self-regulated strategy development. *Contemporary Educational Psychology*, 30(2), 207-241.

- Graham, S., Harris, K., and Reid, R. (1993). Developing self-regulated learners. In E. L. Meyen, G. A. Vergason, and R. J. Whelan (eds.), *Educating students with mild disabilities* (pp. 127-149). Denver: Love.
- Graham, S., Harris, K., and Troia, G. A. (1998). Writing and self-regulation: Cases from the self-regulated strategy development model. In D. H. Schunk and B. J. Zimmerman (eds.), *Developing self-regulated learners: From teaching to self-reflective practice* (pp. 20-41). New York: Guilford Press.
- Graham, S., Harris, K., and Troia, G. (2000). Self-regulated strategy development revisited: Teaching writing strategies to struggling writers. *Topics in Language Disorders*, 20(4), 1-14.
- Graham, S., and Hebert, M. (2010). *Writing to read: Evidence for how writing can improve reading*. New York: Carnegie Corporation of New York.
- Graham, S., MacArthur, C., Schwartz, S., and Page-Voth, V. (1992). Improving the compositions of students with learning disabilities using a strategy involving product and process goal setting. *Exceptional Children*, 58(4), 322-334.
- Graham, S., McKeown, D., Kiuahara, S., and Harris, K.S. (2012). A meta-analysis of writing instruction for students in elementary grades. *Journal of Educational Psychology*, 104(4), 879-896.
- Graham, S., and Perin, D. (2007a). A meta-analysis of writing instruction for adolescent students. *Journal of Educational Psychology*, 99(3), 445-476.
- Graham, S., and Perin, D. (2007b). *Writing next: Effective strategies to improve writing of adolescents in middle and high schools*. New York, NY: Carnegie Corporation of New York.
- Graham, S., Schwartz, S., and MacArthur, C. (1993). Knowledge of writing and the composing process, attitude toward writing, and self-efficacy for students with and without learning disabilities. *Journal of Learning Disabilities*, 26, 237-249.
- Graves, M., and Graves, B. (1994). *Scaffolding reading experiences: Designs for student success*. Norwood, MA: Christopher-Gordon.

- Gray, J. R., Braver, T. S., and Raichle, M. E. (2002). Integration of emotion and cognition in the lateral prefrontal cortex. *Proceedings of the National Academy of Sciences of the United States of America*, 99, 4115-4120.
- Green, J. (1990). Reading is a social process. In J. Howell, A. McNamara, and M. Clough (eds.), *Social context of literacy* (pp. 104-123). Canberra, Australia: ACT Department of Education.
- Greene, B. A., and Land, S. M. (2000). A qualitative analysis of scaffolding use in a resource-based learning environment involving world wide web. *Journal of Educational Computing Research*, 23(2), 151-179.
- Grenfell, M. and Harris, V. (1999). *Modern languages and learning strategies*. London: Routledge.
- Gresham, F. M., MacMillan, D. L., and Bocian, K. M. (1996). Learning disabilities, low achievement, and mild mental retardation: More alike than different? *Journal of Learning Disabilities*, 29(6), 570-581.
- Griffiths, R. (2002). *Learning differently: Handbook for students with learning disabilities at Cabrillo College*. Retrieved from [https://cabrillo.edu/academics/learningskills/documents/LDStudent\\_Book.pdf](https://cabrillo.edu/academics/learningskills/documents/LDStudent_Book.pdf).
- Gumpel, T., and Shlomit, D. (2000). Exploring the efficacy of self-regulatory training as a possible alternative to social skills training. *Behavioral Disorders*, 25, 131-141.
- Guthrie, J. (2008). Reading motivation and engagement in middle and high school: Appraisal and intervention. In J. T. Guthrie (ed.), *Engaging adolescents in reading* (pp. 1-16). London: Corwin Press.
- Guthrie, J., and Knowles, K. (2001). Promoting reading motivation. In L. Verhoeven, and C. E. Snow (eds.), *Literacy and motivation: Reading engagement in individuals and groups* (pp. 159-176). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Guthrie, J., and Wigfield, A. (2000). Engagement and motivation in reading. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, and R. Barr (eds.), *The handbook of reading research* (Vol. 2, pp. 403-420). Mahwah, New Jersey: Lawrence Erlbaum Associates.

- Guthrie, J., Wigfield, A., and VonSeeker, C. (2000). Effects of integrated instruction on motivation and strategy use in reading. *Journal of Educational Psychology*, 92, 331-341.
- Hacker, D. (1997). Comprehension monitoring of written discourse across early-to-middle adolescence. *Reading and Writing: An Interdisciplinary Journal*, 9, 207-240.
- Hacker, D., Plumb, C., Butterfield, E. C., Quathamer, D., and Heineken, E. (1994). Text revision: Detection and correction of errors. *Journal of Educational Psychology*, 86, 65-78.
- Hacker, D., and Tenent, A. (2002). Implementing reciprocal teaching in the classroom: Overcoming obstacles and making modifications. *Journal of Educational Psychology*, 94(4), 699-718.
- Hall, J. and Verplaetse, L. (2000). *Second and foreign language learning through classroom interaction*. Mahwah, N.J.: Lawrence Erlbaum.
- Hallenbeck, Mark J. (1995). *The Cognitive strategy in writing: Welcome relief for adolescents with learning disabilities*. [ERIC Document Number: ED381981]. Retrieved from <http://www.eric.ed.gov>.
- Hamre, B., and Pianta, R. (2005). Can instructional and emotional support in the first grade classroom make a difference for children at risk of school failure? *Child Development*, 76, 949-967.
- Harris, K. (1986). Self-monitoring of attentional behavior versus self-monitoring of production: Effects on on-task behavior and academic response rate among learning disabled children. *Journal of Applied Behavior Analysis*, 19, 417-442.
- Harris, K., and Graham, S. (1996). *Making the writing process work: Strategies for composition and self-regulation*. Cambridge, MA: Brookline.
- Harris, K., and Graham, S. (1999). Programmatic intervention research: Illustrations from the evolution of self-regulated strategy development. *Learning Disability Quarterly*, 22, 251-262.

- Harris, K., Graham, S., and Mason, L. (2006). Improving the writing, knowledge, and motivation of struggling young writers: Effects of self-regulated strategy development with and without peer support. *American Educational Research Journal*, 43(2), 295-340.
- Harris, K., Graham, S., Reid, R., McElroy, K., and Hamby, R. (1994). Self-monitoring of attention versus self-monitoring of performance: Replication and cross-task comparison studies. *Learning Disability Quarterly*, 17, 121-139.
- Harris, K., and Pressley, M. (1991). The nature of cognitive strategy instruction: Interactive strategy construction. *Exceptional Children*, 57(5), 392-405.
- Harris, M. (1997). Self-assessment of language learning in formal settings. *English Language Teaching Journal*, 51(1), 12-20.
- Harris, M., and McCann, P. (1994). *Assessment*. Oxford, U.K.: Heinemann Publishers.
- Harris, T., and Hodges, R. (1995). *The literacy dictionary*. Newark, DE: International Reading Association.
- Hart, E., and Speece, D. (1998). Reciprocal teaching goes to college: Effects for postsecondary students at risk for academic failure. *Journal of Educational Psychology*, 90(4), 670-681.
- Hashey, J., and Connors, D. (2003). Learn from our journey: Reciprocal teaching action research. *The Reading Teacher*, 57(3), 224-235.
- Hatch, E. (1978). Discourse and second language acquisition. In E. Hatch (ed.), *Second language acquisition: A book of readings* (pp. 401-435). Rowley, MA: Newbury House.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London: Routledge.
- Hedge, T. (2000). *Teaching and learning in the classroom*. Oxford, UK: Oxford University Press.
- Herczog, M. and Porter, P. (2010). *Strategies for struggling readers: A teacher resource guide*. California: Center for Civic Education.

- Higgins, E. L., and Raskind, M. H. (1997). The compensatory effectiveness of optical character recognition/speech synthesis on reading comprehension of postsecondary students with learning disabilities. *Learning Disabilities: A Multidisciplinary Journal*, 8, 75-87.
- Hillocks, G. (1984). What works in teaching composition: A meta-analysis of experimental treatment studies. *American Journal of Education*, 93, 133-170.
- Hollas, B. (2002). Teaching your below-grade level students how to become strategic readers. University of Tennessee, Knoxville, Tennessee: Professional Development Inservice.
- Holmes, B. C. (1985). The effects of a strategy and sequenced materials on the inferential comprehension of disabled readers. *Journal of Learning Disabilities*, 18(9), 542-546.
- Horwitz, E. K. (2001) Language anxiety and achievement. *Annual Review of Applied Linguistics* 21, 112-126.
- Horwitz, E. K., Horwitz, B. and Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal* 70(2), 125-132.
- Hosenfeld, C. (1977). A preliminary investigation of the reading strategies of successful and unsuccessful second language learners. *System*, 5(2), 110-23.
- Houck, C., and Billingsley, B. (1989). Written expression of students with and without learning disabilities: Differences across the grades. *Journal of Learning Disabilities*, 22(9), 561-567, 572.
- Howe, M. (2003). *Importance of communication skills*. Retrieved from [wysiwyg://9/http://www.howewriteyourare.com/articles/communicationskills0103.html](http://www.howewriteyourare.com/articles/communicationskills0103.html).
- Hu, G. (2002). Psychological constraints on the utility of metalinguistic knowledge in second language production. *Studies in Second Language Acquisition*, 24, 347-386.

- Hughes, C. (1998). Effective instruction for adults with learning disabilities. In B. Keith Lenz, Neil A. Sturmski, and Mary Ann Corley (eds.), *Serving adults with learning disabilities: Implications for effective practice* (pp. 34-49). Washington, D. C.: National Adult Literacy and Learning Disabilities Center.
- Hughes, C., and Boyle, J. R. (1991). Effects of self-monitoring for on-task behavior and task productivity on elementary students with moderate mental retardation. *Education and Treatment of Children*, 14(2), 96-111.
- Hughes, C., Copeland, S., Agran, M., Wehmeyer, M., Rodi, M. S., and Presley, J. A. (2002). Using self-monitoring to improve performance in general education high school classes. *Education and Training in Mental Retardation and Developmental Disabilities*, 37, 262-272.
- Hunt, J., Gow, L., and Barnes, P. (1989). Learner self-evaluation and assessment: A tool for autonomy in the language learning classroom. In V. Bickley (ed.), *Language teaching and learning styles within and across cultures* (pp. 207-17). Hong Kong: Institute of Language in Education, Education Department.
- Isen, A. (1984). The influence of positive affect on decision making and cognitive organization. In T. C. Kinnear (ed.), *Advances in consumer research, XI* (pp. 534-537). Utah: Association for Consumer Research.
- Isen A. (1999). On the relationship between affect and creative problem solving. In Russ S.W. (ed.), *Affect, creative experience and psychological adjustment* (pp. 3-17). Phila: Brunner/Mazel.
- Isen, A. (2000). Positive affect and decision making. In M. Lewis and J. Haviland-Jone (eds.), *Handbook of emotions* (2nd ed., pp. 417-435). New York: Guilford.
- Isen, A. (2001). An influence of positive affect on decision making in complex situations: Theoretical issues with practical implications. *Journal of Consumer Psychology*, 11(2), 75-85.
- Isen, A., Daubman, K., and Nowicki, G. (1987). Positive affect facilitates creative problem solving. *Journal of Personality and Social Psychology*, 32, 112-1131.



- Isen, A., and Patrick, R. (1983). The effect of positive feelings on risk taking: When the chips are down. *Organizational Behavior and Human Performance*, 31, 194-202.
- Isen, A., and Reeve, J. (2005). The influence of positive affect on intrinsic and extrinsic motivation: Facilitating enjoyment of play, responsible work behavior, and self-control. *Motivation and Emotion*, 29(4), 29-323.
- Isen, A., and Shalcker, T. E. (1982). The effect of feeling state on the evaluation of positive, neutral, and negative stimuli: When you accentuate the positive, do you eliminate the negative? *Social Psychology Quarterly*, 45, 58-63.
- Jacobs, J. E., and Paris, S. G. (1987). Children's metacognition about reading: Issues in definition, measurement, and instruction. *Educational Psychology*, 22, 255-278.
- Javorsky, J., Sparks, R., and Ganschow, L. (1992). Perceptions of college students with and without specific learning disabilities about foreign language courses. *Learning Disabilities Research & Practice*, 7, 31-44.
- Jennings, C., and Shepherd, J. (1998). *Literacy and the key learning areas: Successful classroom strategies*. Australia: Eleanor Curtain Publishing.
- Jianing, Xu. (2007). Storytelling in the EFL speaking classroom. *The Internet TESL Journal*, 13(11). Retrieved from <http://iteslj.org/Techniques/Jianing-Storytelling.html>.
- Jitendra, A., Cole, C., Hoppes, M., and Wilson, B. (1998). Effects of a direct instruction main idea summarization program and self-monitoring on reading comprehension of middle school students with learning disabilities. *Reading and Writing Quarterly*, 14(4), 379-396.
- Jitendra, A. K., Hoppes, M. K., and Xin, Y. P. (2000). Enhancing main idea comprehension for students with learning problems: The role of summarization strategy and self-monitoring instruction. *Journal of Special Education*, 34(3), 127-139.
- Johnson-Glenberg, M. C. (2000). Training reading comprehension in adequate decoders/poor comprehenders: Verbal versus visual strategies. *Journal of Educational Psychology*, 92(4), 772-782.

- Johnson, L., Graham, S., and Harris, K. (1997). The effects of goal setting and self-instruction on learning a reading comprehension strategy: A study of students with learning disabilities. *Journal of Learning Disabilities*, 30(1), 80-91.
- Kahn, B. E., and Isen, A. M. (1993). The influence of positive affect on variety seeking among safe, enjoyable products. *Journal of Consumer Research*, 20, 257-270.
- Kamil, M., Borman, G., Dole, J., Kral, C., Salinger, T., and Torgesen, J. (2008). *Improving adolescent literacy: Effective classroom and intervention practices*. Washington, D. C.: National Center for Education Evaluation and Regional Assistance.
- Karsenty, L. (2001). Adapting verbal protocol methods to investigate speech systems use. *Applied Ergonomics*, 32(1), 15-22.
- Kasper, G., and Kellerman, E. (1997). *Communication strategies: Psycholinguistic and sociolinguistic perspectives*. London: Longman.
- Kauffman, D. F. (2004). Self-regulated learning in web-based environments: Instructional tools designed to facilitate cognitive strategy use, metacognitive processing, and motivational beliefs. *Journal of Educational Computing Research*, 30(1), 139-161.
- Kaufman, N. J., Randlett, A. L., and Price, J. (1985). Awareness of the use of comprehension strategies in good and poor college readers. *Reading Psychology*, 6, 1-11.
- Kavale, K., Fuchs, D. and Scruggs, T. (1994). Setting the record straight on learning disability and low achievement: Implications for policy making. *Learning Disabilities Research & Practice*, 60(10), 717-718.
- Kavani, R., and Amjadiparvar, A. (2018). The effect of strategy-based instruction on motivation, self-regulated learning, and reading comprehension ability of Iranian EFL learning. *Cogent Education*, 5(1), DOI: 10.1080/2331186X.2018.1556196.
- Kehe, D., and Kehe, P. (2004). *Conversation strategies: Pair and group activities for developing communicative competence*. Brattleboro, VT: Pro Lingua Associates.

- Kellerman, E. (1991). Compensatory strategies in second language research: A critique, a revision, and some (non-) implications for the classroom. In R. Phillipson, E. Kellerman, L. Selinker, M. Sharwood Smith, and M. Swain (eds.), *Foreign/second language pedagogy research: A commemorative volume for Claus Færch* (pp. 142-161). Clevedon, England: Multilingual Matters.
- Kelley, D., and Gorham, J. (1988). Effects of immediacy on recall of information. *Communication Education*, 37, 198-207.
- Kelly, M., Moore, D., and Tuck, B. (1994). Reciprocal teaching in a regular primary school classroom. *Journal of Educational Research*, 88(1), 53-62.
- Khamwan, T. (2007). *The Effects of interactional strategy training on teacher-student interaction in an EFL classroom*. Nakhon Ratchasima: Suranaree University of Technology.
- Khoshsima, H., and Tiyar, F. (2014). The Effect of summarizing and presentation strategies on reading comprehension of Iranian intermediate EFL learners. *International Journal of Applied Linguistics & English Literature*, 3(4), 89-96.
- Kiewra, K. A. (2002). How classroom teachers can help students learn and teach them how to learn. *Theory into Practice*, 41(2), 71-80.
- King, J., Biggs, S., and Lipsky, S. (1984). Students' self-questioning and summarizing as reading study strategies. *Journal of Reading Behavior*, 16 (3), 205-218.
- Kitsantas, A., Reiser, B., and Doster, J. (2004). Goal setting, cues, and evaluation during acquisition of procedural skills: Empowering students' learning during independent practice. *Journal of Experimental Education*, 72(4), 269-287.
- Klingner, J., and Vaughn, S. (1996). Reciprocal teaching of reading comprehension strategies for students with learning disabilities. *Elementary School Journal*, 96(3), 275-293.
- Klingner, J., Vaughn, S., and Boardman, A. (2007). *Teaching reading comprehension to students with learning difficulties*. New York: Guilford Press.
- Kong, J. (2004). A study of communication strategy training. *Foreign Language World*, 5, 33-39.

- Kong, J. (2006). An investigation of communication strategies used by Chinese non-English major postgraduates. *Teaching English in China*, 29(2), 3-9.
- Kongsom, T. (2016). The impact of teaching communication strategies on English speaking of engineering undergraduates. *Journal of Language Teaching and Learning in Thailand*, 51, 39-69.
- Kozminsky, E., and Kozminsky, L. (2001). How do general knowledge and reading strategies ability relate to reading comprehension of high school students at different educational levels? *Journal of Research in Reading*, 2, 187-204.
- Kraat, Arlene W. (1985). *Communication interaction between aided and natural speakers: A state of the art report*. [Eric Document Number: ED287275]. Retrieved from <http://www.eric.ed.gov>.
- Kramsch, C. (1987). Interactive discourse in small and large groups. In Wilga M. Rivers (ed.), *Interactive language teaching* (pp. 17-30). Cambridge: Cambridge University Press.
- Krashen, Stephen D. (1988). *Second language acquisition and second language learning*. New York: Prentice-Hall International.
- Lam, W. K. (2010). Implementing communication strategy instruction in the ESL oral classroom: What do low-proficiency learners tell us? *TESL Canada Journal*, 27(2), 11-30.
- Langer, J. (1984). Examining background knowledge and text comprehension. *Reading Research Quarterly*, 19(4), 468-481.
- Langtree, I. (2010). *Definitions of the models of disability*. Retrieved from <http://www.disabled-world.com/definitions/disability-models.php>.
- Lantoff, J. (2000). Second language learning as a mediated process. *Language Teaching*, 33, 79-96.
- Larenas, C. (2011). Exploring knowledge of English speaking strategies in 8<sup>th</sup> and 12<sup>th</sup> graders. *Facultad de Ciencias Humanas*, 13 (2), 85-98.
- Lau, K. L. (2006). Reading strategy use between Chinese good and poor readers: a think aloud study. *Journal of Research in Reading*, 29(4), 383-399.

- Learning Disabilities Association of Alberta (2010). *Learning disabilities reference manual*. Retrieved from [http://www.ldalberta.ca/wpcontent/uploads/2010/10/Resources\\_LDReferenceManual.pdf](http://www.ldalberta.ca/wpcontent/uploads/2010/10/Resources_LDReferenceManual.pdf).
- Learning Disabilities Association of America (2010). *The Learning Disabilities Association of America's white paper on evaluation, identification, and eligibility criteria for students with specific learning disabilities*. Pittsburgh, PA: Author. [ERIC Document No. ED521970]. Retrieved from <http://www.eric.ed.gov>.
- Learning Disabilities Association of Canada (1999). *Destination literacy: Identifying and teaching adults with learning disabilities*. Ottawa, ON: The Association.
- Learning Disabilities Association of Canada (2005). *A literature framework to guide the research study: Putting a Canadian face on learning disabilities (PACFOLD)*. <http://pacfold.ca/download/Supplementary/Framework.pdf>.
- Learning Disabilities Association of Ontario (2001). *Learning disabilities: A new definition*. Retrieved from [http://www.ldao.ca/documents/Definition\\_and\\_Supporting%20Document\\_2001.pdf](http://www.ldao.ca/documents/Definition_and_Supporting%20Document_2001.pdf).
- Lederer, J. (2000). Reciprocal teaching of social studies in inclusive elementary classrooms. *Journal of Learning Disabilities*, 33(1), 91-107.
- Lee-Thompson, L. C. (2008). An investigation of reading strategies applied by American learners of Chinese as a foreign language. *Foreign Language Annals*, 41(4), 702-720.
- Lenski, S., Wham, M., and Johns, J. (1999). *Reading and learning strategies for middle and high school students*. Dubuque, IA: Kendall/Hunt.
- Lenz, B. K., Ellis, E. S., and Scanlon, D. (1996). *Teaching learning strategies to adolescents and adults with learning disabilities*. Austin, TX: PRO-ED.

- Leong, D., Bodrova, E., Hensen, R., and Henninger, M. (1999). *Scaffolding early literacy through play*. NAEYC 1999 Annual Conference: New Orleans, LA. Retrieved from [http://www.mcrel.org/PDF/EarlyChildhoodEducation/4006IR\\_NAEYC\\_Handout\\_Play.pdf](http://www.mcrel.org/PDF/EarlyChildhoodEducation/4006IR_NAEYC_Handout_Play.pdf).
- Lerner, J., and Kline, F. (2006). *Learning disabilities and related disorders: Characteristics and teaching strategies* (10<sup>th</sup> ed.). Boston, MA: Houghton Mifflin Company.
- Levin, J. R., and Pressley, M. (1981). Improving children's prose comprehension: Selected strategies that seem to succeed. In C. M. Santa and B. L. Hayes (eds.), *Children's prose comprehension: Research and practice* (pp. 44-71). Newark, DE: International Reading Association.
- Lew, M., Alwis, W., and Schmidt, H. (2010). Accuracy of students' self-assessment and their beliefs about its utility. *Assessment and Evaluation in Higher Education*, 35(2), 135-156.
- Lewis, M. (2002). *Implementing the lexical approach: Putting theory into practice*. Boston, MA: Heinle.
- Lewis, S. (2011). Are communication strategies teachable? *Encuentro*, 20, 46-54.
- Liao, P., and Chiang, M. (2003). College students' learning strategies in developing English speaking skills. In Y. Chen and Y. Leung (eds.), *Selected Papers from the Twelfth International Symposium on English Teaching* (pp. 113-123). Taiwan: Taipei.
- Lightbown, P., and Spada, N. (1993). Instruction and the development of question in L2 classroom. *Studies in Second Language Acquisition*, 15, 205-224.
- Li-xia, J. (2016). The establishment of strategy-training-based writing teaching mode via language experiment platform (LEP). *US-China Foreign Language*, 14(2), 115-120.
- Logan, R. K. (2007). *The extended mind: The emergence of language, the human mind and culture*. Canada: University of Toronto Press.

- Long, M. (1981). Input, interaction and second language acquisition. In Winitz, H. (ed.), *Native language and foreign language acquisition. Annals of the New York Academy of Sciences*, 379, 259-278.
- Long, M. (1985). Input and second language acquisition theory. In S. M. Gass, and C. G. Madden (eds.), *Input in second language acquisition* (pp. 377-393). Rowley, MA: Newbury House.
- Long, M. (1996). The role of the linguistic environment in second language acquisition. In W. Ritchie, and T. Bhatia (eds.), *Handbook of second language acquisition* (pp. 413-468). San Diego, CA: Academic Press.
- Lysynchuck, L., Pressley, M., and Vye, N. (1990). Reciprocal teaching improves standardized reading comprehension performance in poor comprehenders. *Elementary School Journal*, 90(5), 469-484.
- Macaro, E. (2003). *Teaching and learning a second language*. London: Continuum.
- MacArthur, C. (1996). Using technology to enhance the writing performance of students with learning disabilities. *Journal of Learning Disabilities*, 29, 344-354.
- MacArthur, C. (1999). Overcoming barriers to writing: Computer support for basic writing skills. *Reading & Writing Quarterly*, 15, 169-192.
- MacArthur, C., Ferretti, R. P., Okolo, C. M., and Cavalier, A. R. (2001). Technology applications for students with literacy problems: A critical review. *Elementary School Journal*, 101(3), 273-301.
- MacArthur, C., and Graham, S. (1987). Learning disabled students' composing under three methods of text production: Handwriting, word processing, and dictation. *Journal of Special Education*, 21, 22-42.
- MacArthur, C., Graham, S., Haynes, J., and De La Paz, S. (1996). Spelling checkers and students with learning disabilities: Performance comparisons and impact on spelling. *Journal of Special Education*, 30, 35-57.

- MacArthur, C., Graham, S., and Schwartz, S. (1991). Knowledge of revision and revising behavior among students with learning disabilities. *Learning Disability Quarterly*, 14(1), 61-74.
- MacArthur, C., and Philippakos, Z. (2010). Instruction in a strategy for compare-contrast writing. *Exceptional Children*, 76, 438-456.
- MacArthur, C., Schwartz, S., and Graham, S. (1991). Effects of a reciprocal peer-revision strategy in special education classrooms. *Learning Disabilities Research & Practice*, 6, 201-210.
- MacDonald, B., and Boud, D. (2003). The Impact of self-assessment on achievement: The effects of self-assessment training on performance in external examinations. *Assessment in Education*, 10(2), 209-220.
- MacIntyre, P. D. (1995). How does anxiety affect second language learning? A reply to Sparks and Ganschow. *The Modern Language Journal*, 79(1), 90-99.
- MacIntyre, P. D. (1999). Language anxiety: A review of the research for language teachers. In D. Young (ed.), *Affect in foreign language and second language learning: A practical guide to creating a low-anxiety classroom atmosphere*. Boston: McGraw-Hill College.
- Mackey, A. (1999). Input, interaction, and second language development: An empirical study of question formation in ESL. *Studies in Second Language Acquisition*, 21, 557-587.
- MacMillan, D., and Siperstein, G. (2002). Learning disabilities as operationally defined by schools. In R. Bradley, L. Danielson and D. P. Hallahan (eds.), *Identification of learning disabilities: Research to practice* (pp. 287-333). Mahwah, NJ: Erlbaum.
- Malasit, Y., and Sarobol, N. (2013). Communication strategies used by Thai EFL learners. Retrieved from [http://www.flit2013.org/private\\_folder/Proceeding/802.pdf](http://www.flit2013.org/private_folder/Proceeding/802.pdf).
- Malone, L. D., and Mastropieri, M. A. 1992. Reading comprehension instruction: Summarization and self-monitoring training for students with learning disabilities. *Exceptional Children*, 58(3), 270-279.



- Manchón, R. (2000). Fostering the autonomous use of communication strategies in the foreign language classroom. *Links & Letters* 7, 13-27.
- Marchand-Martella, N. and Martella, R. (2012). *Important features of effective adolescent literacy instruction*. Desoto, TX: SRA McGraw-Hill.
- Mariani, L. (1994). Developing strategic competence towards autonomy in oral interaction. *Perspectives: A Journal of TESOL-Italy*, 20 (1), 41-57.
- Mariani, L. (2010). *Communication strategies: Learning and teaching how to manage oral interaction*. Learning Paths–Tante Vie Per Imparare. Retrieved from [www.learningpaths.org](http://www.learningpaths.org).
- Marks, M., Pressley, M., Coley, J., Craig, S., Gardner, R., DePinto, T., and Rose, W. (1993). Three teachers' adaptations of reciprocal teaching in comparison to traditional reciprocal teaching. *Elementary School Journal*, 94 (2), 267-283.
- Mastropieri, M. A., and Scruggs, T. E. (1997). Best practices in promoting reading comprehension in students with learning disabilities. *Remedial & Special Education*, 18(4), 197-216.
- Mastropieri, M. A., Scruggs, T. E., Bakken, J. P., and Whedon, C. (1996). Reading comprehension: A synthesis of research in learning disabilities. In T.E. Scruggs and M.A. Mastropieri (eds.), *Advances in learning and behavioral disabilities: Intervention research* (Vol. 10, Part B, pp. 201-227). Greenwich, CT: JAI Press.
- Matsuda, S., and Gobel, P. (2004) Anxiety and predictors of performance in the foreign language classroom. *System* 32, 21-36.
- Mayberg, H. S., Liotti, M., Brannan, S. K., McGinnis, S., Mahurin, R. K., Jerabek, P. A., ... and Fox, P. T. (1999). Reciprocal limbic-cortical function and negative mood: Converging PET findings in depression and normal sadness. *American Journal of Psychiatry*, 156, 675-682.
- McCrudden, M., Perkins, P., and Putney, L. (2005). Self-efficacy and interest in the use of reading strategies. *Journal of Research in Childhood Education*, 20(2), 119-131.

- McDevitt, T., and Ormrod, J. (2004). *Child development: Educating and working with children and adolescent* (2nd ed.). Upper Saddle River, NJ: Pearson.
- McKeown, M., Beck, I., and Blake, R. (2009). Rethinking reading comprehension instruction: A comparison of instruction for strategies and content approaches. *Reading Research Quarterly*, 44(3), 218-253.
- McNamara, D. S., and Magliano, J. T. (2009). Toward a comprehensive model of comprehension. *Psychology of Learning and Motivation*, 51, 297-384.
- McNeil, J. D. (1992). *Reading comprehension new directions for classroom practice* (3rd ed.). Los Angeles: University of California.
- Medical Research Council (2001) *Review of autism research: Epidemiology and causes*. London: Medical Research Council.
- Meltzer, L., Katzir-Cohen, T., Miller, L., and Roditi, B. (2001). The impact of effort and strategy use on academic performance: Student and teacher perceptions. *Learning Disability Quarterly*, 24(2), 85-98.
- Meltzer, L., and Krishnan, K. (2007). Executive function difficulties and learning disabilities: Understandings and misunderstandings. In L. Meltzer (ed.), *Executive function in education: From theory to practice* (pp. 77-105). New York: The Guilford Press.
- Meyer, K. (2010). "Diving into reading": Revisiting reciprocal teaching in the middle years. *Literacy Learning: The Middle Years*, 18(1), 41-52.
- Mishna, F. (1998). *Tips for parents--expectations: A delicate balance*. Retrieved from [http://www.integra.on.ca/tipseries\\_12.htm](http://www.integra.on.ca/tipseries_12.htm).
- Mistar, J., Zuhairi, A., and Umamah, A. (2014). Strategies of learning speaking skill by senior high school EFL learners in Monesia. *The Asian EFL Journal*, 80, 65-74.
- Moats, L. (1998). Reading, spelling, and writing disabilities in the middle grades. In B. Wong (ed.), *Learning about learning disabilities* (2nd ed., pp. 367-389). San Diego, CA: Academic Press.

- Montgomery, K. (2001). *Authentic assessment: A guide for elementary teachers*. New York: Longman.
- Moore, P. (1988). Reciprocal teaching and reading comprehension: A review. *Journal of Research in Reading*, 11(1), 3-14.
- Mortimer, E., and Scott, P. (2003). *Meaning making in secondary science classrooms*. Maidenhead, UK: Open University Press.
- Mothus, T., and Lapadat, J. (2006). *A strategy intervention to increase the reading comprehension of junior high school students with reading disabilities*. [ERIC Document Number: ED490965]. Retrieved from <http://www.eric.ed.gov>.
- Mu, C. (2005). *A taxonomy of ESL writing strategies*. Retrieved from <http://eprints.qut.edu.au/64/1/64.pdf>.
- Mu, C., and Carrington, S. (2007). An investigation of three Chinese students' English writing strategies. *TESL-EJ*, 11(1), 1-23.
- Nakatani, Y. (2005). The effects of awareness-raising training on oral communication strategy use. *Modern Language Journal*, 89(1), 76-91.
- Nakatani, Y. (2006). Developing an oral communication strategy inventory. *The Modern Language Journal*, 90(2), 151-168.
- Nakatani, Y. (2010). Identifying strategies that facilitate EFL learners' oral communication: A classroom study using multiple data collection procedures. *The Modern Language Journal*, 94(1), 116-136.
- Nam, S., Kim, J., and Sparks, S. (2018). An overview of review studies on effectiveness of major AAC systems for individuals with developmental disabilities including autism. *The Journal of Special Education Apprenticeship*, 7(2), 1-14.
- Naparstek, N. (2002). *Successful educators: A practical guide for understanding children's learning problems and mental health issues*. Westpoint, CT: Bergin & Garvey.
- Nash-Ditzel, S. (2010). Metacognitive reading strategies can improve self-regulation. *Journal of College Reading and Learning*, 40(2), 45-63.
- National Commission on Writing for America's Families, Schools and Colleges (2004). *Writing: A ticket to work...or a ticket out*. NY: The College Board.

- National Dissemination Center for Children with Disabilities (2004). *Learning disabilities: Disability fact sheet, No. 7*. Retrieved from <http://www.spannj.org/transition/TransitionCD>.
- National Health Service in Scotland (2004). *People with learning disabilities in Scotland*. Retrieved from [http://www.gla.ac.uk/media/media\\_63872\\_en.pdf](http://www.gla.ac.uk/media/media_63872_en.pdf).
- National Information Center for Children and Youth with Disabilities (1997). *Interventions for students with learning disabilities*. [ERIC Document Number: ED415607]. Retrieved from <http://www.eric.ed.gov>.
- National Joint Committee on Learning Disabilities (1991). Learning disabilities: Issues on definition. *Asha*, 33, (Suppl.5), 18-20.
- National Joint Committee on Learning Disabilities (1994). Learning disabilities: Issues on definition. In *Collective perspectives on issues affecting learning disabilities: Position papers and statements* (pp. 61-66). Austin, TX: PRO-ED.
- National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Washington, D. C.: National Institute of Child Health and Human Development. Retrieved from [www.nationalreadingpanel.org](http://www.nationalreadingpanel.org).
- Nelson, J., Smith, D., and Dodd, J. (1992). The effects of teaching a summary skills strategy to students identified as learning disabled on their comprehension of science text. *Education and Treatment of Children*, 15, 228-243.
- Newhall, P. (2012). Language-based learning disabilities. In P. W. Newhall (ed.), *Language-based teaching series*. Prides Crossing, MA: Landmark School Outreach Program.
- Newhall, P. (2013). *Language-based learning disability: What to know*. <http://www.ldonline.org/article/56113>.
- Nguyet, N., and Mai, L. (2012). Teaching conversational strategies through video clips. *Language Education in Asia*, 3(1), 32-49.
- Nichols, E. (2002). On the legislative front: Secondary school reform and students with learning disabilities. *Communique*, 31(2), 4-5.

- Nielsen, J., Clemmensen, T., and Yssing, C. (2002). Getting access to what goes on in people's heads? Reflections on the think-aloud technique. *Proceedings of the second Nordic conference on human computer interaction* (pp. 101-110). New York: Association for Computing Machinery.
- Nik, Y., Hamzah, A., and Rafidee, H. (2010). A comparative study on the factors affecting the writing performance among bachelor students. *International Journal of Educational Research and Technology*, 1(1), 57-63.
- NSW Centre for Effective Reading (2013). *Comprehension handbook*. Retrieved from <http://www.cer.education.nsw.gov.au/documents/249903/250184/Comprehension%20Handbook%20.pdf>.
- Nunan, D., and Bailey, K. (2009). *Exploring second language classroom research*. Boston: Heinle, Cengage Learning.
- Nyikos, M. (1996). The conceptual shift to learner-centered classrooms: Increasing teacher and student strategic awareness. In R. L. Oxford (ed.), *Language learning strategies around the world: Cross-cultural perspectives* (pp. 109-117). Honolulu: Second Language Teaching and Curriculum Center.
- O'Connor, E., and McCartney, K. (2007). Examining teacher-child relationships and achievement as part of an ecological model of development. *American Educational Research Journal*, 44, 340-369.
- Oczkus, L. D. (2003). *Reciprocal teaching at work: Strategies for improving reading comprehension*. Newark, DE: International Reading Association.
- Ogane, M. (1998). *Teaching communication strategies*. [ERIC Document Number: ED419384]. Retrieved from <http://www.eric.ed.gov>.
- Oka, E., and Paris, S. (1987). Patterns of motivation and reading skills in underachieving children. In S. J. Ceci (ed.), *Handbook of cognitive, social, and neuropsychological aspects of learning disabilities* (Vol. 2, pp. 115-145). Hillsdale, NJ: Erlbaum.

- O'Malley, J. (1987). The effects of training in the use of learning strategies on learning English as a second language. In Wenden, A. and J. Rubin (eds.), *Learner strategies in language learning*. London: Prentice-Hall.
- O'Malley, J., and Chamot, A. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- O'Malley, J., and Chamot, A. (1994). Learning strategies in second language learning. In A. Lewy (ed.), *International encyclopedia of education*. Oxford, England: Pergamon Press.
- O'Malley, J., Chamot, A., and Küpper, L. (1989). Listening comprehension strategies in second language acquisition. *Applied Linguistics*, 10(4), 418-437.
- O'Malley, J., Chamot, A., Stewner-Manzanares, G., Küpper, L., and Russo, R. (1985a). Learning strategy applications with students of English as a second language. *TESOL Quarterly*, 19(3), 285-296.
- O'Malley, J., Chamot, A., Stewner-Manzanares, G., Kupper, L., and Russo, R. (1985b). Learning strategies used by beginning and intermediate ESL students. *Language Learning*, 35, 21-46.
- Ontario Ministry of Education. (2002). *The Ontario Curriculum, Unit Planner Assessment Companion*. Toronto: Queen's Printer for Ontario. Retrieved from <http://www.edu.gov.on.ca/eng/policyfunding/ocup/documents/assess2002.pdf>.
- Ontario Ministry of Education (2003). *Early reading strategy*. Retrieved from <http://www.edu.gov.on.ca>.
- Orsmond, P., Merry, S., and Reiling, K. (2000). The use of student derived marking criteria in peer and self-assessment. *Assessment and Evaluation in Higher Education*, 25, 23-38.
- Oxford, R. (1990). *Language learning strategies: What every teacher should know*. New York: Newbury House Publishers.
- Oxford, R. (1993). Research on second language learning strategies. In W. Grabe (ed.), *Annual review of applied linguistics* (pp. 175-187). Cambridge, U.K.: Cambridge University Press.
- Oxford, R. (1994). *Language learning strategies: An update*. Retrieved from <http://www.cal.org/resources/digest/oxford/html>.

- Oxford, R. (1999). Learning strategies. In B. Spolsky (ed.), *Concise Encyclopedia of Educational Linguistics* (pp. 518-522). Oxford: Elsevier.
- Oxford, R. (2000). Communicative strategies. In M. Byram (ed.), *Routledge encyclopedia of language teaching and learning* (pp. 130-132). London: Routledge.
- Oxford, R. (2003). Language learning styles and strategies: Concepts and relationships. *International Review of Applied Linguistics and Language Teaching*, 41(4), 271-278.
- Oxford, R. (2013). *Teaching and researching language learning strategies: Self-regulation in context* New York: Routledge.
- Oxford, R., Cho, Y., Leung, S., and Kim, H-J. (2004). Effect of the presence and difficulty of task on strategy use: An exploratory study. *International Review of Applied Linguistics and Language Teaching*, 42(1), 1-47.
- Oxford, R., and Crookall, D. (1989). Research on language learning strategies: methods, findings, and instructional issues. *Modern Language Journal*, 73, 404-419.
- Oxford, R., Crookall, D., Cohen, A., Lavine, R., Nyikos, M., and Sutter, W. (1990). Strategy training for language learners: Six situational case studies and a training model. *Foreign Language Annals*, 22, 197-216.
- Oxford, R., and Ehrman, M. (1995). Adults' language learning strategies in an intensive foreign language program in the United States. *System*, 23, 359-386.
- Pajares, F., Johnson, M., and Usher, E. (2007). Sources of writing self-efficacy beliefs of elementary, middle, and high school students. *Research in the Teaching of English*, 42, 104-120.
- Palincsar, A., and Brown, A. (1984). Reciprocal teaching of comprehension fostering and comprehension-monitoring activities. *Cognition & Instruction*, 1(2), 117-175.
- Palincsar, A. and Brown, A. (1985). Reciprocal teaching: A means to a meaningful end. In J. Osborn, P. Wilson and R. C. Anderson (eds.), *Reading education: Foundations for a literate America* (pp. 299-310). MA: Lexington.

- Palincsar, A., Brown, A., and Martin, S. (1987). Peer interaction in reading comprehension instruction. *Educational Psychologist*, 22, 231-253.
- Paris, S., and Ayres, L. (1994). *Becoming reflective students and teachers with portfolios and authentic assessment*. Hyattsville, MD: American Psychological Association.
- Paris, S., Lipson, M., and Wixson, K. (1983). Becoming a strategic reader. *Contemporary Educational Psychology*, 8, 293-316.
- Paris, S., Wasik, B., and Turner, J. (1991). The development of strategic readers. In R. Barr, M. L. Kamil, P. Mosenthal, and P.D. Pearson (eds.), *Handbook of reading research* (pp. 609-640). White Plains, NY: Longman.
- Park, H. (2008). *Critical review: The use of reciprocal teaching to improve reading comprehension of both normal learning and learning disabled individuals in the reading to learn stage*. Retrieved from <https://www.uwo.ca/fhs/lwm/teaching/EBP/200708/Park,H.pdf>.
- Patri, M. (2002). The influence of peer feedback on self-and peer-assessment or oral skills. *Language Testing*, 19(2), 109-131
- Pearson, P., and Gallagher, M. (1983). The instruction of reading comprehension. *Contemporary Educational Psychology*, 8(3), 317-344.
- Peñuelas, A. (2012). The writing strategies of American university students: Focusing on memory, compensation, social and affective strategies. *ELIA*, 12, 77-113.
- Peterson-Karlan, G., and Parette, H. P. (2007). *Supporting struggling writers using technology: Evidence-based instruction and decision-making*. Retrieved from [http://www.techmatrix.org/resources/tech\\_support\\_writing.pdf](http://www.techmatrix.org/resources/tech_support_writing.pdf).
- Peterson, R., and Eeds, M. (1990). *Grand conversations: Literature groups in action*. New York: Scholastic.
- Phaiboonnugulkij, M., and Prapphal, K. (2013). Online speaking strategy assessment for improving speaking ability in the area of language for specific purposes: The case of tourism. *English Language Teaching*, 6(9), 19-29.



- Pica, T., and Doughty, E. (1985). Input and interaction in the communicative language classroom: A comparison of teacher-fronted and group activities. In S. M. Gass and E. G. Madden (eds.), *Input in second language acquisition* (pp. 115-32). Rowley, MA: Newbury House.
- Pietrzykowska, A. (2014). The relationship between learning strategies and speaking performance. In M. Pawlak, J. Bielak, and A. Mystkowska-Wiertelak (eds.), *Classroom-oriented research: Achievements and challenges* (pp. 55-68). London: Springer.
- Pilonieta, P. (2010). Instruction of research-based comprehension strategies in basal reading programs. *Reading Psychology*, 31, 150-175.
- Pinto, P., and Bakken, J. (2009). Research-based instructions to increase communication skills for students with severe disabilities. *International Journal of Special Education*, 24(3), 99-109.
- Pintrich, P. (1994). Continuities and discontinuities: Future directions for research in educational psychology. *Educational Psychologist*, 29, 37-148.
- Pintrich, P. (1999). The role of motivation in promoting and sustaining self-regulated learning. *International Journal of Educational Research*, 31, 459-470.
- Pintrich, P. (2002). The role of metacognitive knowledge in learning, teaching, and assessing. *Theory into Practice*, 41(4), 219-225.
- Pintrich, P., and De Groot, E. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33-50.
- Pintrich, P., and Schunk, D. H. (1996). *Motivation in education: Theory, research, and applications*. Englewood Cliffs, NJ: Prentice Hall Merrill.
- Pintrich, P., Smith, D., Garcia, T., and McKeachie, W. J. (1991). *A manual for the use of the motivated strategies for learning questionnaire (MSLQ)*. Ann Arbor, MI: NCRIPAL, School of Education, University of Michigan.

- Popescu, A., and Cohen-Vida, M-I. (2014). Communication strategies for developing the learner's autonomy. *Social and Behavioral Sciences*, 116, 3489–3493.
- Poway Unified School District (PUSD) (n.d.). *The Writing process*. [http://bowenpeters.weebly.com/uploads/8/1/1/9/8119969/writing\\_process\\_detailed.pdf](http://bowenpeters.weebly.com/uploads/8/1/1/9/8119969/writing_process_detailed.pdf).
- Pracejus, E. (1974). The effect of clarification on reading comprehension. *Dissertation Abstracts International*, 35(4), 2058-A.
- Prater, M., Joy, R., Chilman, B., Temple, J., and Miller, S. (1991). Self-monitoring of on-task behavior by adolescents with learning disabilities. *Learning Disability Quarterly*, 14, 164-177.
- Pressley, M. (1995). More about the development of self-regulation: Complex, long-term, and thoroughly social. *Educational Psychologist*, 30, 207-212.
- Pressley, M. (1998). *Reading instruction that works: The case for balanced teaching*. New York: Guilford.
- Pressley, M. (2000). What should comprehension instruction be the instruction of? In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, and R. Barr (eds.), *Handbook of reading research* (Vol. 3, pp. 545-461). Mahwah, NJ: Erlbaum.
- Pressley, M. (2002). Metacognition and self-regulated instruction. In A. Farstrup and S. Samuels (eds.), *What research has to say about reading instruction* (3rd ed., pp. 291-309). Newark, DE: International Reading Association.
- Pressley, M., and Afflerbach, P. (1995). *Verbal protocols of reading: The nature of constructively responsive reading*. Hillsdale, NJ: Erlbaum.
- Pressley, M., El-Dinary, P. B., Gaskins, I., Schuder, T., Berman, J. L., Almasi, J., and Brown, R. (1992). Beyond direct explanation: Transactional instruction of reading comprehension strategies. *The Elementary School Journal*, 92(5), 513-555.
- Pressley, M., and Ghatala, E. S. (1990). Self-regulated learning: monitoring learning from text. *Educational Psychologist*, 25, 19-33.

- Pressley, M., Johnson, C. J., Symons, S., McGoldrick, J. A., and Kurita, J. A. (1989). Strategies that improve children's memory and comprehension of text. *Elementary School Journal*, 90, 3-32.
- Pressley, M., Levin, J., and Ghatala, E. (1984). Memory strategy monitoring in adults and children. *Journal of Verbal Learning and Verbal Behavior*, 23, 270-288.
- Pressley, M., Levin, J., Ghatala, E., and Ahmad, M. (1987). Test monitoring in young grade school children. *Journal of Experimental Child Psychology*, 43, 96-111.
- Pressley, M., and Wharton-McDonald, R. (1997). Skilled comprehension and its development through instruction. *School Psychology Review*, 26, 448-466.
- Price, A., and Cole, M. (2009). *Best practices in teaching students with learning disabilities*. Calgary, AB: Calgary Learning Centre.
- Proctor, C. P., August, D., Carlo, M. S., and Snow, C. E. (2006). The intriguing role of Spanish vocabulary knowledge in predicting English reading comprehension. *Journal of Educational Psychology*, 98, 159-169.
- Proctor, C. P., Dalton, B., and Grisham, D. L. (2007). Scaffolding English language learners and struggling readers in a universal literacy environment with embedded strategy instruction and vocabulary support. *Journal of Literacy Research*, 39(1), 71-93.
- Protheroe, N., and Clarke, S. (2008). *Learning strategies as a key to student success*. Retrieved from <https://www.naesp.org/resources/2/Principal/2008/NDp33.pdf>.
- Queensland Studies Authority (2007). *Learning difficulties*. Brisbane, Queensland. Retrieved from [http://www.qsa.qld.edu.au/downloads/p9/kla\\_special\\_needs\\_info\\_learning.pdf](http://www.qsa.qld.edu.au/downloads/p9/kla_special_needs_info_learning.pdf).
- Rabab'ah, G. (2002). *Strategic competence and language teaching*. [ERIC Document Number: ED472697]. Retrieved from <http://www.eric.ed.gov>.

- Rabab'ah, G. (2003). Communication problems facing Arab learners of English: A personal perspective. *TEFL Web Journal*, 2(1), 16-29.
- Rabab'ah, G. (2015). The Effect of communication strategy training on the development of EFL learners' strategic competence and oral communicative ability. *Journal of Psycholinguistic Research*, 45(3), 1-27.
- Rachmawati, Y. (2013). Language learning strategies used by learners in learning speaking. *Journal of English and Education*, 1(2), 124-131.
- Raimes, A. (1987). Language proficiency, writing ability, and composing strategies: A study of ESL college student writers. *Language Learning*, 37, 439-468.
- Rao, Z. (2003). Effect of using a "top-down" strategy on Chinese university students comprehension of English readings. *Asian Journal of English Language Teaching*, 13, 29-44.
- Raphael, T., and Pearson, P. D. (1985) Increasing students' awareness of sources of information for answering questions. *American Educational Research Journal*, 22, 217-236.
- Rathee, R., and Rajain, P. (2018). Role of communication skills for management students. *Global Journal of. Commerce & Management Perspective*. 7(1), 41-46.
- Reid, R. (1996). Research in self-monitoring with students with learning disabilities: The present, the prospects, the pitfalls. *Journal of Learning Disabilities*, 29(3), 317-331.
- Reid, R., Lienemann, T., and Hagaman, J. (2013). *Strategy instruction for students with learning disabilities* (2nd ed.). New York, NY: The Guilford Press.
- Reutzel, D. R., Smith, J. A., and Fawson, P. C. (2005). An evaluation of two approaches for teaching reading comprehension strategies in the primary years using science information texts. *Early Childhood Research Quarterly*, 20(3), 276-305.
- Riazi, A. (1997). Acquiring disciplinary literacy: A social-cognitive analysis of text production and learning among Iranian graduate students of education. *Journal of Second Language Writing*, 6(2), 105-137.

- Rich, R. Z., and Blake, S. (1994). Using pictures to assist in comprehension and recall. *Intervention in School and Clinic*, 29, 271-275.
- Richards, J., and Lockhart, C. (1996). *Reflective teaching in second language teaching classrooms*. Cambridge: Cambridge University Press.
- Richardson, J., and Morgan, R. (1997). *Reading to learn in the content areas*. Belmont, CA: Wadsworth Publishing Company.
- Rivers, W. M. (2000a). Interaction as the key to teaching language for communication. In Wilga M. Rivers. (ed.), *Interactive language teaching* (pp. 3-16). Cambridge: Cambridge University Press.
- Rivers, W. M. (2000b). Preface. In Wilga M. Rivers. (ed.), *Interactive language teaching* (pp. xi-xvi). Cambridge: Cambridge University Press.
- Rivers, William, P. (2001). Autonomy at all costs: An ethnography of metacognitive self-assessment and self-management among experienced language learners. *The Modern Language Journal*, 85(2), 279-290.
- Roberts, G., Torgesen, J., Boardman, A., and Scammacca, N. (2008). Evidence-based strategies for reading instruction of older students with learning disabilities. *Learning Disabilities Research & Practice*, 23(2), 63-69.
- Rodriguez, J., Plax, T., and Kearney, P. (1996). Clarifying the relationship between teacher nonverbal immediacy and student cognitive learning: Affective learning as the central causal mediator. *Communication Education*, 45, 293-305.
- Rogers, L., and Graham, S. (2008). A meta-analysis of single subject design writing intervention research. *Journal of Educational Psychology*, 100, 879-906.
- Rooney, K., Hallahan, D., and Lloyd, J. (1984). Self-recording of attention by learning disabled students in the regular classroom. *Journal of Learning Disabilities*, 17, 360-364.
- Rosenshine, B., and Meister, C. (1992). The use of scaffolds for teaching higher-level cognitive strategies. *Educational Leadership*, 49(7), 26-33.

- Rosenshine, B., and Meister, C. (1994). Reciprocal teaching: A review of the research. *Review of Educational Research*, 64(4), 479-530.
- Rosenshine, B., Meister, C., and Chapman, S. (1996). Teaching students to generate questions: A review of the intervention studies. *Review of Educational Research*, 66, 181-221.
- Ross, J., Rolheiser, C., and Hogaboam-Gray, A. (1999). Effects of self-evaluation training on narrative writing. *Assessing Writing*, 6(1), 107-132.
- Ross, S. (1999). Self-assessment in second language testing: A meta-analysis and analysis of experiential factors. *Language Testing*, 15(1), 1-20.
- Rost, M. (1996). Helping learners develop communication strategies. *The Language Teacher*, 20 (12), 41-43.
- Rost, M., and Ross, S. (1991). Learner use of strategies in interaction: Typology and teachability. *Language Learning*, 41(2), 235-268.
- Rowe, G., Hirsch, J. B., and Anderson, A. (2007). Positive affect increases the breadth of attentional selection. *Proceedings of the National Academy of Sciences of the United States of America*, 104, 1, 383-388.
- Rubin, J. (1981). Study of cognitive processes in second language learning. *Applied Linguistics*, 11, 117-131.
- Ruffin, T. (2009). Reading strategies: Adaptations to meet the needs of secondary English language learners with learning disabilities. *The Reading Matrix*, 9(1), 22-30.
- SABES (2008). *Examples of "authentic" tasks and assessments*. Retrieved from [www.quia.com/files/quia/.../sabesse](http://www.quia.com/files/quia/.../sabesse).
- Santangelo, T., Harris, K., and Graham, S. (2008). Using self-regulated strategy development to support students who have "Trubol Giting Thangs Into Werds". *Remedial and Special Education*, 29(2), 78-89.
- Santos, S. (2010). *EFL writing in Mexican universities: Research and experience*. Tepic, Nayarit, México: Universidad Autónoma de Nayarit.
- Saricoban, A. (2002). Reading strategies of successful readers through the three phase approach. *The Reading Matrix*, 2, 1-13.

- Sasaki, M. (2000). Toward an empirical model of EFL writing processes: An exploratory study. *Journal of Second Language Writing*, 9(3), 259-291.
- Sasaki, M. (2004). A multiple-data analysis of the 3.5-year development of EFL student writers. *Language Learning Journal*, 54 (3), 525-582.
- Savage, L. (1998). Eliciting critical thinking skills through questioning. *The Clearing House*, 71(5), 291-293.
- Savignon, S. (1972). *Communicative competence: An experiment in foreign language teaching*. Philadelphia: Center for Curriculum Development.
- Savignon, S. (1983). *Communicative competence: Theory and classroom practice*. MA: Addison Wesley.
- Savignon, S. (1991). Communicative language teaching: State of the art. *TESOL Quarterly*, 25(2), 261-277.
- Savignon, S. (2001). Communicative language teaching for the twenty-first century. In M. Celce-Murcia (ed.), *Teaching English as a second or foreign language* (3<sup>rd</sup> ed., pp. 13-28). Boston: Heinle & Heinle.
- Sawyer, R. J., Graham, S., and Harris, K. R. (1992). Direct teaching, strategy instruction, and strategy instruction with explicit self-regulation: Effects on the composition skills and self-efficacy of students with learning disabilities. *Journal of Educational Psychology*, 84(3), 340-352.
- Schmeck, R. (1988). *Learning strategies and learning styles*. New York, NY: Plenum Press.
- Schmidt, J., Deshler, D., Schumaker, J., and Alley, G. (1988/1989). Effects of generalization instruction on the written language performance of adolescents with learning disabilities in the mainstream classroom. *Journal of Reading, Writing, and Learning Disabilities International*, 4, 291-309.
- Schmidt, R., and Frota, S. (1986). Developing basic conversational ability in a second language: A case study of an adult learner of Portuguese. In R. Day (ed.), *Talking to learn: Conversation in second language acquisition* (pp. 237-326). Rowley, MA: Newbury.

- Schnee, A. (2010). *Student writing performance: Identifying the effects when combining planning and revising instructional strategies*. Retrieved from <https://digitalcommons.unl.edu/cehsdiss/72>.
- Schneider, E., and Crombie, M. (2003). *Dyslexia and foreign language learning*. London: David Fulton.
- Schoenbach, R., Greenleaf, C. Cziko, and Hurwitz, L. (1999). *Reading for understanding: A guide to improving reading in middle and high school classrooms*. San Francisco: Jossey-Bass.
- Schoonen, R., and De Glopper, K. (1996). Writing performance and knowledge about writing. In G. Rijlaarsdam, H. Bergh, and M. Couzijn (eds.), *Theories, models and methodology in writing research* (pp. 87-107). Amsterdam: Amsterdam University Press.
- Schraw, G. (1998). Promoting general metacognitive awareness. *Instructional Science*, 26, 113-125.
- Schraw, G., and Nietfeld, J. (1998). A further test of the general monitoring skill hypothesis. *Journal of Educational Psychology*, 90, 236-248.
- Schumaker, J., and Deshler, D. (2003). Can students with LD become competent writers? *Learning Disability Quarterly*, 26(2), 129-141.
- Schunk, D. (1989). Self-Efficacy and cognitive achievement: Implications for students with learning problems. *Journal of Learning Disabilities* 22, 14-22.
- Schunk, D. (1994). Self-regulation of self-efficacy and attributions in academic settings. In D. H. Schunk and B. J. Zimmerman (eds.), *Self-regulation of learning and performance: Issues and educational applications* (Chapter 4). Hillsdale, NJ: Lawrence Erlbaum.
- Schunk, D., and Rice, J. (1992). Influence of reading-comprehension strategy instruction on children's achievement outcomes. *Learning Disability Quarterly*, 15, 51-64.
- Schwarz, R., and Terrill, L. (2000). *ESL instruction and adults with learning disabilities*. Retrieved from [www.cal.org/caela/esl\\_resources/digests/LD2.html](http://www.cal.org/caela/esl_resources/digests/LD2.html).



- Scott, J. (2012). *Reading comprehension interventions for students with learning disabilities or reading difficulties in Grades 3-12: A literature review, 2006-2011*. Retrieved from <http://www.lynchburg.edu>.
- Scott, S., McGuire, J., and Foley, T. (2003). Universal design for instruction: A framework for anticipating and responding to disability and other diverse learning needs in the college classroom. *Equity and Excellence in Education*, 36(1), 40-49.
- Sears, S., Carpenter, C., and Burstein, N. (1994). Meaningful reading instruction for learners with special needs. *The Reading Teacher*, 47(8), 632-646.
- Seijts, G. H., and Latham, G. P. (2006). Learning goals or performance goals: Is it the journey or the destination? *Ivey Business Journal*, 70(5), 1-6.
- Seo, J., and Park, H. (2000). The effects of reciprocal teaching on reading comprehension and reading strategy skills in primary level students with reading disabilities. *Communication Sciences & Disorders*, 5(1), 1-23.
- Selinker, L. (1984). The current state of IL studies: An attempted critical summary. In A. Davies, C. Criper and A. P. R. Howatt (eds.), *Interlanguage* (pp. 332-343). Edinburgh: Edinburgh University Press.
- Sencibaugh, J. (2005). *Meta-Analysis of reading comprehension interventions for students with learning disabilities: strategies and implications*. [ERIC Document Number: ED 493483]. Retrieved from <http://www.eric.ed.gov>.
- Shale, D., and D. R. Garrison (1990). Education and communication. In D. R. Garrison and D. Shale (eds.), *Education at a distance*. Malabar: Robert E. Krieger Publishing Company.
- Shanahan, T., Callison, K., Carriere, C., Duke, N., Pearson, P., Schatschneider, C., and Torgesen, J. (2010). *Improving reading comprehension in kindergarten through 3rd grade: A practice guide*. Washington, D. C.: National Center for Education Evaluation and Regional Assistance.

- Sheorey, R., and Mokhtari, K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native readers. *System*, 29, 431-449.
- Shimabukuro, S., Prater, M., Jenkins, A., and Edelen-Smith, P. (1999). The effects of self-monitoring of academic performance on students with learning disabilities and ADD/ADHD. *Education and Treatment of Children*, 22, 397-414.
- Singhal, M. (2001). Reading proficiency, reading strategies, metacognitive awareness and L2 readers. *The Reading Matrix*, 1, 1-9.
- Si-Qing, C. (1990). A study of communication strategies in interlanguage production by Chinese EFL learners. *Language Learning*, 40(2), 155-187.
- Skinner, M., and Smith, A. (2011). Creating success for students with learning disabilities in postsecondary foreign language courses. *International Journal of Special Education*, 26, 42-57.
- Snell, M., Chen, L., and Hoover, K. (2006). Teaching augmentative and alternative communication to students with severe disabilities: A review of intervention research 1997-2003. *Research and Practice for Persons with Severe Disabilities*, 31(3), 203-214.
- Snyder, B., and Pressley, M. (1990). Introduction to cognitive strategy instruction. In Pressley, M. and Associates (eds.), *Cognitive strategy instruction that really improves children's academic performance* (pp. 7-26). Cambridge, MA: Brookline.
- Solomon, A. (2011). *The new wave of autism rights activists*. Retrieved from <http://nymag.com/news/features/47225/index2.html>.
- Sousa, D. (2001). *How the special needs brain learns*. Thousand Oaks, CA: Corwin Press.
- Sporer, N., Brunstein, J., and Kieschke, U. (2009). Improving students' reading comprehension skills: Effects of strategy instruction and reciprocal teaching. *Learning and Instruction*, 19(3), 272-286.
- Stauffer, R. (1969). *Directing reading maturity as a cognitive process*. New York: Harper & Row.

- Stern, H. (1983). *Fundamental concepts of language teaching*. Oxford: Oxford University Press.
- Stevens, R. (1988). Effects of strategy training on the identification of main ideas of expository passages. *Journal of Educational Psychology*, 80, 21-26.
- Stoddard, B., and MacArthur, C. (1993). A peer editor strategy: Guiding learning disabled students in response and revision. *Research in the Teaching of English*, 27(1), 76-103.
- Stoller, F. (2002). Help your students become better readers. *Panama TESOL Newsletter*, 14 (2), 7-10.
- Street, B. (1984). *Literacy in theory and practice*. Cambridge: Cambridge University Press.
- Strickland, D., and Shanahan, T. (2004). Laying the groundwork for literacy. *Educational Leadership*, 61(6), 74-77.
- Sturomski, Neil (1997). *Interventions for students with learning disabilities*. Washington, D. C.: National Information Center for Children and Youth with Disabilities.
- Sujathamalini, J. (2014). *Learning difficulties in children: Teacher competencies*. New Delhi: Discovery Publishing House.
- Sundeen, T. (2007). The effect of prewriting strategy instruction on the written products of high school students with learning disabilities. *Electronic Theses and Dissertations*.3369. Retrieved from <https://stars.library.ucf.edu/etd/3369>.
- Swanson, H. (1999). Instructional components that predict treatment outcomes for students with learning disabilities: Support for a combined strategy and direct instruction model. *Learning Disabilities Research*, 14, 129-140.
- Swanson, P. N., and De La Paz, S. (1998). Teaching effective comprehension strategies to students with learning and reading disabilities. *Intervention in School and Clinic*, 33(4), 209-218.
- Taboada, A. (2012). Text-based questioning: A comprehension strategy to build English language learners' content knowledge. *Literacy Research and Instruction*, 51, 87-109.

- Tahang, H., Sarmin, S., Yuliana, Y., and Taslim, T. (2018). Language learning strategies employed by successful students in developing English-speaking performance. *Qalam: Jurnal Ilmu Kependidikan*, 7(1), 56-65.
- Takallou, F. (2011). The effect of metacognitive strategy instruction on EFL learners' reading comprehension performance and metacognitive awareness. *Asian EFL Journal*, 13(1), 273-301.
- Tancock, S. (1994). A literacy lesson framework for children with reading problems. *The Reading Teacher*, 48(2), 130-140.
- Tankersley, K. (2005). *Literacy strategies for grades 4-12: Reinforcing the threads of reading*. Association for Supervision and Curriculum Development: Alexandria, VA.
- Taras, M. (2003). To feedback or not to feedback in student self-assessment. *Assessment and Evaluation in Higher Education*, 28(5), 549-565.
- Tarone, E. (1980). Communication strategies, foreigner talk and repair in interlanguage. *Language Learning*, 30, 417-431.
- Tarone, E. (1981). Some thoughts on the notion of communication strategy. *TESOL Quarterly*, 15(3), 285-295.
- Tarone, E. (1983). Some thoughts on the notion of 'communication strategy'. In C. Faerch and G. Kasper (eds.), *Strategies in interlanguage communication* (pp. 61-74). London: Longman.
- Tarone, E. (1984). Teaching strategic competence in the foreign-language classroom. In Savignon, Sandra J., and Margie S. Berns (eds.), *Initiatives in communicative language teaching* (pp. 127-136). Reading, MA: Addison-Wesley.
- Tarone, E. (2005). Speaking in a second language. In E. Hinkel (ed.), *Handbook of research in second language teaching and learning* (pp. 485-502). Mahwah, NJ: Lawrence Erlbaum Associates.
- Teng, H. (2012). A study on the teachability of EFL communication strategies. *Social and Behavioral Sciences* 46, 3566-3570.
- Thamraksa, C. (2005) *Metacognition: A key to success for EFL learners*. Retrieved from [http://www.bu.ac.th/knowledgecenter/epaper/jan\\_june2005/chutima.pdf](http://www.bu.ac.th/knowledgecenter/epaper/jan_june2005/chutima.pdf).

- Thomas, C., Englert, C., and Gregg, S. (1987). An analysis of errors and strategies in the expository writing of learning disabled students. *Remedial and Special Education*, 8, 21-30.
- Thompson, E. (1993). It's not so hard: Preparing students for reading comprehension. *Schools in the Middle*, 2(3), 33-36.
- Thompson, S. (2000). *Effective content reading comprehension and retention strategies*. [ERIC Document Number: ED440372]. Retrieved from <http://www.eric.ed.gov>.
- Tian, J., and Zhang, X. (2005). The study of communication strategies used by non-English majors in group discussion. *Foreign Language World*, 3, 61-67.
- Tierney, R., Readence, J., and Dishner, E. (1995). *Reading strategies and practices: A compendium* (4th ed.). Boston: Allyn & Bacon.
- Torgesen, J. and Kail, R. (1980). Memory processes in exceptional children. In B. K. Keogh (ed.), *Advances in special education*, Vol. 1. Greenwich, CT: JAI.
- Torrance, M., Thomas, V., and Robinson, E. (2000). Individual differences in undergraduate essay-writing strategies: A longitudinal study. *Higher Education*, 39, 181-200.
- Tovani, C. (2004). *Do I really have to teach reading?* Portland, Maine: Stenhouse Publishers.
- Trehearne, Miriam P. (2015). Comprehensive literacy resource for grades 1-2 teachers. New York: ETA/Cuisenaire.
- Troia, G. (2007). Research in writing instruction: What we know and what we need to know. In M. Pressley, A. K. Billman, K. H. Perry, K. E. Refitt, and J. M. Reynolds (eds.), *Shaping literacy achievement: Research we have, research we need* (pp. 129-156). New York: Guilford Press.
- Troia, G., and Graham, S. (2002). The effectiveness of a highly explicit, teacher-directed strategy instruction routine: Changing the writing performance of students with learning disabilities. *Journal of Learning Disabilities*, 35(4), 290-305.
- Troia, G., Graham, S., and Harris, K. (1999). Teaching students with learning disabilities to mindfully plan when writing. *Exceptional Children*, 65(2), 235-252.

- Troia, G., Roth, F., and Graham, S. (1998). An educator's guide to phonological awareness: Assessment measures and intervention activities for children. *Focus on Exceptional Children*, 30, 1-12.
- Vacca, L., Vacca, R., Gove, M., McKeon, C., Burkey, L., and Lenhart, L. (2006). *Reading and learning to read*. Boston: Allyn & Bacon.
- Vacca, R. (2002). Making a difference in adolescents' school lives: Visible and invisible aspects of content area reading. In A. E. Farstrup and S. J. Samuels (eds.), *What research has to say about reading instruction* (3rd ed., pp. 184-204). Newark, DE: International Reading Association.
- Van den Branden, K. (2000). Does negotiation of meaning promote reading comprehension? A study of multilingual primary school classes. *Reading Research Quarterly*, 35(3), 426-443.
- Vandergrift, L. (1996). The listening comprehension strategies of core French high school students, *Canadian Modern Language Review*, 52, 200-223.
- Vandergrift, L. (1997). The comprehension strategies of second language (French) learners: A descriptive study. *Foreign Language Annals*, 30(3), 387-409.
- Vandergrift, L. (1998). Successful and less successful learners in French: What are the strategy differences: *The French Review*, 71, 370-395.
- Vandergrift, L. (2003). Orchestrating strategy use: Toward a model of the skilled second language listener. *Language Learning*, 53(3), 463-496.
- Van Keer, H., and Verhaeghe, J. (2005). Effects of explicit reading strategies instruction and peer tutoring on second and fifth graders' reading comprehension and self-efficacy perceptions. *Journal of Experimental Education*, 73(4), 291-329.
- Vann, R., and Abraham, R. (1990). Strategies of unsuccessful language learners. *TESOL Quarterly*, 24(2), 223-234.
- Van Riper, I. (2010). *The effects of the directed reading-thinking activity on reading comprehension skills of middle school students with autism*. Retrieved from [proquest.com/docview/612799662](http://proquest.com/docview/612799662).

- Van Schroyenstein, L., and Walsh, P. (2008) Managing health problems in persons with intellectual disabilities. *British Medical Journal*, 337, 1408-1412.
- Vaughn, S., and Klingner, J. (1999). Teaching reading comprehension through collaborative strategic reading. *Intervention in School and Clinic*, 34, 284-292.
- Vaughn, S., and Linan-Thompson, S. (2004). *Research-based methods of reading instruction: Grades k-3*. Alexandria, VA: ASCD.
- Victori, M. (1995). *EFL writing knowledge and strategies: An interactive study*. Unpublished PhD dissertation, Universitat Autònoma de Barcelona (Spain), Barcelona.
- Vogel, S., and Reder, S. (1998). Literacy proficiency among adults with self-reported learning disabilities. In M. C. Smith (ed.), *Literacy for the 21st Century: Research, policy, practices, and the national adult literacy survey*. Westport, CT: Greenwood Press.
- von Elek, T. (1985). A test of Swedish as a second language. In Y. P. Lee et al. (eds.), *New Directions in Language Testing* (pp. 47-57). Oxford: Pergamon Press.
- Vygotsky, L. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. (1981). The genesis of higher mental functions. In J. V. Wertsch (ed.), *The concept of activity in Soviet psychology* (pp. 144-188). Armonk, NY: M. E. Sharpe.
- Vygotsky, L. (1997). *The collected works of L. S. Vygotsky, Vol. 4: The history of the development of higher mental functions* (M. J. Hall, Trans; R. W. Reiber, Ed.). New York: Plenum Press.
- Wagner, E. D. (1994). In support of a functional definition of interaction. *American Journal of Distance Education*, 8(2), 6-26.
- Wagner, J., and Firth, A. (1997). Communication strategies at work. In G. Kasper, and E. Kellerman (eds.), *Communication strategies: Psycholinguistic and sociolinguistic perspectives* (pp. 323-344). New York: Longman.
- Walqui, A. (2006). Scaffolding instruction for English language learners: A conceptual framework. *The International Journal of Bilingual Education and Bilingualism*, 9(2), 159-180.

- Wang, M. (2009). *Effects of metacognitive reading strategy instruction on EFL high school students' reading comprehension, reading strategies awareness, and reading motivation*. Retrieved from <http://www.ufl.edu>.
- Watson, S., Gable, R., Gear, S., and Hughes, K. (2012). Evidence-based strategies for improving the reading comprehension of secondary students: Implications for students with learning disabilities. *Learning Disabilities Research & Practice, 27*(2), 79-89.
- Wayne, F., and Mitchell, R. (1992). Vital communication skills and competencies in the workforce of the 1990s. *Journal of Education for Business, 67*(3), 141-147.
- Weinstein, C. E., Husman, J., and Dierking, D. R. (2000). Self-regulation interventions with a focus on learning strategies. In M. Boekaerts, P. R. Pintrich, and M. Zeidner (eds.), *Handbook of self-regulation* (pp. 727-747). San Diego, CA: Academic Press.
- Wenden, A. (1985). Learner strategies. *TESOL Newsletter, 19*(5), 1-7.
- Wenden, A. (1986). Incorporating learner training in the classroom. *System, 14*(3), 315-325.
- Wenden, A. (1991a). *Learner strategies for learner autonomy*. London: Prentice-Hall International.
- Wenden, A. (1991b). Metacognitive strategies in L2 writing: A case for task knowledge. In J. E. Alatis (ed.), *Georgetown university round table on languages and linguistics 1991* (pp. 302-322). Washington, D.C.: Georgetown University Press.
- Wenden, A., and Rubin, J. (1987). *Learner strategies in language learning*. New Jersey: Prentice Hall.
- Westera, J. and Moore, D. (1995). Reciprocal teaching of reading comprehension in a New Zealand high school. *Psychology in the Schools, 32*(3), 225-232.
- Westwood, P. (2008). *What teachers need to know about learning difficulties?* Australia: ACER Press.
- Williams, C., and Roberts, D. (2011). *Strategic oral language instruction in ELD: Teaching oracy to develop literacy*. California: Ballard & Tighe Publishers.



- Williamson, J., McMunn, N., and Reagan, H. (2004). *Tools for providing feedback in reading: A reading assessment handbook for all teachers in grades 3-12*. U.S. Department of Education: Institute of Education Sciences.
- Williamson, Y. (2015). *At-risk students and the study of foreign language in school*. Retrieved from <https://sites.google.com/site/mrswilliamsonmandarinclass/blog>
- Wilson, A. M., and Lesaux, N. K. (2001). Persistence of phonological processing deficits in college students with dyslexia who have age-appropriate reading skills. *Journal of Learning Disabilities*, 34(5), 394-400.
- Winne, P. H. (1995). Inherent details in self-regulated learning. *Educational Psychologist*, 30(4), 173-187.
- Wixson, K. K., and Peters, C. W. (1984). Reading redefined: A Michigan Reading Association position paper. *The Michigan Reading Journal*, 17, 4-7.
- Wolf, S., and Gearhart, M. (1994). Writing what you read: Assessment as a learning event. *Language Arts*, 71, 425-444.
- Wong, A. (2005). Writers' mental representations of the intended audience and of the rhetorical purpose for writing and the strategies that they employed when they composed. *System*, 33, 29-47.
- Wong, B. (1988). An instructional model for intervention research in learning disabilities. *Learning Disabilities Research & Practice*, 4, 5-16.
- Wong, B. (1994). Instructional parameters promoting transfer of learned strategies in students with learning disabilities. *Learning Disability Quarterly*, 17, 110-120.
- Wong, B. (1997). Research on genre-specific strategies for enhancing writing in adolescents with learning disabilities. *Learning Disabilities Quarterly*, 20, 140-159.
- Wong, B. (1998). *Learning about learning disabilities* (3<sup>rd</sup> ed.). San Diego: Academic Press.
- Wong, B. (2000). Writing strategies instruction for expository essays for adolescents with and without learning disabilities. *Topics in Language Disorders*, 20(4), 29-44.

- Wong, B. (2001). Commentary: Pointers for literacy instruction from educational technology and research on writing instruction. *Elementary School Journal*, 101(3), 359-369.
- Wong, B., Butler, D. L., Ficzero, S. A., and Kuperis, S. (1996). Teaching low achieving students and students with learning disabilities to plan, write, and revise opinion essays. *Journal of Learning Disabilities*, 29, 197-212.
- Wong, B., Butler, D. L., Ficzero, S. A., and Kuperis, S. (1997). Teaching low achieving students and students with learning disabilities to plan, write, and revise compare-and-contrast essays. *Learning Disabilities Research & Practice*, 20, 175-183.
- Wong, B., and Jones, W. (1982). Increasing metacomprehension in learning-disabled and normally achieving students through self-questioning training. *Learning Disability Quarterly*, 5, 228-240.
- Wong, B., Wong, R., and Blenkinsop, J. (1989). *Cognitive and metacognitive aspects of learning disabled adolescents' composing problems*. *Learning Disability Quarterly*, 12(4), 310-323.
- Wood, D., Bruner, J. S., and Ross, G. (1976). Role of tutoring in problem-solving. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 17(2), 89-100.
- Wright, P. W. (2005). *IDEA 2004: Proposed changes to the code of federal regulations*. U.S.: Department of Education.
- Wulandari, D., Sukirlan, M., and Sudirman, S. (2014). Improving students' reading comprehension of descriptive text by using prediction strategy. *UNILA Journal of English Teaching*, 6(1), 1-7.
- Xu, J. (2016). The relationship between the use of speaking strategies and performance on IELTS speaking test: A study on Chinese college students. *International Journal for 21st Century Education*, 3(2), 69-96.
- Yang, D., and Gai, F-P. (2010). Chinese learners' communication strategies research: A case study at Shandong Jiaotong University. *Cross-Cultural Communication*, 6(1), 56-81.

- Yoshida-Morise, Y. (1998). The Use of communication strategies in language proficiency interviews. In Richard Young, and Agnes Weiyun He (eds.), *Talking and testing: Discourse approaches to the assessment of oral proficiency* (pp. 205-238). Amsterdam: John Benjamin.
- Zeynali, S., Zeynali, S. and Motlagh, S. (2015). The Effects of socio-affective strategy in enhancement of reading comprehension in Iranian EFL Learners. *International Journal of Language and Linguistics*, 4(2-1), 9-22.
- Zhang, L. (2008). Constructivist pedagogy in strategic reading instruction: Exploring pathways to learner development in the English as a second language (ESL) classroom. *Instructional Science*, 36(2), 89-116.
- Zheng, Y. (2008). Anxiety and second/foreign language learning revisited. *Canadian Journal for New Scholars in Education*, 1(1), 1-12.
- Zimmerman, B. J. (1998). Developing self-fulfilling cycles of academic regulation: An analysis of exemplary instructional models. In D. H. Schunk, and B. J. Zimmerman (eds.), *Self-regulated learning: From teaching to self-reflective practice* (pp. 1-19). New York: The Guilford Press.
- Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, and M. Zeidner (eds.), *Handbook of self-regulation* (pp. 13-39). San Diego: Academic Press.
- Zimmerman, B. J., and Risemberg, R. (1997). Self-regulatory dimensions of academic learning and motivation. In G. D. Phye (ed.), *Handbook of academic learning: Construction of knowledge* (pp. 105-125). San Diego, CA: Academic Press.
- Zimmerman, C. B. (1997). Historical trends in second language vocabulary instruction. In James Coady and Thomas Huckin (eds.), *Second language vocabulary acquisition* (pp. 5-19). Cambridge: Cambridge University Press.

## Subject Index

- affective strategies**  
 benefits of, 49-51  
 definition of, 49  
 types of, 49
- clarifying**  
 benefits of, 155  
 research on, 155
- cognitive learning theory**, 159
- cognitive strategies**  
 benefits of, 28-29  
 definition of, 27  
 types of, 27
- genre-specific strategies**, 178, 204-206
- learning disabilities**  
 characteristics, 2,14  
 definition of, 1-10
- difficulties faced by students with, 5-6
- effective instruction for students with, 10-13, 16-17, 82-84, 125-127, 178-180
- learning strategies**  
 benefits of, 20-26  
 classification of, 26-54  
 definition of, 18-20  
 methods of detecting, 60-46  
 models of teaching, 54-60  
 research on, 64-76
- metacognitive strategies**  
 benefits of, 29-30  
 definition of, 29

implementation of, 44-47

types of, 29, 31-44

### **oral communication**

advantages of, 77-80

difficulties facing

students with learning

disabilities in, 80-81

### **oral communication**

#### **strategies**

benefits of, 100-105

classification of, 88-100

definition of, 85-88

multiple-strategies

model for teaching, 105-117

research on, 118

### **planning**

benefits of, 31-32

definition of, 31

types of, 31

### **predicting**

benefits of, 156-157

research on, 157

### **questioning**

benefits of, 154

research on, 154-155

### **reading comprehension**

definition of, 119-120

difficulties facing

students with learning

disabilities in, 120-121

### **reading process,** 123,

139, 141, 146, 148-158

### **reading strategies**

benefits of, 137-140

classification of, 129-137

definition of, 128

multiple-strategies

model for teaching, 140-153

research on, 125-127

**reciprocal teaching**

benefits of, 159-160  
 definition of, 153  
 procedures of, 160--  
 161  
 research on, 161-172  
 strategies of, 153-158  
 theoretical foundations  
 of, 158-159

**release of teacher**

**responsibility,** 106,  
 143, 179, 193, 206-  
 207

**self-assessment**

benefits of, 36-40  
 definition of, 36  
 obstacles of, 40  
 of the use of  
 communication  
 strategies, 116  
 of the use of reading  
 comprehension  
 strategies, 146

of the use of writing  
 strategies, 200  
 tools of, 44  
 research on, 41-43

**self-monitoring**

benefits of, 34-35  
 definition of, 32  
 types of, 33

**self-reports**

concurrent, 61-62  
 retrospective, 62-63

**social cognitive theory,**

159

**social strategies**

benefits of, 47-48  
 definition of, 47  
 types of, 47

**summarizing**

benefits of, 156  
 research on, 156

**writing genre,** 187, 192,

194, 197, 201-206

**writing process,** 175,  
178-179, 182, 184,  
193-199, 201-207,  
209, 2014, 2018

**writing strategies**

benefits of, 191-193  
classification of , 182-  
190  
definition of, 180-181  
multiple-strategies  
model for teaching,  
193-207  
research on, 207-221

**written expression**

benefits of, 173-174  
difficulties facing  
students with learning  
disabilities in, 174-175