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Thesis Summary

**Enhancing Reading Comprehension in English as a
Foreign Language among Students with Learning
Disabilities: Results of an Intervention Program**

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List of Acronyms

ADHD	Attention Deficit Hyperactivity Disorder
EAP	English for Academic Purposes
EFL	English as a Foreign Language
ESL	English as a Second Language
HOTS	higher order thinking skills
L1	Native Language
L2	Second Language
LD	Learning Disabilities
RCSE	Reading Comprehension Self-Efficacy intervention program
ZPD	Zone of Proximal Development

Abstract

This study examines a concrete strategy-based reading comprehension intervention program which was conceived to facilitate English as a Foreign Language (EFL) reading comprehension of young adult students with learning disabilities (LD) within the context of English for academic purposes and enhance their academic self-efficacy (RCSE). These students have to demonstrate English competence measured by the Israeli national English matriculation exam to submit to higher education institutions in Israel. Two questions directed this mixed methods action research: What is the contribution of the strategy-based RCSE program to reading comprehension enhancement in EFL for students with LD? And in what ways might the strategy-based RCSE program enhance the students' academic self-efficacy in reading in EFL? The quantitative and qualitative data yielded significant increases in EFL reading comprehension and in academic self-efficacy. Awareness of the learning process; concrete, explicit, and repetitive practice; self-regulated learning and task persistence were found as mediating components of reading comprehension while anxiety decline; positive self-perception; and an emphasis on mastery goal orientation were indicated as mediators of academic self-efficacy. Yet, few application difficulties emanated from the students' personality traits and some of the RCSE features were demonstrated. It is suggested, then, that future intervention programs of this kind should prioritize teaching approaches that appeal to cognitive and emotional aspects of conduct.

Key words

Intervention program, EFL academic reading comprehension, Learning disabilities, Learning strategies, Concrete thinking and mental actions, Academic self-efficacy.

1. Chapter I: Introduction

1.1 Research Background

To gain an academic degree in Israel, students need to pass an EAP test.

Academic institutions provide courses designed for regular students. These courses are based entirely on comprehension of high level academic reading materials in EFL. No such program exists to facilitate the reading comprehension skills of students with LD. Also, to enrol in universities or colleges, students must pass the national English high school matriculation exams of 3 (basic), 4 (intermediate), and 5 (advanced) credits. These exams mainly require reading comprehension skills in the EFL context. The participants of this study take the 3 and 4 credit exams.

As a teacher of these courses and a coordinator of some of them, I have been searching for ways to ease the students' struggles while reading. However, since reading involves language abstractions one needs to understand the nature of the reading comprehension problems of students with LD and develop approaches that enhance their comprehension abilities (Gersten et al., 2001). A thorough observation of the students' conduct throughout the years showed that these students' difficulties had a common denominator. It seemed that the processes of thinking (Brown, 1987) are not well organised, and the abstract thinking, a 'product' (Brown, 1987) readers aim at is possible but somehow is not activated. Similarly, Berkeley, MastroPier and Scruggs(2011) claim that students with LD have the cognitive tools needed to process information, but they do it inefficiently, and Gersten et al. (2001) added that they manifest an inability to monitor their understanding.

To avoid such a breakdown in processing, the transition from reading to understanding has to be systemised. Galperin (2010), for instance, suggests a stepwise teaching-learning procedure to improve the quality of learners' thinking. He claims that we should study mental actions as psychic processes that start with external, concrete actions that are then transformed into inner, mental ones. Therefore, an intervention program, the RCSE, based on the concrete concept, was built to improve the students' reading comprehension achievements and their academic self-efficacy.

1.2 Gap in Knowledge

- In terms of **alternative learning strategies for students with LD**, even experienced teachers often demonstrate inadequate knowledge to help these students successfully (Huang et al., 2011) or favour the use of traditional methods while teaching reading in English (Muhammad, 2013).
- No study in the field of EFL reading comprehension has been found that explicitly articulates the importance of **placing a great emphasis on conscious concrete thinking** as a prerequisite stage to enhancing reading comprehension of students with LD. An exception is Galperin's theory of "mental action" (2010), which offers similar processes of thinking but mainly in the disciplines of mathematics and basic reading.
- Little attention has been given to the inquiry about **beliefs of many subgroups** (students with LD, for example) in the field of **foreign language learning** (Wesely, 2012) in general and to the **development of self-efficacy beliefs** toward English studies in particular (Raofifi, Bee and Swee, 2012)

1.3 Aims of the Research

1. To check whether students with learning disabilities improve their reading comprehension in EFL after the strategy-based RCSE program.
2. To examine how the strategy-based RCSE program enhanced those students' academic self-efficacy.

1.4 Research Questions

1. What is the contribution of the strategy-based RCSE program to reading comprehension enhancement in EFL for students with LD?
2. In what ways might the strategy-based RCSE program enhance the students' academic self-efficacy in reading in EFL?

2. Chapter II: Literature Review

2.1 Views on Learning Disabilities

Definition and Characteristics

The term “learning disabilities” is defined by the federal law of the USA and appears in the Individuals with Disabilities Act (IDEA-2004) (Public Law 108-446). It is defined as follows:

“A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, write, spell, or to do mathematical calculations. Such term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia...” (Lerner and Kline, 2006, pp. 6-7 in Leons, Herbert and Gobbo, 2009, pp. 47-48).

In accordance with this definition it can be concluded that students with LD suffer from a neurological disempowerment with certain mental or physical attributes (Mcclimens, 2007). Among the various LD forms, dyslexia, Attention Deficit Disorder (ADD), and Attention Deficit Hyperactivity Disorder (ADHD) are the most common among the participants of this study and these are also the major disabilities affecting the reading comprehension of this population. To be more specific, a learning disability is characterised as interference with a person’s ability to store (in memory), process, or produce information (LDA, 2004). Another specific manifestation of ADD and ADHD is a difficulty in controlling behaviour such as demonstrating inappropriate attention skills, impulsivity, and hyperactivity. This may result in disabilities related to executive functioning, like planning, organising, maintaining focus, and persisting in tasks (Leons, Herbert and Gobbo, 2009).

Effects on Reading Comprehension

Considering the effects LD may have on reading comprehension, controlled attentional processing should be offered to learners (Erçetin and Alptekin, 2013) so they can focus on higher order levels of thinking rather than on a low-level order of thinking that “wastes” learners’ attentional resources (LaBerge and Samuels, 1974). However, Paloyelis et al. (2010) doubt this

assertion, claiming that the link between behavioural inattention and deficits in specific reading is vague, requiring further research.

Since the etiology of such a link is unclear it would be effective to offer students with LD a wide variety of strategies (Cohen, 1998) to compensate for their various deficiencies. Moreover, they should be provided with guided practice to ensure a successful training strategy (Amman, 2013). Furthermore, the strategies should focus on self-regulation processes while aiming at specific neurocognitive processes such as impulsivity and a deficit in maintaining focus (Rabiner and Malone, 2004) to keep learners attentive and competent (Arievitch and Haenen, 2005). All in all, Spekman, Goldberg, and Herman (1992) suggested that promoting learners' awareness of the process they go through is vital for long term effect.

2.2 Perspectives of Reading Comprehension

2.2.1 Second Language Acquisition: Major Principles

To answer the demands of our globalised economy of creativity and flexible thinking, language instruction should **focus on dialogue between students and teachers**. Dialogues expose students to varied intelligences (Michaeli, 2013; Eksi, 2013; Liu, 2014), engage them in introspection (Rushton, 2003; Crasborn, Hennissen, Brouwer, Korthagen and Bergen, 2011), and make them independent learners (Michaeli, 2013) who can criticise others' perspectives (Gillespie, 2007). While in agreement, Nave (2012) warns that dialogue can be disrupted by participants due to their own needs, interests, weaknesses, etc. Therefore, educators should guarantee a balanced encounter between the learner, the learning content, and the teacher. In this respect, there has been a shift in emphasis from teacher-centred to student-centred (Zhang, 2005; Cox and Cordray, 2008).

Following the same principle, Brown (1987) draws a distinction between the observable surface level of language and the deep structure of it; defining them as **performance** and **competence**, respectively. In accordance with this distinction, Wigglesworth (2005) focuses on competence, examining the **process** language acquisition learners go through rather than the **product** (performance). But for a successful process to occur, **learning has to be conscious and explicit** (Schmidt, 2001; Gass, Svetics and Lemelin, 2003; Dekeyser, 2003; Leikin, 2008) as Galperin (2010) argued that the psychology of any mental action is the ability to perform mental

transformations of an object which is, in fact, the active part of consciousness. In addition, unlike Krashen (1993) who contradicts the consciousness concept, Wanzek (2011) reinforces it by reporting that extended periods of time allotted to reading did not have a significant effect on reading comprehension.

2.2.2 Reading Comprehension Skills

Reading comprehension is a complex process, requiring a high cognitive ability of extracting meanings from texts while simultaneously constructing new meanings (Snow and Sweet, 2003) and its success **depends on the nature of the reader** (reading speed and accuracy, vocabulary, and world knowledge), **the text** (structure, coherency, and syntactic complexity) and **the act of reading** (motivation) (Lesaux, Lipka and Siegel, 2006). The last dimension, motivation, can be encouraged by a supportive in-class environment especially for weak students (Leons, Herbert and Gobbo 2009). Other skills needed are **working memory**, **syntactic awareness**, and **phonological processing** (Lesaux, Lipka and Siegel, 2006). But apart from expressing weakness in phonological working memory (Gathercole and Baddeley 1993), poor readers may also exhibit deficient linguistic skills in their L1 as well. Still, teaching these skills in L2 is strongly suggested and can even improve those of L1 (Abu-Rabia, Shakkour, and Siegel, 2013) and vice versa (Cummins, 1981). However, Shany, Wiener, and Feingold (2011) reorganise these various skills, offering a different division: **higher level language functions** such as morphology, syntax and semantics, and **higher level language discourse processes** like text structure understanding, inference making, and metacognitive thinking.

2.2.3 LD Readers' Deficits: Compensating Theories

The method of applied psychological research of the development of mental actions is concerned with error analysis of poor readers and an analysis of the conditions to help eliminate such errors (Galperin, 2010). This can be done by a knowledgeable figure who sets the conditions for the novice to participate in extending current skills to higher levels of competence (Donato, 1994) or similarly to interact with written linguistic input for meaning (Bernhardt, 2005) and who also has control over the whole task of leading the learners through its interrelated parts until they perceive the text as a one whole (Rogoff, 1990). Galperin, who mainly studied children (in Arieviditch and Haenen, 2005), specifies this transition, proposing that

each ‘pure’ thought is an outcome of mental transformation of an object. Yet Arievidt and Haenen (2005) claim that adults also need materialisation.

Feuerstein (1980) and Cohen (1998) share the same perception of the teacher. One contends that the teacher is a mediator (of a “**mediated learning experience**”) who enables ‘direct learning’, while the other perceives the teacher as a learner trainer treating the student-teacher interaction as team work. Schwarzer (2009), however, adopts the **Whole Adult Learner** concept, maintaining that **learners’ language skills as well as their feelings and hopes should be treated while mediating**. To put it differently, this concept offers a combined effort by the structural linguist and the behavioural psychologist who are both interested in answering ‘what’ questions about human behaviour (language skills), whereas the generative linguist and the cognitive psychologist are far more interested in the ‘why’ questions (feelings and hopes) (Brown, 1987). “How People Learn” (Cox and Cordray, 2008) is a comprehensive framework that resembles the characteristics of the ‘whole’ adult learner approach, with the exception of incorporating the dimension of community-centeredness by the “How People Learn” project which increased both students’ critical thinking skills and their ability to transfer their learning to other academic experiences.

2.2.4 Application Theories

Major Characteristics

Strategy-based instruction enables learners to control their own cognition by planning, organising, and evaluating the learning processes within their current abilities, thereby avoiding involvement with insurmountable tasks (Cohen, 1998). Also, **multiple instructional strategies** like text structure and main ideas resulted in long term maintenance and transfer of strategy effects, enabling students to become self-directed (Jitendra and Gajria, 2011). However, strategy training should be carefully planned (Grabe, 1991; Cromley, 2005) so that learners can consciously internalise the strategies and self-regulate their reading (Simpson and Nist, 2000; Smagorinsky, 2008).

Additional Characteristics

Reading comprehension also depends on learners’ prior knowledge, called schema (Zhang, 2005), meaning that the reader should be simultaneously involved in a process of meaning and knowledge construction (Wing, 2002), which resembles the **constructivist learning theory** (Vygotsky, 1986) and which indicates an increased use of reading strategies

(Zhang 2005). In the same vein, **scaffolding**—an explicit teaching of strategies (Clark, 2005)—enhances students’ comprehension (Duke and Pearson, 2002) with less stress and faster (Graves and Graves, 2003). It enables gradual release of responsibility from the teacher to the learners until they are able to transfer the strategies to other contexts (Pearson and Fielding, 1991). The **metacognitive approach** (Flavell, 1992) elaborates on the concept of constructivism by arousing students’ awareness of what, how, and why they learn, which has a profound effect on second-language reading (Carrell, Pharis and Liberto, 1989). Jacobs and Paris (1987) provide a more structured conceptual framework of metacognitive processes, comprising three components of learners’ knowledge regarding learning strategies: declarative, procedural, and conditional. Wenden (1991) also incorporates categories into Flavell’s framework but covers additional aspects suggesting that learners should obtain information about themselves as learners, the learning tasks, and the learning strategies.

However, metacognitive learning should occur at a level slightly above the actual competence of the learner (Zhang, 2005; Thompson, 2013). Like Cohen (1998), both Vygotsky (1986) and Krashen (1992) relate to this idea but give it different names; the **“Zone of Proximal Development” (ZPD)** and **“I + 1”** respectively. Also, Vygotsky (1986) explains that it is important to notice that each student needs a different amount of time and a different level of assistance at the different stages of learning, whereas Krashen (1992) states that understanding input containing “I + 1” depends on the learners’ previous acquired linguistic competence and knowledge. Thompson (2013) adds direct instruction, modelled behaviour, guided feedback, reassurance of tasks already completed, scaffolding, and cognitive restructuring related to reordering of perception, memory, and action as determinants of successful progress of learners within their ZPD.

Similar features are found in **Problem-Based Learning** (Zohar, 2013) where students follow a structured form of research, working accurately and consistently with a great deal of data and drawing conclusions. Yea-Ru, Ernst, and Talley (2010) express a similar notion by recommending planning, monitoring, inference, translation, and top-down vs. bottom-up techniques, which improved the RC achievements of both high and low capable readers (Jahromi, 2014) and which resemble problem solving learning techniques. **Self-assessment techniques** are also favoured for **diminishing anxiety** (Burley, 1990) or for encouraging students to take more responsibility over their own learning (Schwarzer, 2009). All of these

approaches help learners work independently (Martini and Shore, 2008), evaluate their own thinking (Graham et al., 2011), analyse their own miscues, and **increase** their **confidence** (Wurr et al., 2008).

Indeed, catering to learners' confidence is of crucial importance since low self-esteem is the source of either extreme over- or underestimation of abilities (Harter, 1990) especially among LD students (Meltzer, 1998; Stone and May, 2002). When learners are more confident, they can sense the cognitive difference between ability and effort, and improve performance and consequently self-regulate their behaviour (Harter, 1998). Other researchers (Miranda, Villaescusa and Vidal-Abarca, 1997; Chamot et al., 1999; Pressley, 2002; Kolić-Vehovec and Bajšanski, 2007) also advocate an **operation of self-regulated procedures**. Still, although studying the relationship between self-regulated components and reading comprehension also produced insignificant or mixed results (Davis, 2010; Hatami and Zarei, 2012), Schwarzer (2009) stresses that unlike children, it is especially crucial for adults who should not depend on their teachers so that learning can be extended beyond the classroom. Researchers also demonstrate slightly different approaches to self-regulation procedures by proposing models, each with its own emphasis. Boekaert (1999) and Zimmerman (2000) suggest two different component models; evaluation of the learners' approach while they self-regulate their learning, and demonstration of the stages of self-regulated activation, respectively.

Unfortunately, there will always be some learners who resist following a framework planned in advance (Thompson, 2013) due to a lack of characteristics of self-regulated learners (Zimmerman, 2002) emanating from the norms of their upbringing (Baumeister and Vohs, 2008). In addition, to adopt self-regulation processes, learners must have a goal for learning (Cleary and Zimmerman, 2001; Kozlowski and Bell, 2006). Moreover, Kozlowski and Bell (2006) found that goal content, goal proximity activities, and goal frame had a meaningful effect on self-regulation. Another way to develop self-regulated reading is to activate metacognitive processes enforced by a think-aloud strategy (McKeown and Gentilucci, 2007).

2.3 Self-Efficacy

Researchers demonstrate some contrasting ideas regarding the effect of self-efficacy, social cognitive theory, and other self-beliefs prominent in theories of motivation on their related academic outcomes. Like Bandura (1986), Chemers, Hu, and Garcia (2001) contend that **enhancement of students' self-efficacy results in better academic achievements**. However,

Chemers, Hu, and Garcia claim that cognitive, motivational, and affective processes mediate the effects of self-efficacy, whereas Bandura (1986) and Pajares (1996) assert that it is self-efficacy beliefs that mediate these processes. There is also controversy about whether self-efficacy beliefs create outcome expectations (Bandura, 1978) or vice versa, as McClelland (1985) and Marzillier and Eastman (1984) suggest that efficacy beliefs are the result of imagined outcomes perceived by individuals.

Also, when self-beliefs such as anxiety, perceived usefulness, previous experience and achievement, aptitude, and ability compete for their predictive ability, the effect of self-efficacy is minimised due to two drawbacks. First, motivational theorists base their methodologies solely on their own theories (Pajares, 1996). Second, researchers do not draw a clear line between global assessments of self-efficacy and domain-specific ones (Bandura, 1986; Pajares, 1996). Wilhite (1990) approves it by showing that global self-efficacy measures have negative relations with academic achievements in contrast to the students' memory ability. Multon, Brown and Lent (1991) provide contrasting findings showing that generalised self-efficacy indices also predicted performances that were not specifically related. Pajares (1996), therefore, compromises by suggesting that specific domain self-efficacy items should be added to global ones.

Dewck (1999) and Bandura(1986) express a similar dichotomy between positive and negative attitudes of the individuals towards their capabilities and complement each other. Dewck concentrates on the **factors that develop or undermine self-efficacy**; incremental theorists believe in the possibility of improvement and make the required effort, but entity theorists believe in the fixity of intelligence and hardly make an effort. However, Bandura (1986) discusses the **predictive role of self-efficacy**, but in the same manner, he contends that learners with high self-efficacy envision positive outcomes and vice versa.

The self-efficacy theory (Bandura, 1986), the expectancy-value theory (Wigfield and Eccles, 1992) and the attribution theory (Weiner, 1979) express a different emphasis concerning the relationships between self-efficacy and perceived outcomes. The expectancy-value theorists explain what determines engagement in tasks (Hutchins and Patterson, 2008) whereas the attribution theorists deal with the learners' reasons for success or failure, which are often unrealistic and lead to unjustified performance expectancies. **Levels of self-efficacy are attributed to anxiety** (Mills, Pajares and Herron, 2006; Erkan and Saban, 2011). Spielberger (1976) expands the discussion about anxiety, explaining that trait anxiety individuals often

perceive unfamiliar situations as threatening, as opposed to state anxiety ones who feel threatened, depending on the level of perceived difficulty. One exception is Çubukçu (2008) who links learners' anxiety to low self-esteem due to low sociocultural background and not to language anxiety.

In brief, it can be conclusively argued that **theorists are still not decisive enough about the relationships between these various self-belief concepts or between them and their related outcomes** (Pajares, 1996) except for being reciprocal. In other words, motivational constructs and their related performances are largely influenced by the mediational role of self-efficacy; the same as low self-efficacy can be increased by perceived valued outcomes and potential rewards (Schunk, 1991; Bandura, 1995).

2.4 Task Persistence

All in all, it seems likely that catering both to learners' language skills and their academic self-efficacy may increase their self-regulation abilities and probably even their foreign language competence. Taken together, educators may also witness increasing levels of task persistence among their students. However, for task persistence to occur, an improvement in language skills and an increase in self-efficacy may not always suffice for all learners. Learners must also have a real cause for learning such as mastering the studied subject for professional, academic, or social purposes. This prompts the necessity to investigate the attribution of motivation for learning to task persistence.

Task persistence largely deals with the perspectives of the various determinants that encourage its development, and **is determined by the kind of goal the learner has** (Dweck and Leggett, 1988). **Mastery goal orientation** is a real desire to understand and acquire knowledge and results in persistence (Elliot, 1999) while **performance goal orientation** is a wish to outperform others and achieve better grades, and is characterised by little effort in the face of failure (Ames, 1992). Based on the same dichotomy, Nicholls (1992) specifies that performance oriented people who are likely to have a low perceived ability engage in activities according to their level of perceived ability, unlike mastery oriented people with high perceived ability, and choose tasks without considering their related perceived ability. They also use reading strategies more than their counterparts (Tercanlioglu and Demiröz, 2015).

Dweck and Leggett (1988) also contend that unlike incremental theorists, entity theorists demonstrate difficulty in maintaining persistence when they possess low perceived ability. Ames

(1992) adds **the motivation factor**, which can either be generated by a performance approach goal or a performance avoidance goal (Elliot, McGregor and Gable, 1999). The first type makes an effort to succeed while the second type tries to avoid a demonstration of low ability (Elliot, 1999). However, Skaalvik (1997) asserts that mastery and performance goals may be simultaneous motivators that can complement each other, and an optimal condition for high levels of motivation is having high levels of more or less the same degree of both of them (Sideridis and Kaplan, 2011). Moreover, it strengthens commitment to task performance and improves quality of engagement (Elliot and Moller, 2003).

Concerning LD, although research is inconsistent about the influence of executive dysfunction on learners' performance (Dovis et al., 2011), both Dovis et al. (2011) and Martinussen et al. (2005) found that **deficits in executive functioning are the result of motivational deficits** that affect task persistence negatively. Impairments in working memory and behavioural inhibition are prominent among children with ADHD, having difficulty remembering the sequence of actions for which they need greater motivation. Lacking that motivation results in failure to persist in tasks.

An addition of feedback and incentives can improve a visual-spatial working memory task of children with ADHD (Shiels et al., 2008) and in such cases they even perform as well as typically developing children. However, adults have developed a neurobiological change which enables them to modulate their need for rewards (Steinberg et al., 2008). Nevertheless, these findings reinforce the "structural cognitive modifiability" (Feuerstein, 1980) and the brain's plasticity (Strauss, Satz and Wada, 1990).

To compensate for motivational deficits, the kind of praise is also significant (Mueller and Dweck, 1998). They showed that after unsuccessful experiences, the group praised for intelligence demonstrated lower levels of persistence than the group praised for effort. In addition, reading long and difficult texts requires activation of attention resources across periods of sustained effort (Clemens et al., 2015), which suggests that texts should be shortened to increase task persistence.

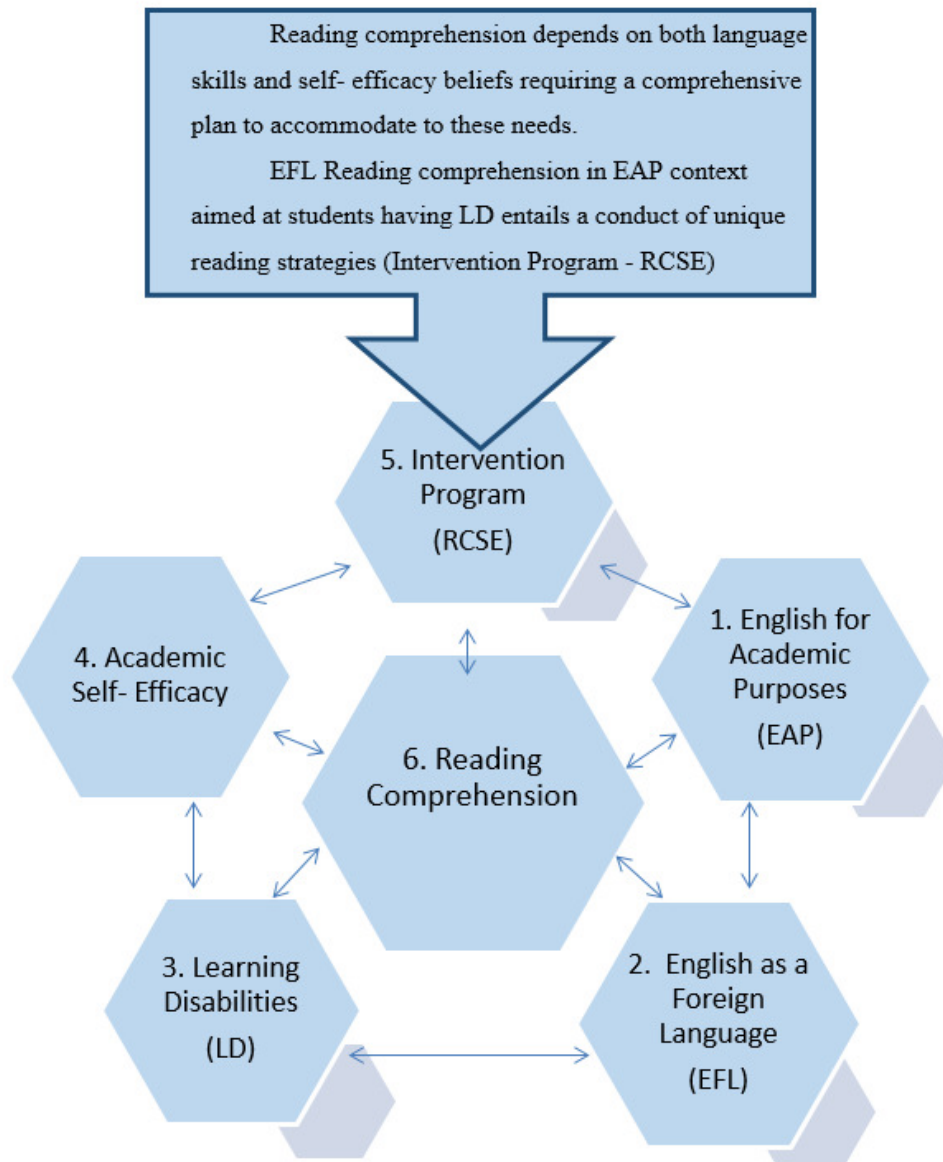
Two juxtaposing ideas relate to the role of learning strategies in encouraging task persistence. Students should be provided with strategies that help them become more systematic and consequently increase levels of task persistence (Karnes, Johnson and Beauchamp, 2005). In

contrast, Gersten (2001) prioritises task persistence, claiming that it is even more important for text understanding than knowledge of learning strategies.

2.5 Conceptual Framework

This study is based on theories related to the fields of language education and language acquisition in the context of reading comprehension in EAP for students with LD. The theories that underpinned this study are mediated learning (Feuerstein, 1980, 2004), social cognitive theory (Bandura, 2006), and constructivism (Vygotsky, 1986), as they relate to foreign language education and the ‘whole’ adult learner (Schwarzer, 2009).

Thus, the conceptual framework of this study includes the following concepts: EAP, reading comprehension in EFL, learning disabilities, academic self-efficacy, and an intervention program (RCSE). Their conflation is expressed in Model 1:



Model 1: Reading comprehension component interplay

Model 1 represents the reciprocal relationship between the various components involved in the reading act, each having its own contribution to the unity of the process. Reading comprehension is placed at the centre of the diagram since it is the major component related to by each of the components in the outer circle and uniquely affects them and is affected by them. The components of the outer circle also affect each other.

This model shows how the components involved in the improvement of reading comprehension interact and complement each other. The ultimate goal which is reading

comprehension in EAP determines the teaching and learning approach that addresses the learners' need to cope with academic reading in EFL context. EFL teaching aids in facilitating learners' access to the language considering learners' limited vocabulary, schema and knowledge of syntactic structures. It also requires reading strategies to weaken the manifestations of learners' deficits emerging from LD they possess. These, in turn, increase their academic self-efficacy beliefs which motivate them to maintain persistence. The need to raise learner' self- efficacy also imposes certain characteristic related to the rationale, and structure of the RCSE which eventually enhances learners reading comprehension achievements.

The inner cycle which presents the reading comprehension component is an outcome of a successful interplay between the components of the outer cycle. Also, the need to improve reading comprehension determines the nature of the RCSE. However, as reading comprehension is enhancing, learners gradually gain mastery of EAP within EFL context, their difficulties emanated from their LD's are less significant and their academic self- efficacy is increasing.

3. Chapter III: Research Methodology

3.1.1 Research Hypotheses

1. Students' reading comprehension achievements will improve as they engage in the strategy-based RCSE.
2. Students' academic self-efficacy will increase as they engage in the strategy-based RCSE.

3.1.2 Research Variables

1. Independent variable – a reading comprehension, strategy-based intervention program
2. Dependent variables – EFL reading comprehension and academic self-efficacy

3.2 Research Approach

Mixed Methods

This study employs the mixed methods approach for several reasons. First, it enables better understanding of issues of validity (Campbell and Fiske, 1959). Second, one method can examine the consistency of the other's findings using methodological triangulation (Greene, Caracelli and Graham, 1989). The study follows a sequential explanatory design (Tashakkori and Teddlie, 2010); the integration of findings during the interpretation stage (Creswell et al., 2013) provides the researcher not only with information related to the learners' reading comprehension competence magnitude (via quantitative data, questionnaires) but also with their attitudes towards the RCSE (via qualitative data, interviews).

Action Research

This study tries to get an in-depth understanding of the processes readers have to go through to improve their reading competence, with the aim of ultimately offering an improved program for enhancing reading comprehension. Being the teacher and the researcher, it follows the method of action research. It offers concrete actions to assist the readers when confronted with various challenging reading tasks, improving practice rather than producing knowledge (Elliott, 1991) while the methodology checks whether these concrete actions resolve students' problems. At the same time, it allows building a matching framework for students to follow (Norton, 2009).

Research Design

Table 1: Research Design

		Research Aims	Research Tools	Research Population	Data Analysis
Stage 1: Pre-intervention Quantitative	Quantitative	To check: <ul style="list-style-type: none"> goal orientation reading comprehension strategy awareness Present feelings academic self-efficacy levels 	Questionnaire 1	40 students with LDs	Statistics
		To check <ul style="list-style-type: none"> reading comprehension achievements 	Reading comprehension exam	40 students with LDs	
		To check <ul style="list-style-type: none"> reading comprehension strategy usage 	Questionnaire 2	40 students with LDs	
Stage 2: Mid-Intervention	Quantitative	To check <ul style="list-style-type: none"> reading comprehension achievements 	Reading comprehension exam	40 students with LDs	Statistics
Stage 3: Post-Intervention Mixed methods	Quantitative	To check: <ul style="list-style-type: none"> reading comprehension strategy awareness present feelings academic self-efficacy levels 	Questionnaire 1	40 students with LDs	Statistics
		To check <ul style="list-style-type: none"> reading comprehension achievements 	Reading comprehension exam	40 students with LDs	
		To check <ul style="list-style-type: none"> reading comprehension strategy usage 	Questionnaire 2	40 students with LDs	
	Qualitative	To check: <ul style="list-style-type: none"> in-depth academic self-efficacy findings attitudes towards reading comprehension 	Semi-structured interview	29 students with LDs	Content analysis

Research Population Sampling

The research population comprised 40 students who engaged in a reading comprehension course in a college in the middle of Israel and gave their informed consent to participate in this study. Since the purpose of this study was to examine reading comprehension in a specific context to maximise understanding of the phenomenon, the participants were deliberately chosen on the basis of their typicality (Cohen, Manion and Morrison, 2011): students with LD who have reading comprehension difficulties and aim to succeed in the Israeli English national matriculation exam. Therefore, it is a purposive sampling.

3.2.1 Research Tools (all went through a pilot process)

Questionnaires:

- Demographic Details Questionnaire
- Goal Orientation Question (composed by the researcher)
- Reading Comprehension Strategy Awareness Questionnaire (composed by the researcher).
- English Studies Present Feelings Question: (composed by the researcher)
- Self-Efficacy Questionnaire (adapted from Chemers Hu and Garcia, 2001)
- Reading Comprehension Tests (approved by the Ministry of Education, Israel)
- Reading Comprehension Strategy Usage Questionnaire (composed by the researcher).

Semi-Structured In-Depth Interviews (composed by the researcher)

3.3 Data Analysis

Quantitative tools: Questionnaires

To answer research question one: "What is the contribution of the strategy-based RCSE to reading comprehension enhancement in EFL for students with LD?" the following tests were conducted:

- **Chi-square tests** for categorical variables, comparing pre- and post-intervention.
- **Wilcoxon signed-rank test** for correlating ordinal variables (pre and post Intervention).
- **Z-Tests** for differences of proportions, comparing pre- and post-intervention.

- **Paired T-Test** for comparing means of pre and post Intervention.
- **Two Way Analysis of Variance** with repeated measures comparing change between two groups.
- **Pearson Correlation Test:** correlations between variables.

To answer researches question two: "In what ways might the strategy-based RCSE enhance the students' academic self-efficacy in reading in EFL?" the following tests were conducted:

- **T-Test for one sample** for testing the deviation from the mid-point of the scale.
- **T-Test for paired samples** comparing means of pre and post Intervention.

Qualitative Tool: Interview

The qualitative stage was employed to validate and explain the findings of the quantitative tools. The data collected by the interviews was analysed by content analysis. The content analysis was based on Shkedi's (2011) principle of category division: division of data into parts and reorganisation of these parts into a new analytic order. The data was analysed according to the following four basic consecutive stages.

- **Initial analysis**
- **Mapping analysis**
- **Focused analysis**
- **Theoretical analysis**

4. Chapter IV: Findings

Note: Only the major findings are presented here. However, they are numbered according to the order of their appearance in the thesis so that the reader can easily trace the areas in the thesis he/she is interested in reading more thoroughly. .

Findings emerging from the quantitative stage: Questionnaires

1. Awareness of Reading Comprehension Strategies (Hypothesis 1)

A Z-Test for differences of proportions showed a significant difference between the pre- and post-intervention phases ($Z=5.48$; $p<0.001$) concerning the participants' awareness of the reading comprehension strategies.

In sum, there was an increase in the awareness of the reading comprehension strategies at the end of the intervention program.

5. Exam Completion

Z-Test for differences of proportions showed that the difference in the rate of exam completion between the pre- and post-intervention phases was significant ($Z=2.53$; $p<0.001$).

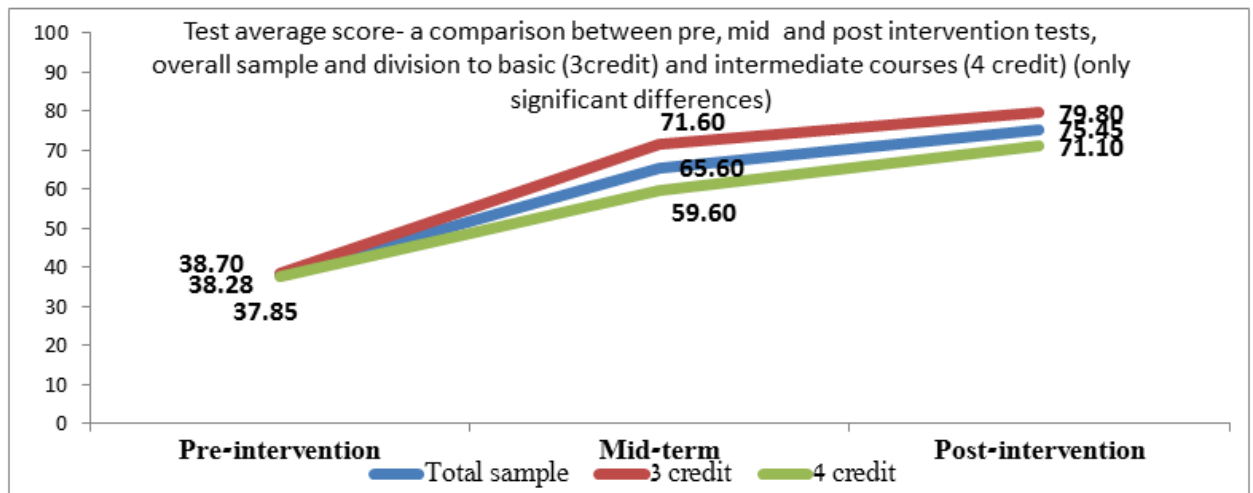
In sum, there was a significant increase in the number of the reading comprehension exam questions that were answered at the end of the intervention program; hypothesis 1 was confirmed.

6. Identifying the Main Idea of the Text

A Wilcoxon signed-rank test, which checked the differences between the positive ranking and the negative ranking (4 point Likert scale) regarding the question about the main idea of the text, indicated significant differences between them ($Z=-4.7$ $p= 0.00194$).

In sum, there was a significant increase in identifying the main idea of the text during the reading comprehension exam at the end of the intervention program; hypothesis 1 was confirmed.

7. An Average Grade of the Reading Comprehension Exam



Graph No. 2: Reading comprehension exam average grade – a comparison between the pre-, mid-, and post- intervention stages, total sample and division into 3- and 4-credit courses

Two Way Analysis of Variance test indicated the following:

- The effect of the timing of the reading comprehension exam was significant ($F(1.44, 54.72) = 118.71, p=0.000$).
- The effect of the number of credits on the participants' reading comprehension exam was close to significant ($F=3.89; p=0.056$).
- The interaction effect between the timing of the reading comprehension exam and the number of credits was not significant ($F(1.44, 54.72) = 2.62; p=0.098$).

In sum, the test scores of the pre-, mid-, and post-reading comprehension exams of both courses showed similar steady significant increases toward the end of the intervention program; hypothesis 1 was confirmed.

10. Relationship between the Strategy Usage Rate and the Reading Comprehension Exam Improvement Rate

The Pearson correlation test showed there is a significant correlation between the increase in strategy usage and the increase in the average grade of the reading comprehension exam.

These correlations were found regarding the following strategy groups: translation strategy ($r = .467, p = .002$) and key word extraction strategy ($r = .366, p = .020$).

In conclusion, the more key word and translation strategies offered by the RCSE were used during the reading comprehension exams the higher the test scores; hypothesis 1 was confirmed.

11. Findings Emerging from the Goal-Orientation Question (Hypothesis 2)

Of the participants, 77.5% took the course to be accepted to university/ college and 57.5% intended to improve the grade of the previous English matriculation exam, while 42.5% wanted a matriculation diploma like others and 15% sought to improve their English.

In sum, with regard to the participants' goal orientation towards the RCSE, most students were performance oriented (intending to improve their grade) while few were mastery oriented (intending to improve their English) at the pre-intervention stage of the RCSE.

12. Findings emerging from the present feelings question (Hypothesis 2)

Most of the participants (67.5%) said that they were relaxed and/ or optimistic in the pre-intervention phase compared to 82.5% who felt that way in the post-intervention phase.

In sum, more participants were relaxed and optimistic at the end of the intervention program than at the beginning; hypothesis 2 was confirmed.

13. Findings emerging from the self-efficacy questionnaires (Hypothesis 2)

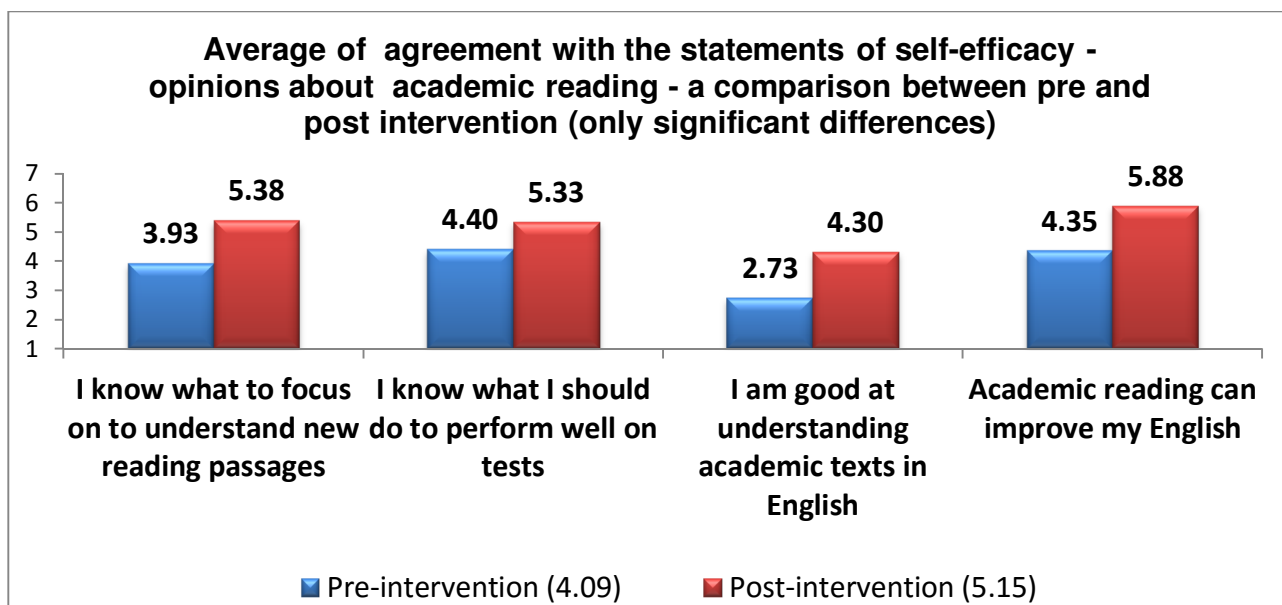
13.1. General Self-Efficacy Attitudes – Academic Studies

- I am a good student (5.33 compared to 4.95 respectively, $p < 0.05, t = 2.03$).
- I am capable of succeeding at this college (6.23 compared to 5.90 respectively, $p < 0.05, t = 2.06$).

In sum, in two out of six statements, there was a significant decrease in the general academic self-efficacy of the participants. One was the way the participants perceive themselves as students and the second was their ability to succeed in their studies at the college; hypothesis 2 was partially confirmed.

13.2. Particular Self-Efficacy Attitudes – EFL Academic Reading

13.2.1. EFL Academic Reading Self-Efficacy – Questionnaire



Graph No. 5: Level of agreement with the statements of self-efficacy – attitudes towards academic reading – a comparison between the pre- and post-intervention phases

Academic reading self-efficacy was significantly higher in the post-intervention phase compared to the pre-intervention phase (5.15 compared to 4.09 respectively, $p < 0.01$, $t = -6.50$).

13.2.2. Academic Reading Self-Efficacy – Integrative Findings: Questionnaires and Interviews

In a Pearson correlation test regarding the participants’ academic reading self-efficacy , a positive significant correlation was found between the questionnaire statement: “I know what to focus on to understand academic texts” and the interview question: “To what extent do you believe the reading comprehension strategies improved your reading comprehension achievements?” ($r = .383$, $p = .041$).

In sum, there was an increase in the participants’ self-efficacy regarding academic reading in EFL context at the end of the RCSE; hypothesis 2 was confirmed.

13.3. Academic Self-Efficacy – EFL Academic Reading and Academic Studies: Interviews

A T-Test for one sample regarding the interview self-efficacy questions showed that the participants considered themselves as capable of coping with academic reading as well as

academic studies after the RCSE. Their academic self-efficacy was significantly higher relative to mid-scale agreement ($t(28) = 11.147, p < .001$).

In sum, there was an increase in the participants' self-efficacy regarding academic reading in EFL context and academic studies, in general, at the end of the RCSE; hypothesis 2 was confirmed.

Findings emerging from the qualitative stage: Semi-structured interviews

Table 4: Interviews' content analysis

Theme 1	Theme 2	Theme 3	Theme 4	Theme 5	Theme 6
Language skills	Learners' conduct	Instruction quality	Easy applications	Application difficulties	Academic self-efficacy
Categories	Categories	Categories	Categories	Categories	Categories
HOTS (High Order Thinking Skill)	Task-initiation & persistence	Emotional & cognitive personal support	Reading comprehension strategies	Inattentiveness	Self-perception
Thinking pace	Taking responsibility	Teacher-student dialogues		Self-regulation	Attitudes toward EFL studies
Skills transfer	Self-regulation	Reading comprehension Strategies		Duration of the RCSE	Attitudes towards prospective academic studies
				Class size	

The findings emerging from the content analysis confirmed both hypotheses. Concerning the first hypothesis, the RCSE enhanced the students' with LD reading comprehension of academic texts in the EFL context. This indicated that the RCSE' concrete and explicit strategies and the repetitive practice increased task persistence, accelerated thinking processes, improved abstract thinking levels, imposed self-regulation processes, and even encouraged skill transfer to additional language skills and other subjects.

Regarding the second hypothesis, the RCSE enhanced the students' with LD academic self-efficacy. It was shown that the emotional personal support delivered by on-going teacher-

student dialogues and the cognitive processes transferred by the reading comprehension strategies made the respondents adopt a mature approach to learning, taking responsibility for their progress. Also, they perceived themselves as successful EFL language learners. They developed a positive attitude towards reading comprehension in the EFL context in particular and towards academic studies in general, emphasising that the participants became mastery goal oriented.

In addition, there were some indications that carefully planned homework could lower anxiety and reduce inattentive expressions among some students. Some other drawbacks were also reported, such as difficulty in enforcing self-regulation processes due to personality characteristics, the RCSE duration, which did not seem to satisfy the needs of all participants, and class size, which did not allow for ultimate solutions for each specific student.

5. Chapter V: Discussion

Research Question 1

What is the contribution of the strategy-based RCSE to reading comprehension enhancement in EFL for students with LD? This section discusses the indicators of the participants' reading comprehension enhancement and the various components of the RCSE that contributed to this enhancement as expressed by the following diagram:

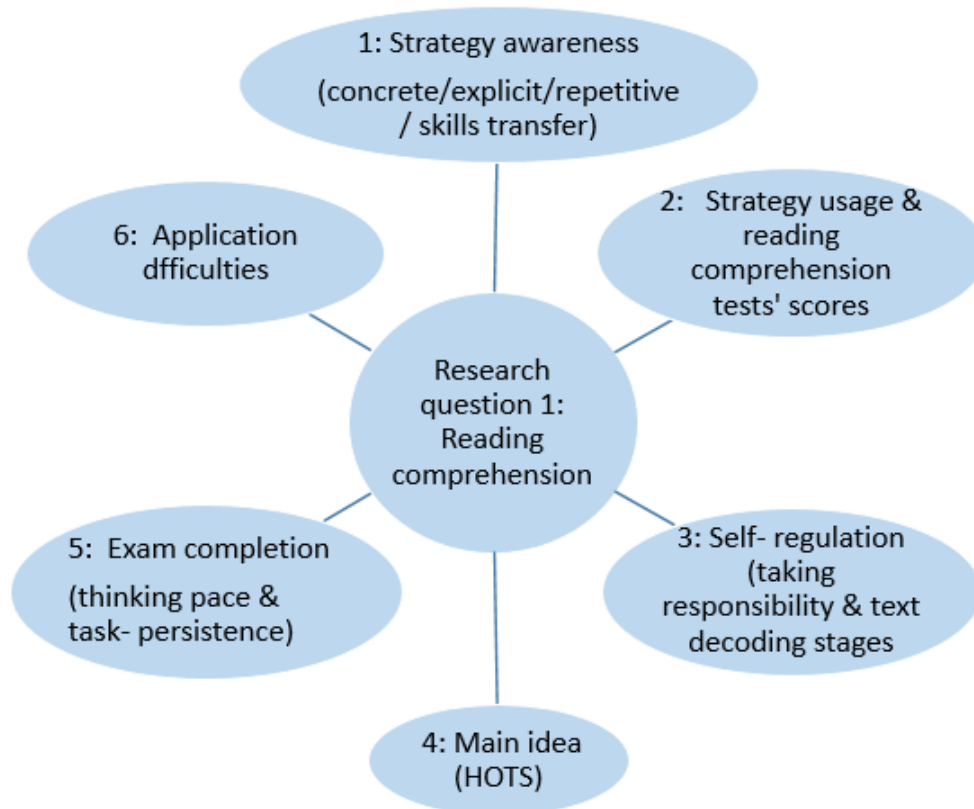


Diagram 1: Conceptual framework of the discussion related to Research Question 1

The enhancement in reading comprehension among the participants is demonstrated by integration of the quantitative and the qualitative data. The participants were aware, i.e., conscious (Schmidt, 2001) of the reading comprehension strategies since they were concrete in nature, instructed explicitly (Dekeyser, 2003), and practiced repetitively. This increase in awareness was also reinforced by the participants' claim of developing language skill transfer (Cox and Cordray, 2008; Abu-Rabia, Shakkour, and Siegel, 2013). Having an awareness of the

reading comprehension strategies increased the likelihood that the participants would take advantage of them to facilitate the reading comprehension processes. This is evident by the increase in the strategy usage rates, which, in turn, raised the reading comprehension test scores (Jitendra and Gajria, 2011). Moreover, the strategy usage encouraged self-regulated behaviour imposed by the text decoding stages (Zimmerman, 2000; Pintrich, 2000; Zimmerman, 2002; Zarei and Hatami, 2012), and the participants began to take responsibility for their progress. Abstract thinking was indicated, as well, by the improvement in the participants' ability to construct main ideas from concrete pieces of information (Galperin, 2010), and thinking pace (Vaughn et al., 2000; Graves and Graves, 2003). Task persistence encouraged by the usage of reading strategies (Karnes, Johnson, and Beauchamp, 2005) added validity to the enhancement of the participants' EFL reading comprehension. However, some unsuccessful adjustments to the RCSE of a few students such as those expressing inattentiveness (Paloyelis et al., 2010; Feng, D'Mello and Graesser, 2013; Clemens et al., 2015), difficulty in adopting self-regulation processes (Jacobs and Paris, 1987; Baumeister and Vohs, 2008), inadequate duration of the RCSE (Grabe, 1991), and a large number of participants in the RCSE could inhibit their progress to some extent.

Research Question 2

In what ways might the strategy-based RCSE enhance the students' academic self-efficacy in reading in EFL?

The following section suggests that various indicators prove that the participants' academic self-efficacy has been enhanced by the intervention program as expressed by the following figure.



Diagram 2: Conceptual framework of the discussion related to Research Question 2

Academic self-efficacy levels were scrutinised by quantitative and qualitative findings. The increase in academic self-efficacy was maintained by the results of questionnaires which addressed this variable directly; the items were context related (Bandura, 1986). However, this increase was also deduced by other variables that emerged mainly from the content analysis, having a heuristic function in the attempt to determine the main claim; raising levels of academic self-efficacy among the participants of the RCSE. The teachers' personal support while instructing the reading comprehension strategies, the verbal encouragement (Hampton and Bandura, 1995; Mason, 2003) and the on-going dialogues with the participants improved their knowledge about learning processes (Crasborn, Hennissen, Brouwer, Korthagen and Bergen, 2011; Eksi, 2013; Liu, 2014) and had a relaxing effect (Burley, 1990; Graves and Graves, 2003; Leons, Herbert and Gobbo, 2009; Yea-Ru, Ernst and Talley, 2010), as well. That is to say, it reduced anxiety among the participants and enabled development of positive self-perception beliefs (Gardner, 2000; Dörnyei, 2005). These changes are also evident by the increase in the

participants' EFL reading self-efficacy (Khajavi and Ketabi, 2012), which is further indicated by the increase in their general self-efficacy (Shang, 2010), the intention to pursue academic studies, and the belief in their ability to cope with them. Hence, the change in their goal orientation (Dweck and Leggett, 1988); from wishing to improve the grades of the English matriculation exam (performance oriented) to improving their English and approaching higher studies (mastery oriented), is an additional convincing determinant.

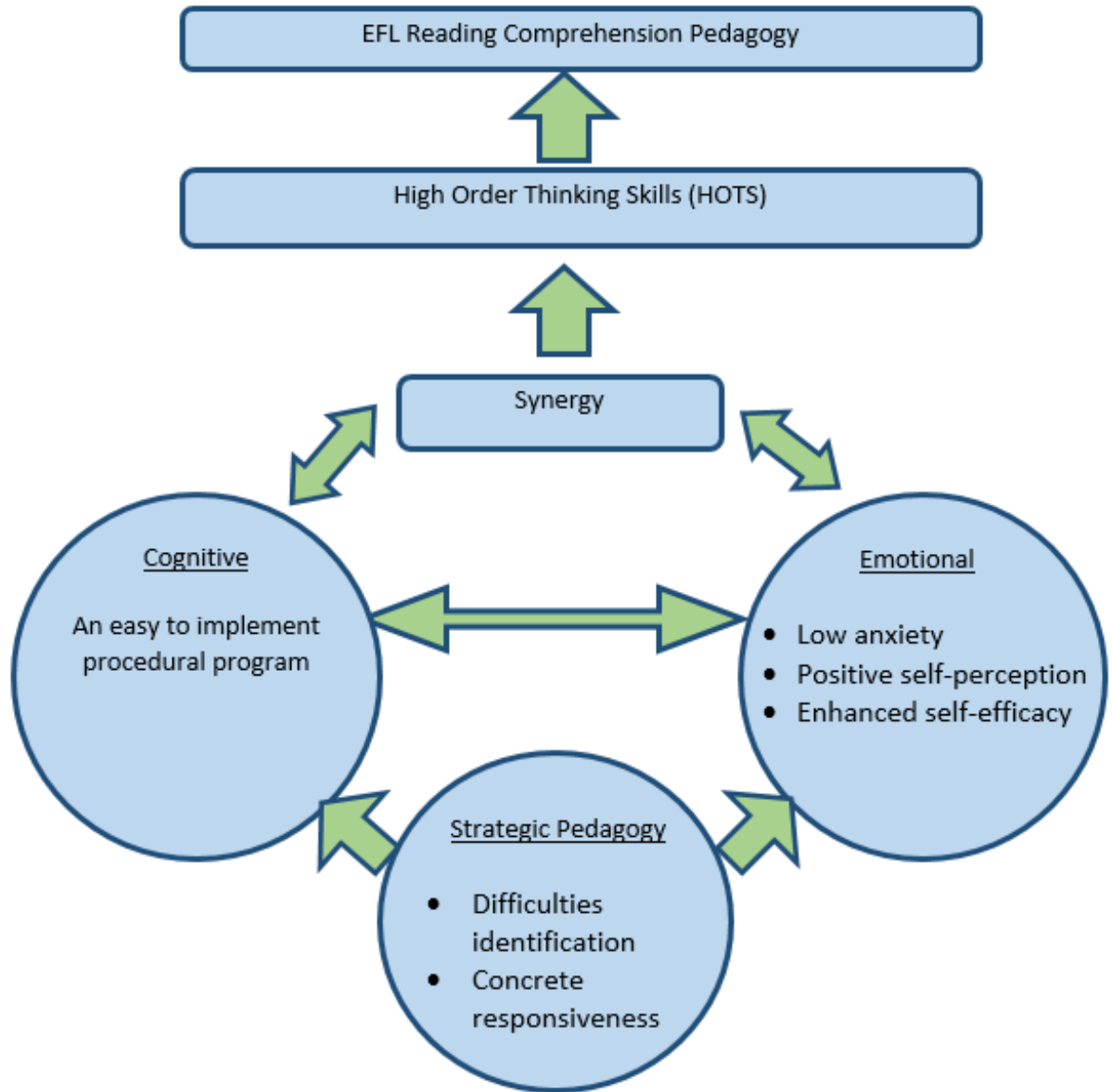
6. Chapter VI: Conclusions

6.1 Conceptual Conclusions

On the conceptual level, the findings of this research allowed the emergence of an evidence-based model of improving reading comprehension abilities in EFL among students with learning disabilities engaged in EAP studies. The EFL reading comprehension pedagogy model integrates three areas of the EFL reading acquisition processes; namely, the cognitive, emotional, and strategic-pedagogical:

- **The strategic-pedagogical processes** encompass concrete responses to a collection of specific difficulties related to the learners' cognitive and emotional conduct when approaching the written texts to achieve comprehension in EFL reading.
- **The cognitive processes** include reading comprehension procedural strategies. Reading comprehension is facilitated as the RCSE appeals to a low order of thinking. It initially activates concrete thinking, which is usually easily triggered, making it easy to implement and paving the way to higher order thinking skills.
- **The emotional processes** comprise anxiety preventive measures, encourage positive self-perception, and increase self-efficacy beliefs. A manageable concrete approach to reading reduces learners' stress and promotes task initiation and persistence followed by small successful operations. These, in turn, simultaneously make the students perceive themselves as capable learners and increase their self-efficacy beliefs in EFL reading and academic studies.

The research showed that the integration of the three processes creates a synergy that pushes towards implementation of high order thinking in reading comprehension and enables the EFL students to achieve excellence. Following is the EFL RCSE pedagogy model.



Model 3: The EFL RCSE Pedagogy Model

The EFL RCSE pedagogy model that emerged from this research poses reading comprehension as a process that extends the instruction in class. The research presents the RCSE program as an integrative and interactive pedagogy that incorporates the instruction strategies with the students with learning disabilities as a whole. This makes the RCSE model a holistic interactive and integrative reading comprehension pedagogy.

6.2 Practical Conclusions

Practical implications of the EFL RCSE pedagogical model necessitate the following steps:

1. Opening professional development frameworks for EAP teachers. The frameworks will provide teachers with the strategies and the tools inherent in the RCSE model to facilitate reading comprehension among EAP students with learning disabilities.
2. To maximise the RCSE potential for the success of the least capable students, add innovative strategies to compensate for the following problems: inattentiveness, inadequate course duration, resistance to self-regulation processes, and too large classes.
3. The lowest achieving students should be given more direct instruction regarding the use of the different strategies.
4. Intervention programs should provide students with LD activities that encourage task persistence because they need longer processes to internalise learning materials than regular students.
5. To minimise the effects of personal characteristics of students with LD, intervention programs should offer a wide variety of activities to suit different learning styles.
6. The process that students with LD go through should be conceived carefully, making it short and concise enough to produce immediate changes. Developing a positive self-perception as learners at early stages of learning encourages students with LD to become mastery goal oriented in the EFL context.

6.3 Contribution to Knowledge

Contribution to Theoretical Knowledge

- Presentation of an **interplay** between leading concepts in the field of **foreign language acquisition** in general, and **reading comprehension** in particular, and their related **application theories**.
- Highlighting the notion of **education** in general and **concreteness** in **EFL** settings in particular.

- Presentation of the **RCSE Pedagogy Model** as an innovation related to **reading comprehension** and **self-efficacy** among students with **learning disabilities** engaged in **EAP** courses.
- An expansion of knowledge concerned with an **enhancement of academic self-efficacy** based on the concept of **concreteness**.

Contribution to Practical Knowledge

- The study is of great value to the **day-to-day practice of EFL teachers** engaged in teaching **EAP** courses to students with **learning disabilities**.
- **Facilitated text discourse** processes can **save feelings of frustration** and **minimise avoidance in the face of failure** among different age groups of the student population.
- The **RCSE model enables** students with learning disabilities to pass their **EAP** courses and pursue **academic studies**.
- The **RCSE model** can serve as an infrastructure to **curriculum designs**.
- Teachers could use the **RCSE approach** to teaching and learning as a **remedial tool** to aid students in their **other life settings**, showing them that **difficulties have resolutions**.

6.4 Research Limitations

Some characteristics of this study seem to place limitations on its quality but a few measures were taken to reduce their effects on its findings.

First, this action research examined too specific a setting and population to claim its generalisability. However, this was resolved by employing a mixed methods approach. The quantitative methodology has low validity but high reliability while the qualitative one has high validity but low reliability, thereby complementing each other and increasing generalisability (Onwuegbuzie and Burke, 2006). Another way to benefit the larger population of students with LD is through transferability, which is possible by making connections between this study and other similar contexts (Cohen, Manion and Morrison, 2011).

Second, the negative effect of the researcher involvement was taken into account. Being the teacher-researcher increases social desirability (Cohen, Manion and Morrison, 2011). But the on-going dialogues between the researcher and the participants throughout the RCSE that have

conveyed the message that failures are part of any process that aims at change, have minimized this phenomenon. Additionally, the researcher involvement may lead to biased evaluations of the verbal data. To avoid it, the reading comprehension open-ended questions and the interviews' data were cross-examined by professional colleagues. However, what was seemingly a drawback turned into a benefit; being the researcher and the teacher created an intimacy with the participants and encouraged openness that would not have developed with an external researcher (Shkedi, 2003, 2011), leading to trustworthiness (Borrego, 2009) and authenticity (Maxwell, 1992).

6.5 Further Research

This study provides a fruitful line of future inquiry. To extend this study's contribution to knowledge, the efficacy of the RCSE program should be re-evaluated in other contexts, with other methodologies and for different purposes.

Future research could aim at deepening an understanding of reading comprehension strategies as they connect with self-efficacy. This can be achieved by implementation of this study in a high school context for EFL students whose matriculation exams include reading comprehension of high level academic texts.

Research could also target enhancing better practice of EFL reading comprehension of students with learning disabilities by examining the issue under this study from the EAP teachers' point of view while implementing the RCSE intervention program.

References

- Abu-Rabia, S., Shakkour, Y., & Siegel, L., 2013. Cognitive Retroactive Transfer (CRT) of Language Skills among Bilingual Arabic-English Readers. *Bilingual Research Journal*, 36 (1), pp.61-81.
- Alberto, P. A., & Troutman, A. C., 2003. *Applied Behavior Analysis for Teachers* (6th ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.
- Ames, C., 1992. Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84(3), pp.261-271.

- Amman, S. M. R., 2013. Teaching reading strategies to ESP readers. *International Journal of Research Studies in Educational Technology*, doi: 10.5861/ijrset.2013.318.
- Anaydubalu, C. C., 2010. Self-efficacy, anxiety, and performance in the English language among Middle-School students in English language program in Satri Si Suriyothai School, Bangkok. *International Journal of Human and Social Sciences*, 5(3), pp.193-198.
- Arievitch, I. M., & Haenen, J. P. P., 2005. Connecting sociocultural theory and educational practice: Galperin's approach. *Educational Psychologist*, 40(3), pp.155–165.
- Baars, B. J., 2003. Working memory requires conscious processes, not vice versa. In: N. Osaka (Ed.), *Neural basis of consciousness*. Philadelphia, PA: John Benjamin. *Disorders*, 36, pp.189-208.
- Baars, B. J., & Franklin S., 2003. How conscious experience and working memory interact. *Trends in Cognitive Sciences*, 7, pp.166 -172.
- Baddeley, A. D., 2003. Working memory and language: An overview. *Journal of Communication Disorders*, 36, pp.189 -208.
- Bakken, J. P., Mastropieri, M. A., & Scruggs, T. E., 1997. Reading comprehension of expositors science material and students with learning disabilities: a comparison of strategies. *The Journal of Special Education*, Bensalem, 31(3), pp.300-324.
- Bandura, A., 1978. Reflections on self-efficacy. *Advances in Behavioural Research and Therapy*, 1, pp.237-269.
- Bandura, A., 1986. Social foundations of thought and action: a social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall. In: Hampton, N. Z. and Mason, E. (2003). *Learning disabilities, gender, sources of efficacy, self-efficacy beliefs, and academic achievement in High School Students*. *Journal of School Psychology*, 41(2), pp.101-112.
- Bandura, A., 1993. Perceived self-efficacy in cognitive development and functioning. *Educational Psychology*, 28(2), pp.117-148.
- Bandura, A., 1995. Experience of personal and collective efficacy in changing societies. In: A. Bandura (Ed.), *Self-Efficacy in Changing Societies*, 1– 45. New York: Cambridge University Press.
- Bandura, A., 2006. Adolescent development from an agentic perspective. In Raoofi, S., Bee, H. T. & Swee, H. C. (2012). *Self-efficacy in second/foreign language learning contexts*. *English Language Teaching*, 5(11), pp.60-73.

- Bandura, A., 2006. Autobiography. In: M. G. Lindzey & W. M. Runyan (Eds.), *A history of psychology in autobiography (IX)*. Washington, D.C.: American Psychological Association.
- Barnes, B. R., 2012. Using mixed methods in South African psychological research. *South African Journal of Psychology*, 42(4), pp.463 – 475.
- Baumeister, R. F., & Vohs, K. D., 2008. Self-regulation, ego depletion, and motivation. *Social and Personality Psychology Compass*, 1, pp.1-14.
- Belloch, A., 2003. Dimensions of the self-consciousness scale and their relationship with psychopathological indicators. *Personality and Individual Differences*, 35, pp.829–841.
- Berkeley, S., MastroPier, M. A. I., & Scruggs, T. E., 2011. Reading comprehension strategy instruction and attribution retraining for secondary students with learning and other mild disabilities. *Journal of Learning Disabilities*, 44(1), pp.18-32.
- Bernaus, M., & Gardner, R. C., 2008. Teacher motivation strategies, student perceptions, student motivation, and English achievement. In Wesely, P. M. (2012). Learner attitudes, perceptions, and beliefs in language learning. *Foreign Language Annals*, 4(1), pp.98-117.
- Bernhardt, E. B., 2005. Progress and procrastination in second language reading. *Annual Review of Applied Linguistics*, 25, pp.133–150.
- Bloom, B., 1956. *Taxonomies of Education Objectives: The Classification of Educational Goals; Handbook I, Cognitive Domain*. New York: McKay.
- Boekaerts, M., 1999. Self-regulated learning: Where we are today. *International Journal of Educational Research*, 31(6), pp.445-457.
- Borrego, M., Douglas, E. P. & Amelink, C. T. (2009). Quantitative, qualitative, and mixed research methods in engineering education. *Journal of Engineering Education*, pp.53-66.
- Brown, H. D., 1987. *Principles of Languages Learning and Teaching*, second ed. Englewood Cliffs: Prentice Hall Regents.
- Burley, D., 1990. *Using informal education*. Reproduced with permission from Tony Jeffs and Mark Smith (Eds.), Buckingham: Open University Press. First published on the informal education homepage: May 2001.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multi trait-multimethod matrix. *Psychological Bulletin*, 56, pp.81-105.

- Carrell, P., Pharis, B., & Liberto, J. (1989). Metacognitive strategy training for ESL reading. *TESOL Quarterly*, 23 (4), pp.647–678.
- Chamot, A. U., O'Malley, J. M., Barnhardt, S., El-Dinary, P., & Robbins, B., 1999. *The Learning Strategies Handbook*. New York: Longman.
- Chard, D. J., Vaughn, S., & Tyler, B., 2002. A synthesis of research on effective interventions for building fluency with elementary students with learning disabilities. *Journal of Learning Disabilities*, 35, pp.386–406.
- Chemers, M. M., Hu, L., & Garcia, B. F., 2001. Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology*, 93, pp.55-64.
- Clark, K. F., & Graves, M. F., 2005. Scaffolding students' comprehension of text. *The Reading Teacher*, 58(6), pp.570-580.
- Cleary, T. J., & Zimmerman, B. J., 2001. Self-regulation differences during athletic practice by experts, non-experts, and novices. *Journal of Applied Sport Psychology*, 13(2), pp.185-206.
- Clemens, N. H., Davis, J. L., Simmons, L. E., Oslund, E. L., & Simmons, D. C., 2015. Interpreting secondary students' performance on a timed, multiple-choice reading comprehension assessment: The prevalence and impact of non-attempted items. *Journal of Psychoeducational Assessment*, 33(2), pp.154–165.
- Cohen, A. D., 1998. *Strategies in Learning and Using a Second Language*. London and New York: Longman.
- Cohen, L., Manion, L., & Morrison, K., 2011. *Research Methods in Education*, 5th ed. NY: Routledge.
- Courchesne, E., Chisum, H., & Townsend, J., 1994. Neural activity-dependent brain changes in development: implications for psychopathology. *Development and Psychopathology*, 6, pp.697-722.
- Cox, M. F., & Cordray, D. S., 2008. Assessing pedagogy in bioengineering classrooms: quantifying elements of the “How People Learn” model using the VaNTH observation system (VOS). *Journal of Engineering Education*, pp.413-431.
- Crasborn, F., Hennissen, P., Brouwer, N., Korthagen, F., & Bergen, T., 2011. Exploring a two-dimensional model of mentor teacher roles in mentoring dialogues. *Teacher and Teacher Education*, 27, pp.320-331.

- Creswell, J. W., 2013. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: Sage Publications.
- Cromley, J. G., 2005. Metacognition, cognitive strategy instruction, and reading in adult literacy. *Review of Adult Learning and Literacy*, 5, pp.187-204.
- Çubukçu, F., 2008. A Study on the correlation between self-efficacy and foreign language learning anxiety. *Journal of Theory and Practice in Education*, 4(1), pp.148-158.
- Cummins, J., 1981. The role of primary language development in promoting educational success for language minority students. In: California State Department of Education (Ed.), *Schooling and language minority students: A theoretical rationale*, pp.3-49. Los Angeles, CA: California State University.
- Davis, D. S., 2010. A meta-analysis of comprehension strategy instruction for upper elementary and middle school students. Unpublished PhD Thesis, Vanderbilt University. In: Jahromi, M. K. (2014). EMP Students' use of reading strategies and the impact of strategy instruction on medical text comprehension. *Modern Journal of Language Teaching Methods*, 4(1), pp.185-208.
- DeKeyser, R., 2003. Implicit and explicit learning. In: C. Doughty & M. Long (Eds.), *The Handbook of Second Language Acquisition*. London: Blackwell.
- Denzin, N. K., 1978. The logic of naturalistic inquiry. In: N. K. Denzin (Ed.) *Sociological methods: A sourcebook*, McGraw-Hill: New York.
- Denzin, N. K., & Lincoln, Y. S. (Eds.), 1994. *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage Publications Inc.
- Dienes, Z., & Perner, J., 1999. A theory of implicit and explicit knowledge. *Behavioral and Brain Sciences*, 22, pp.735 -808.
- DiFino, M., & Lombardino, L. J., 2004. Language learning disabilities: The ultimate foreign language challenge. *Foreign Language Annals*, 37(3), pp.390-400.
- Donato, R., 1994. Collective scaffolding in second language learning. In: J. Lantolf & G. Appel (Eds.), *Vygotskian approaches to second language research*. Norwood, NJ: Ablex. pp.35-59.
- Dörnyei, Z., 2005. *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: Lawrence Erlbaum.

- Dovis, S. & Van der Oord, S. & Wiers, R. W., & Prins, P. J. M., 2011. *Can Motivation Normalize Working Memory and Task Persistence in Children with Attention-Deficit/Hyperactivity Disorder? The Effects of Money and Computer-Gaming*. Published online: 21 December 2011 # The Author(s), with open access at Springerlink.com.
- Duke, N. K., & Pearson, P. D., 2002. Effective practices for developing reading comprehension. In: A. E. Farstrup & S. J. Samuels (Eds.), *What research has to say about reading instruction*, third ed., pp.205-242. Newark, DE: International Reading Association.
- Dweck, C. S., 1999. *Self-theories: their role in motivation, personality, and development*. New York: Psychology Press.
- Dweck, C. S., & Leggett, E. L., 1988. A social-cognitive approach to motivation and personality. *Psychological Review*, 95(2), pp.256-273.
- Ehrman, M., and Oxford, R., 1990. Adult language learning styles and strategies in an intensive training setting. *Modern Language Journal*, 74, pp.311-326.
- Eksi, G. Y., 2013. E-dialogue journal: Student teachers' perspectives on their school experience. *Procedia-Social and Behavioral Sciences*, 70, pp.1810-1819.
<http://dx.doi.org.ezproxy.levinsky.ac.il/10.1016/j.sbspro.2013.01.257>
- Elliot, A. J., 1999. Approach and avoidance motivation and achievement goals. *Educational Psychologist*, 34(3), pp.169-189.
- Elliot, A. J., McGregor, H. A., & Gable, S., 1999. Achievement goals, study strategies, and exam performance: A mediational analysis. *Journal of Educational Psychology*, 91, pp.549–563.
- Elliot, A. J., & Moller, A. C., 2003. Performance-approach goals: Good or bad forms of regulation. *International Journal of Educational Research*, 39, pp.339–356.
- Elliott, J., 1991. *Action Research for Educational Change*. Buckingham: Open University Press.
- Erçetin, G., & Alptekin, C., 2013. The explicit/implicit knowledge distinction and working memory: Implications for second-language reading comprehension. *Applied Psycholinguistics*. 34(4), pp.727-753.
- Erkan, Y. D., & Saban, A. I., 2011. Writing performance relative to writing apprehension, self-Efficacy in, writing and attitudes towards writing: A correlational study in Turkish tertiary-level EFL. *The Asian EFL Journal Quarterly*, 13(1), pp.163-191.

- Feuerstein R., 1980. *Instrumental Enrichment and Intervention Program for Cognitive Modifiability*. Baltimore: University Park Press.
- Feuerstein, R., Rand, Y., Hoffman, M., & Miller, R., 2004. Voices from the Past. Cognitive modifiability in retarded adolescents: Effects of instrumental enrichment. *Pediatric Rehabilitation*, 7(1), pp.20-29.
- Fitzgerald, J., 1995. English-as-a-second-language learners' cognitive reading processes: A review of research in the United States. *Review of Educational Research*, 65, pp.145–190.
- Flavell, J. H., 1992. Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. In: T. Nelson (Ed.), *Metacognition: Core readings*, pp.2–9. Boston, MA: Allyn & Bacon.
- Galaburda, A. M., 1994. Developmental dyslexia and animal studies: At the interface between cognition and neurology. *Cognition*, 50, pp.133-149.
- Galperin, P., 2010. On Development of mental actions and concepts, *Cultural-Historical Psy.*, (3), pp.111-114. ISSN: 1816-5435 / 2224-8935 (online), Psyjournals.ru.
- Gardner, R. C., 2000. Correlation, causation, motivation and second language acquisition. *Canadian Psychology*, 41, pp.1-24. <http://dx.doi.org/10.1037/h0086854>
- Gass, S., Svetics, I., & Lemelin, S., 2003. Differential effects of attention. *Language Learning*, 53(3), pp.497-545.
- Gathercole, S., & Baddeley, A., 1993. *Working memory and language*. Hillsdale, NJ: Erlbaum.
- Gersten, R., Fuchs, L. S., Williams, J. P., & Bakers, S., 2001. Teaching reading comprehension strategies to students with learning disabilities: A Review of Research. *Review of Educational Research*, 71(2), pp.279-320.
- Gillespie, A., 2007. The social basis of self-reflection. In: J. Valsiner, & A. Rosa (Eds.), *The Cambridge handbook of sociocultural psychology*, pp.678-691. Cambridge: Cambridge University Press.
<http://dx.doi.org.ezproxy.levinsky.ac.il/10.1017/CBO9780511611162.037>
- Gorsuch, G., 2009. Investigating second language learner self-efficacy and future expectancy of second language use for high-stakes program evaluation. *Foreign Language Annals*, 42(3), pp.506-540.
- Grabe, W., 1991. Current developments in second language reading research. *TESOL Quarterly*, 25(3), pp.375–460.

- Graham, S., Nelson, R., Hom, E. & Watterson, C. E., 2011. *Focus on Exceptional Children*. Denver: Love Publishing Company.
- Graves, M.F., & Graves, B.B., 2003. *Scaffolding reading experiences: Designs for student success*. Norwood, MA: Christopher-Gordon.
- Grayson, L. B., Walter, D. S., Dearing, E., & Hamill, S. K., 2009. Cognitive self-regulation in youth with and without learning disabilities: academic self-efficacy, theories of intelligence, learning vs. performance goal preferences, and effort attributions. *Journal of Social and Clinical Psychology*, 28(7), pp.881-908.
- Greene, J. C., & Caracelli, V. J., 2003. Making paradigmatic sense of mixed methods practice. In: Tashakorri, A. & Teddlie, C. (Eds), *Handbook of mixed methods in social & behavioral research*, Thousand Oaks, CA: Sage.
- Greene, J. C., Caracelli, V. J., & Graham, W. F., 1989. *Toward a conceptual framework for mixed-method evaluation designs*. *Educational Evaluation and Policy Analysis*, 11, pp.255-274.
- Grossen, B., & Carnine, D., 1993. Phonics instruction: Comparing research and practice. *Teaching Exceptional Children*, 25, pp.22–25.
- Haenlein, M., & Caul, W. F., 1987. Attention deficit disorder with hyperactivity: a specific hypothesis of reward dysfunction. *Journal of American Academy of Child and Adolescent Psychiatry*, 26(3), pp.356–362.
- Hampton, N. Z., & Mason, E., 2003. Learning Disabilities, Gender, Sources of Efficacy, Self-Efficacy Beliefs, and Academic Achievement in High School Students. *Journal of School Psychology*, 41(2), pp.101-112.
- Hanan, A. A., 2006. A View from Somewhere: Explaining the Paradigms of Educational Research. *Journal of Philosophy of Education*, 40(2), pp. 205-221.
- Harter, S., 1990. Causes, correlates, and the functional role of global self-worth: A life-span perspective. In: J. Kolligan and R. Sternberg (Eds.), *Perceptions of competence and incompetence across the life-span*, pp.67-98. New Haven, CT: Yale University Press.
- Harter, S., 1998. The development of self-representations. In W. Damon (Ed.), *Handbook of child psychology*, 5th ed., 3, pp.553-617. New York: Wiley.
- Hoffman, J. V., & Clements, R., 1984. Reading miscues and teacher verbal feedback. *The Elementary School Journal*, 84, pp.423–440.

- Huang, J., Clarke, K., Milczarski, E., Raby, C., 2011. The assessment of English language learners with learning disabilities: issues, concerns, and implications. *Education*, 131(4), pp.732-739.
- Hutchins, L., & Patterson, F., 2008. Mindfulness meditation may lessen anxiety, promote social skills, and improve academic performance among adolescents with learning disabilities. *Complementary Health Practice Review*, 13, pp.34–45.
- Jacobs, J. E., & Paris, S. G., 1987. Children's metacognition about reading: Issues in definition, measurement, and instruction. *Educational Psychologist*, 22, pp.255-278.
- Jahromi, M. K., 2014. EMP Students' use of reading strategies and the impact of strategy instruction on medical text comprehension. *Modern Journal of Language Teaching Methods*, 4(1), pp.185-208.
- Jitendra, A. K., Gajria, M., 2011. Reading Comprehension Instruction for Students with Learning Disabilities. *Focus on Exceptional Children*, 43(8), pp.1-16.
- Karnes, M. B., Johnson, L. J., Beauchamp, K. D. F., 2005. Reprise: Developing Problem-Solving Skills to Enhance Task Persistence of Handicapped Preschool Children. *Journal of Early Intervention*, 27(4), pp. 236-246.
- Kavale, K. A., 2005. Identifying Specific Learning Disability: Is Responsiveness to Intervention the Answer? *Journal of Learning Disabilities*, 38(6), pp.553-62.
- Khajavi, Y., & Ketabi, S., 2012. Influencing EFL learners' reading comprehension and self-efficacy beliefs: The effect of concept mapping strategy. *Porta Linguarum*, 17, pp.9-27.
- Kolić-Vehovec, S., & Bajšanski, I., 2007. Comprehension monitoring and reading comprehension in bilingual students, *Journal of Research in Reading*, 30(2), pp.198-211.
- Kozlowski, S. W., & Bell, B. S., 2006. Disentangling achievement orientation and goal setting: Effects on self-regulatory processes. *Journal of Applied Psychology*, 91(4), pp.900-916.
- Krashen, S. D., 1992. *Fundamentals of language education*. Laredo Publishing Co., Inc. 4-6.
- Krashen, S. D., 1993. *The Power of Reading*. Englewood, CO: Libraries Unlimited.
- LaBerge, D., & Samuels, S. J., 1974. Toward a theory of automatic processing in reading. *Cognitive Psychology*, 6, pp.293-323.
- LDA (Learning Disability Association of America), 2004. *Defining Learning Disabilities*. Retrieved October 3, 2013, http://www.ldaamerica.org/new_to_ld/defining.asp

- Lei, S. A., Berger, A. M., Allen, B. M., Plummer, C. V., & Rosenberg, W., 2010. Strategies for improving reading skills among Ell college students. *Reading Improvement*, 47(2), pp.92-104.
- Leikin, M. L., 2008. Syntactic processing in two languages by native and bilingual adult readers: an ERP study. *Journal of Neurolinguistics*, 21, pp.349–373.
- Leons, E., Herbert, C., & Gobbo, K., 2009. Students with learning disabilities and AD/HD in the foreign language classroom: Supporting Students and Instructors. *False Foreign Language Annals*, 42(1), pp.42-54.
- Lerner, J., & Kline, E., 2006. *Learning disabilities and related disorders: characteristics and teaching strategies*. Boston and New York: Houghton Mifflin.
- Lesaux, N. K., Lipka, O., & Siegel, L. S., 2006. Press the Escape key to close investigating cognitive and linguistic abilities that influence the reading comprehension skills of children from diverse linguistic backgrounds. *Reading and Writing*, 19(1), pp.99-131.
- Linan-Thompson, S., Vaughn, S., Hickman-Davis, P., & Kouzekanani, K., 2003. Effectiveness of supplemental reading instruction for second grade English language learners with reading difficulties. *The Elementary School Journal*, 103(3), pp.221–234.
- Lincoln, Y. S., & Guba, E. G., 1985. *Naturalistic Inquiry*. Beverly Hills: Sage Publications.
- Lincoln, Y. S., Lynham, S. A., & Guba, E. G., 2011. Paradigmatic controversies, contradictions, and emerging confluences, revisited. In: Denzin N. K. & Lincoln Y. S. (Eds.), *The SAGE handbook of qualitative research*, pp.97-128. Los Angeles: Sage.
- Liu, S., 2014. Student teachers' changes in perspective on education news reports: A framework for reading, dialogue, and reflection on education news. *International Education Studies*, 7(9), pp.39-49.
- Macalister J., 2011. Today's Teaching Tomorrows Text: Exploring the Teaching of Reading, *ELT Journal*, 65(2), pp.161-169.
- Martini. R., & Shore. B. M., 2008. Pointing to parallels in ability-related differences in the use of metacognition in academic and psychomotor tasks. *Learning and Individual Differences*, 18, pp.237-247.
- Martinussen, R., Hayden, J., Hogg-Johnson, S., & Tannock, R., 2005. A meta-analysis of working memory impairments in children with Attention-Deficit/Hyperactivity Disorder.

- Journal of the American Academy of Child and Adolescent Psychiatry*, 44(4), pp.377–384.
- Marzillier, J. S., & Eastman, C., 1984. Continuing problems with self-efficacy theory: A reply to Bandura. *Cognitive Therapy and Research*, 8, pp.257-262.
- Mastropieri, M. A., & Scruggs, T. E., 1997. Best practices in promoting reading comprehension in students with learning disabilities: 1976 to 1996. *Remedial and Special Education*, 18, pp.197–213.
- Maxwell, J. A., 1992. Understanding and validity in qualitative research. *Harvard Educational Review*, 62(3), pp.279-300.
- McClelland, D. C., 1985. How motives, skills, and values determine what people do. *American Psychologist*, 40, pp.812-825.
- McClimens, A., 2007. Language, labels and diagnosis: an idiot’s guide to learning disability. *Journal of Intellectual Disabilities*, 11(3), pp.257–266.
- McKeown, R. G., & Gentilucci, J. L., 2007. Think-Aloud strategy: Metacognitive development and monitoring comprehension in the middle school second-language classroom. *Journal of Adolescent & Adult Literacy*, 51(2), pp.136-147.
- Meece, J. L., Wigfield, A., & Eccles, J. S., 1990. Predictors of math anxiety and its influence on young adolescents' course enrollment and performance in mathematics. *Journal of Educational Psychology*, 82, pp.60-70.
- Meltzer, L. J., Roditi, B., Houser, R. F., & Perlman, M., 1998. Perceptions of academic strategies and competence in students with learning disabilities. *Journal of Learning Disabilities*, 31, pp.437-451.
- Michaeli, N., 2013. There is already another education. *Hed Hachinuch*, 87(5), pp.78-79.
[Hebrew]
- Mills, N., Pajares, F., & Herron, C., 2006. A reevaluation of the role of anxiety: self-efficacy, anxiety, and their relation to reading and listening proficiency. *Foreign Language Annals*, 39(2), pp.276-294. <http://dx.doi.org/10.1111/j.1944-9720.2006.tb02266.x>
- Ministry of Education, 2008. *Adapting the English Curriculum for Students with Disabilities for Elementary and Secondary Schools State, State Religious, Arab and Druze*. Pedagogical Affairs, Schools Department of Curricula Planning and Development, www.edu.gov.il/tal/portal June 2016.

- Ministry of Education, 2013. *Revised English Curriculum*, Pedagogical Secretariat, Language Dept., English Inspectorate, Israel.
- Miranda, A., Villaescusa, M. I., & Vidal-Abarca, E., 1977. Is attribution retraining necessary? Use of self-regulation procedures for enhancing the reading comprehension strategies of children with learning disabilities. *Journal of Learning Disabilities, Austin*, 30(5), pp.503-512.
- Morrison, K. R. B., 1993. *Planning and accomplishing school-centered education*. Dereham, UK: Peter Francis.
- Mueller, C. M., & Dweck, C. S., 1998. Intelligence praise can undermine motivation and performance. *Journal of Personality and Social Psychology*, 75, pp.33–52.
- Muhammad, S., 2013. Second language reading instruction in Pakistan. *Procedia -Social and Behavioral Sciences*, 70, pp.1403 -1412. doi: 10.1016/j.sbspro.2013.01.204
- Multon, K. D., Brown, S. D., & Lent, R. W., 1991. Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counseling Psychology*, 38, pp.30-38.
- Nash-Ditzel, S., 2010. Metacognitive reading strategies can improve self-regulation. *Journal of College Reading and Learning*, 40(2), pp.45 -63.
- Nave, E., 2012. *Dialogic teaching and learning: aims and disruptive causes*. The Ministry of Education site, Tel Aviv district, research and info center. [Hebrew]
- Nicholls, J. G., 1992. The general and the specific in the development and expression of achievement motivation. In G. Roberts (Ed.), *Motivation in sport and exercise*, pp.31–56. Champaign, IL: Human Kinetics.
- Norton, L. S., 2009. *Action Research in Teaching & learning*, London: Routledge, Taylor and Francis Group.
- Onwuegbuzie, A. J., & Burke Johnson, R., 2006. The validity (in mixed research. *Research in Schools*, 13, pp.48-63.
- Oxford, R. L., 2003. Language learning styles and strategies: An overview. *Learning Styles and Strategies*, pp.1-25. Oxford: GALA.
- Pajares, F., 1996. Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66(4), pp.543-578.

- Pajares, F., & Dixon, D., 1995. *Mathematics self-efficacy and performance attainments of mainstreamed regular, special education, and gifted students*. Manuscript in preparation.
- Paloyelis, Y., Rijdsdijk, F., Wood, A. C., Asherson, P., & Kuntsi, J., 2010. The Genetic association between ADHD symptoms and reading difficulties: The role of inattentiveness and IQ. *Journal of Abnormal Child Psychology*, 38(8), pp.1083-95.
- Pearson, P.D., & Fielding, L., 1991. Comprehension instruction. In: R. Barr, M. L. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research II*, pp.815-860. Mahwah, NJ: Erlbaum.
- Pintrich, P. R., 2000. The Role of Goal Orientation in Self-Regulated Learning. In: M. Boekaerts, P. R. Pintrich, and M. Zeidner (Eds.), *Handbook of Self-Regulation*, pp.451-501. San Diego, CA: Academic Press.
- Pintrich, P. R., & De Groot, E. V., 1990. Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82, pp.33-40.
- Plewis, I., & Mason, P., 2005. What works and why: combining quantitative and qualitative approaches in large scale evaluations. *International Journal of Social Research Methodology*, 8, pp.185-194.
- Pressley, M., 2002. Metacognition and self-regulated comprehension. In: A. Farstrup and S. J. Samuels (Eds.), *What research has to say about reading instruction*, pp.291–309. Newark, DE: International Reading Association.
- Rabiner, D. L., & Malone, P. S., 2004. The impact of tutoring on early reading achievement for children with and without attention problems. *Journal of Abnormal Child Psychology*, 32(3), pp.273– 284.
- Raofi, S., Bee, H. T., & Swee, H. C., 2012. Self-efficacy in second/foreign language learning contexts. *English Language Teaching*, 5(11), pp.60-73.
- Rinaldi, C., & Samson, J., 2008. English language learners and response to intervention: referral considerations. *Teaching Exceptional Children*, 40(5), pp. 6-14.
- Rogoff, B., 1990. *Apprenticeship in thinking*. New York: Oxford University Press.
- Rushton, S. P., 2003. Two preservice teachers' growth in self-efficacy while teaching in an inner-city school. *Urban Review*, 35(3), pp.167-189.
- <http://dx.doi.org.ezproxy.levinsky.ac.il/10.1023/A:1025788102188>

- Sadeghi, N., Kasim, Z. M., Tan, B. H., & Abdullah, F. S., 2012. Learning styles, personality types and reading comprehension performance. *English Language Teaching* 5(4), pp.116-123.
- Schmidt, R., 2001. Attention. In Wigglesworth, G., Mar. 2005. Current approaches to researching second language learner processes. *Annual Review of Applied Linguistics*, 25, pp.98-111.
- Schunk, D. H., 1989. Self-efficacy and cognitive skill learning. In Grayson, L. B., Walter, D. S., Dearing, E., and Hamill, S. K., 2009. Cognitive self-regulation in youth with and without learning disabilities: academic self-efficacy, theories of intelligence, learning vs. performance goal preferences, and effort attributions. *Journal of Social and Clinical Psychology*, 28(7), pp.881-908.
- Schunk, D. H., 1991. Self-efficacy and academic motivation. *Educational Psychologist*, 26, pp.207-231.
- Schunk, D. H., 1995. Self-efficacy, motivation, and performance. *Journal of Applied Sport Psychology*, 7(2), pp.112-137.
- Schwarzer, D., 2009. Best practices for teaching the “Whole” adult ESL learner. *New Directions for Adult & Continuing Education*, 121, pp.25-33.
- Shang, H. F., 2010. Reading strategy use, self-efficacy and EFL reading comprehension. *The Asian EFL Journal Quarterly*, 12(2), pp.18-42.
- Shany, M., Wiener, J., & Feingold, L., 2011. Knowledge about and preoccupation with reading disabilities: A delicate balance. *Journal of Learning Disabilities*, 44(1), pp.80-93.
- Shiels, K., Hawk, L. W., Jr., Lyszczek, C. L., Tannock, R., Pelham, W. E., Jr., Spencer, S. V., Gangloff, B. P., & Waschbusch, D. A., 2008. The effects of incentives on visual-spatial working memory in children with Attention-Deficit/Hyperactivity Disorder. *Journal of Abnormal Child Psychology*, 36, pp.903–913.
- Shkedi, A., 2003. *Words of Meaning. Qualitative Research—Theory and Practice*. Tel Aviv: Ramot, Tel Aviv University. [Hebrew]
- Shkedi, A., 2011. *The Meaning behind the Words. Methodologies of Qualitative Research: Theory and Practice*. Tel Aviv: Ramot, Tel Aviv University. [Hebrew]
- Sideridis, G. D., & Kaplan, A., 2011. Achievement Goals and Persistence across Tasks: The Roles of Failure and Success. *The Journal of Experimental Education*, 79, pp.429-451.

- Simpson, M. L., & Nist, S. L., 2000. An update on strategic learning: It's more than textbook reading strategies. *Journal of Adolescent and Adult Literacy*, 43, pp.528-541.
- Skaalvik, E. M., 1997. Self-enhancing and self-defeating ego orientation: Relations with task and avoidance orientation, achievement, self-perceptions, and anxiety. *Journal of Educational Psychology*, 89, pp.71–81.
- Smagorinsky, P., 2008. *Teaching English by design*. Portsmouth, NH: Heinemann.
- Snow, C. E., & Sweet, A. P., 2003. Reading for comprehension. In: A. P. Sweet & C. E. Snow (Eds.), *Rethinking reading comprehension*. New York, NY: The Guilford Press.
- Spekman, N. J., Goldberg, R. J., & Herman, K. L., 1992. Learning disabled children grow up: A search for factors related to success in the young adult years. *Learning Disabilities Research and Practice*, 7, pp.161–170.
- Spielberger, C. D., 1976. The nature and measurement of anxiety. In C. D. Spielberger & R. Diaz-Guerrero (Eds.), *Cross-cultural research on anxiety*, pp. 11–23. Washington, DC: Hemisphere Wiley.
- Spolsky, B., 1996. Multilingualism in Israel. *Annual Review of Applied Linguistics*, 17, appeared in University of Washington Staff Web Server at:
http://staff.washington.edu/re12/geog100UW/SUPPLEMENTARY/multilingualism_in_israel.htm.
- Steinberg, L., Albert, D., Cauffman, E., Banich, M., Graham, S., & Woolard, J., 2008. Age differences in sensation seeking and impulsivity as indexed by behavior and self-report: evidence for a dual systems model. *Developmental Psychology*, 44, pp.1764–1778.
- Stone, C. A. & May, A. L., 2002. The accuracy of academic self-evaluations in adolescents with learning disabilities. *Journal of Learning Disabilities*, 35(4), pp.370-83.
- Strauss, E., Satz, P., & Wada, J., 1990. An examination of the crowding hypothesis in epileptic patients who have undergone the carotid amygdalotomy test. *Neuropsychologia*, 28, pp.1221-1227.
- Tam, K. Y., Heward, W. L., & Heng, M. A., 2006. A Reading Instruction Intervention Program for English-Language Learners Who Are Struggling Readers. *Journal of Special Education*, 40(2), pp.79-93.
- Tashakkori A., & Teddlie C. (Eds.), 2010. *Handbook of Mixed Methods in Social and Behavioral Research*. Thousand Oaks: Sage.

- Tercanlioglu, L., & Demiröz, H., 2015. Goal orientation and reading strategy use of Turkish students of an English Language Teaching Department. *The Qualitative Report*, 20(3), pp.286-311.
- Thompson, I., 2013. The mediation of learning in the zone of proximal development through a co-constructed writing activity. *Research in the Teaching of English*, 47(3), pp.247-276.
- Tilfarlioglu, F. T., & Ciftci, F. S., 2011. Supporting self-efficacy and learner autonomy in relation to academic success in EFL Classrooms (a case study). *Theory and Practice in Language Studies*, 1(10), pp.1284-1294. <http://dx.doi.org/10.4304/tpls.1.10.1284-1294>
- Vaughn, S., Chard, D. J., Bryant, D. P., Coleman, M., Tyler, B., 2000. Fluency and comprehension interventions for third-grade students. *Remedial and Special Education*, 21, pp.325–335.
- Vokey J. R., & Higham, P. A., 1999. Implicit knowledge as automatic, latent knowledge. *Behavioral and Brain Sciences*, 22, p. 787 .10.1017/S0140525X99582186
S0140525X99582186
- Vygotsky, L. S., 1986. Thought and language. Cambridge, MA: MIT Press.
- Wanzek, J., Vaughn, S., Roberts, G., & Fletcher, J. M., 2011. Efficacy of a reading intervention for middle school students with learning disabilities. *Exceptional Children*, 78(1), pp.73-87.
- Weiner, B., 1979. A theory of motivation for some classroom experiences. *Journal of Educational Psychology*, 71, pp.3-25.
- Wenden, A. L., 1991. *Learner Strategies for Learner Autonomy*. New York: Prentice Hall.
- Wesely, P. M., 2012. Learner attitudes, perceptions, and beliefs in language learning. *Foreign Language Annals*, 45(1), pp.98-117.
- Wigfield, A., & Eccles, J., 1992. The development of achievement task values: A theoretical analysis. *Developmental Review*, 12, pp.265-310.
- Wigglesworth, G., 2005. Current approaches to researching second language learner processes. *Annual Review of Applied Linguistics*, 25, pp.98-111.
- Wilhite, S. C., 1990. Self-efficacy, locus of control, self-assessment of memory ability, and study activities as predictors of college course achievement. *Journal of Educational Psychology*, 82, pp.696-700.

- Wing, W., & SO, M., 2002. Constructivist teaching in primary sciences. *Asia-Pacific Forum on Sciences and Teaching*. 3(1).
- Wurr, A. J., Theurer, J. L., & Kim, K. J., 2008. Retrospective miscue analysis with proficient adult ESL readers, *Journal of Adolescent & Adult Literacy*, 52(4), pp.324-333.
- Yea-Ru, T. I., Ernst, C., & Talley, P. C., 2010. L1 and L2 strategy use in reading comprehension of Chinese EFL readers. *Reading Psychology*, 31(1), pp. 1-29.
- Zarei, A. A., & Hatami, G., 2012. On the relationship between self-regulated learning components and L2 vocabulary knowledge and reading comprehension theory and practice in language studies. *Theory and Practice in Language Studies*, 2(9), pp.1939-1944.
- Zera, D. A., 2001. A reconceptualization of learning disabilities via a self-organizing systems paradigm. *Journal of Learning Disabilities*, 34(1), pp.79-94.
- Zhang, L. J., 2005. *Constructivist pedagogy in strategic reading instruction: exploring pathways to learner development in the English as a second language (ESL) classroom*. Springer Science Business Media B.V, published online 3 April, 2007. [2 Jan 2014]
- Zimmerman, B. J., 2000. Attaining self-regulation: A social cognitive perspective. *Handbook of self-regulation*, pp.13-41.
- Zimmerman, B. J., 2002. Becoming a self-regulated learner: An overview. *Theory into practice*, 41(2), pp. 64-70.
- Zohar, A., 2013. The islands and the land cannot merge. *Hed Hachinuch*, 87(5), pp.52-53.
[Hebrew]