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# Developing Self-efficacy with the Use of Vocabulary Strategy Training

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## **Abstract**

This article reports on part of a larger study of legal vocabulary learning with the use of strategy training at the tertiary level. The aim of the research was to develop effective strategy training in the area of vocabulary learning, develop self-efficacy in the area of vocabulary learning and to investigate the impact of the comprehensive strategy training on strategic capacity and self-efficacy beliefs in the area of vocabulary acquisition. The quasi-experiment was carried out with the use of Self-regulating Capacity in Vocabulary Learning Scale (SRCVoc) (Tseng, Dörnyei, & Schmitt, 2006) and Vocabulary Learning Strategy Based Instruction (VLSBI) in the context of legal vocabulary learning. The study was conducted with SRCVoc-Polish version, a Polish translation of a psychometric instrument for measuring self-regulating capacity in L2 vocabulary learning. The results confirmed improvement of the self-regulating capacity in vocabulary learning in the target area. Vocabulary Learning Strategy Based Instruction proved to assist learners from the experimental group in their perceived vocabulary learning. The article focuses on the appropriate preparation of strategy training in the area of lexical acquisition, and discusses the impact of effective strategy training comprising a wide array of both metacognitive and cognitive strategies on developing self-efficacy.

**Key words:** self-efficacy, vocabulary learning, strategy training, self-efficacy beliefs, self-regulating capacity

## Introduction

In recent years, there has been an increasing amount of literature on self-efficacy, a construct essential for understanding motivation, self-regulation and notions of the self. It is a key element of social cognitive theory, crucial in student learning as it affects students' motivation and achievement. The role of students thoughts and beliefs in the learning process is vital (Schunk, 1995; 2003), and there is a large and growing body of self-efficacy investigations in the field of foreign language (FL) learning establishing the relationship between self-efficacy and achievement, listening and reading proficiency, language learning strategy use, anxiety and self-efficacy for self-regulation (Graham, 2007; Graham, & Macaro, 2008; Mills, Pajares, & Herron, 2007). Graham (2007) pointed to the fact that self-efficacy may be enhanced through explicit language strategy training. This article focuses on the preparation of strategy training in the area of vocabulary acquisition comprising both metacognitive and cognitive strategies in order to enhance students' beliefs about their own abilities and competences.

## Self-efficacy

In 1977 Bandura introduced the construct of self-efficacy, a key element of social cognitive theory. Self-efficacy refers to beliefs in one's capabilities for learning or organizing and performing actions (Bandura, 1997). In accordance with social cognitive theory human functioning is viewed as a dynamic interplay among personal, behavioral and social/environmental variables, known as triadic reciprocity. It implies that strategies addressing various factors can enhance human functioning, thus learners can regulate their behavior and teachers can positively affect their students by promoting the learning and motivation of their students. It is worth noting that people's accomplishments can be better predicted based on their beliefs than on their capabilities. Those beliefs are connected with goal-related effort, persistence and resilience and are associated with outcome expectations, or beliefs about the an-

anticipated result of one's actions (Bandura, 1997). Students tend to engage in activities that in their opinion will result in positive outcomes and avoid ones leading to negative outcomes. Behavior of students is also dependent on their values, i.e. perceptions of importance and utility of learning (Schunk, & Usher, 2011, p. 285). Even students who feel highly efficacious in the specific area may not develop in this area if they do not value it.

Self-efficacy beliefs are context-specific and future-oriented judgements of competence that may be easily changed (Schunk, & Usher, 2011, p. 287). They are formed by interpreting information from their own prior performances (mastery experiences), observations of others (vicarious experiences), persuasive information from others (forms of social persuasion) and strong emotional reactions to a task (physiological indexes) e.g. anxiety and stress (Bandura, 1997). The most influential are mastery experiences, and generally successful performances raise self-efficacy, while failures lower it. However, as it is emphasized an occasional failure or success should not affect it. On the other hand, if students lack the skills needed to success, no amount of self-efficacy can result in a competent performance (Schunk, 1995).

Self-efficacy for self-regulated learning is a crucial part of self-regulation, as developing and maintaining self-efficacy helps to motivate students to learn and to self-regulate their learning. Self-regulation of learning comprises not only detailed knowledge of a skill, but also self-awareness, self-motivation and behavioural skills to implement this knowledge effectively (Zimmerman, 2002, p. 66). There is research (Schunk, Zimmerman, & Barry, 1998; Boekaerts, Pintrich, & Zeidner, 2000) indicating that self-regulatory processes are teachable and can lead to increased student motivation and achievement. Moreover, there are specific tools available to be implemented in order to develop self-regulatory skills, e.g. a self-regulatory learning cycle model by Zimmerman (2002). Self-efficacy is perceived as one of the keys to self-motivation beliefs and learners who perceive high self-efficacy set more challenging goals; they use more effective learning strategies; monitor their learning more closely and are much more motivated to self-regulate their

learning (Stoeger, & Ziegler, 2011, p. 91). Unfortunately, despite extensive evidence that self-regulatory processes can be taught to students, few teachers encourage students to set specific goals or teach explicit learning strategies. Additionally, learners are rarely asked to self-evaluate their work.

It has been emphasised by Zimmerman, Bonner & Kovach (2009, p. 8) that an instructional model involving explicit learning can be used in classroom situations. As argued by them (Zimmerman, Bonner, & Kovach, 2009, p. 10) “when self-regulatory processes play an integral role in development and use of study skill, students become more acutely aware of improvements in their academic achievement and experience a heightened sense of personal efficacy”.

Self-regulated learning is an effective means to improve the achievements of students that range greatly in proficiency. It is not a single personal trait that individual students either possess or lack (Zimmermann, 2002, p. 66). The students’ willingness to study for a test depends on their beliefs, labelled by Bandura (1997) as self-efficacy, about (a) their self-regulated learning capabilities and (b) the outcomes of them (Schunk, & Zimmerman, 1998, p. 10). Low perceptions of self-efficacy can be detrimental to achievement. The researchers agree that efficacious students work harder and persist longer than students who doubt their capabilities. In SLA self-regulated learning is connected with the concept of language learning strategies and the efficient use of strategies which can be enhanced by strategy training (Kossakowska-Pisarek, 2014; 2016). Weinstein, Acee and Jung (2011a, p. 46) highlight that all theories of strategic and self-regulated learning encompass the use of learning strategies. Let’s look at this concept more closely.

## Language Learning Strategies and strategy training

The concept of language learning strategies (LLS) has been the most significant in the research in the area of language learning. It is closely related to the fact that it is a common belief in SLA that some learners are more successful

than others. It may be caused, at least partly, by the fact that some learners approach tasks in a better way (Anderson, 2005), which is called language learning strategy in SLA. It should be noted that from the very beginning there was considerable unease and criticism among researchers concerning the theoretical underpinnings of LLS research. The vital driving force of LLS was, nevertheless, the enthusiasm of many researchers and practitioners as to its applicability in the classroom. The efficiency of this workable component of the learning process can be improved by strategy training. Conversely, Dörnyei (2005) suggested that the concept be abandoned and replaced by self-regulation due to “the manifold theoretical issues with the concept” (Dörnyei, & Ryan, 2015, p. 143). Nevertheless, as Dörnyei and Ryan (2015, p. 148) indicate there is “a new wave of serious strategy publications’ focusing on reinterpreting language learning strategies” (inter alia Cohen, 2011; Cohen, & Macaro, 2007; Oxford, 2011). Nevertheless, more and more scholars have become proponents of strategy training (cf. Dörnyei, & Ryan, 2015, p. 155).

The topic of strategy instruction has attracted a lot of attention. Weinstein et al. (2011b, p. 297) remark that “we must explicitly teach learning strategies that are domain-specific to our courses”. This is vital, as in order to be self-regulated learners students must learn strategies appropriate for the domain in which there are different discourse structures, forms of argument and ways of approaching and solving problems. Pintrich (1995) stresses that faculty can be models of self-regulated learning. It is vital, therefore, that teachers model discipline-specific thinking processes and course-specific strategies for learning in the classroom. By providing feedback and guidance regarding self-regulation, teachers may considerably affect students’ self-regulation. As Weinstein et al. (2011b, p. 293) claim “the instructors’ role is helping students become more strategic and self-regulated” and highlights that teachers can all have a tremendous impact on students’ development of a useful repertoire of learning strategies. Comprehensive strategy training should comprise metacognitive, cognitive and social strategies combined to increase its effectiveness. In order to learn a foreign language effectively, and this is

particularly important in the area of vocabulary learning, students need to be aware of the various factors influencing vocabulary learning and how to employ various strategies, i.e. cognitive, metacognitive and socio-affective strategies, to enhance their process of learning.

Metacognitive strategy training aims at increasing students' self-awareness of learning and learners' strengths and weaknesses in this domain, knowledge about oneself as a learner, and the ability to choose the appropriate tasks and strategies in order to accomplish tasks. From an educational psychologist's perspective Weinstein et al. (2011b, p. 299) defines cognitive strategies as "goal-directed approaches and methods of thought that help students to build bridges between what they already know or have experienced and what they are trying to learn". The aim of these strategies is to build meaning in such a way that new information becomes an integrated part of organised knowledge and can be accessed. The third type of strategies, the socio-affective one, entails cooperation with other learners, a teacher, and L2 speakers.

In order to be effective, self-regulation training should comply with a set of rules. It is widely accepted that self-regulatory instruction should be integrated within the curriculum and it is vital that the integration is properly implemented. Therefore, it is important to stress that such training should include expert and peer modelling, direct social feedback and practice routines. Furthermore, acquiring mastery of optimal studying techniques is connected with multiple efforts of the students. The implementation should be self-monitored and the outcomes ought to be self-evaluated positively. There is ample evidence that students with no explicit training are often unable to devise techniques that improve their success or self-monitoring. Thus, well-planned self-regulated training enhances students' use of learning strategies and self-monitoring of goal attainment. Dörnyei and Ryan (2015, p. 153) advocate strategy instruction as the current state of research suggests its ample utility.

## Vocabulary strategy training

Nation (2001, p. 222) argues that as strategies allow learners to take control of learning from the teacher, it is important to include strategy training into the vocabulary development programme. As there is a broad range of strategy options, learners could benefit from being made aware of the wide array of strategies they can draw on. Strategies are particularly useful (Nation, 2001, p. 223) for the low-frequency words of the language as they provide a way of coping with unknown words, e.g. in case of legal English lexis. Researchers agree that no strategy is believed to be superior or better than others. As Zimmerman, Bonner and Kovach (2009, p. 136) put it “no learning technique or strategy is universally effective, and thus we must constantly self-evaluate our effectiveness as learners to optimally refine our strategic approach”. The difference between learners lies in choosing an appropriate strategy to the task and implementing it effectively. At the same time, various students prefer different strategies, so the choice is often dependent on personality. That is why strategy training should be comprehensive, balanced and adapted to the learning situation and the needs of the learners.

Nation recommends (2001, p. 223) spending a total of at least four to five hours per strategy, so extensive strategy training comprises cognitive, metacognitive and socio-affective strategies. As far as vocabulary learning strategies are concerned the simplest forms of cognitive strategies include repetition and reviewing. The most recommended strategies by various scholars include semantic elaboration, semantic mapping, word lists, word cards and keyword technique. Socio-affective strategies are connected with the environment and encourage learners to interact with each other and learn from each other (Schmitt, 2000). Schmitt (1997) in his taxonomy included the following social strategies in the area of vocabulary learning: asking a teacher for an L1 translation, a paraphrase or a synonym, asking classmates for meaning, discovering meaning through a group work activity, studying and practising meaning in a group, teacher checking students' cards for accuracy, and interacting with native speakers. Affective strategies are related to learners' attempts to

understand and control their feelings. It is worth noting that there are no affective strategies in Schmitt's Taxonomy (1997). Oxford (2011) proposes two affective strategies: activating supportive emotions, beliefs, and attitudes and generating and maintaining motivation.

## Research

This part of research consisted of the two separate studies: a pilot study of the SRCVoc–Polish version instrument, and the experiment conducted to compare the influence of strategy training on vocabulary learning followed by the use of the SRCVoc in the groups which took part in it. The participants of the pilot study of SRCVoc–Polish version were mainly students of Law at the University of Warsaw taking part in Legal English courses taught by 4 teachers at B2 level CEFR. There were 229 respondents (133F, 96 M) aged 19 to 23 years old. The experiment involved using the validated version of SRCVoc–Polish version. The Statistical Package for the Social Sciences (SPSS, PASW Statistics, version 18.0) was used for statistical analysis of both studies. A 6 point Likert scale was used ranging from the highest control to the lowest level of control. The coding frame was as follows 1 – definitely agree, 2 – agree, 3 – partly agree, 4 – partly disagree, 5 – disagree, 6 – definitely disagree. Two negatively worded items, i.e. S1 and S12, were reversed and recoded before computing the score. After the reversal of the appropriate items, high scores on items reflected more agreement with the item in question and subscale referents.

Self-Regulating Capacity in Vocabulary Learning instrument (Tseng, Dörnyei, & Schmitt, 2006) was used which focuses on general learner traits not specific behavioral habits. SRCVoc comprises 20 items in five scales: commitment control, metacognitive control, satiation control, emotion control, environmental control and its focal point is vocabulary learning. It is reported to have good psychometric properties (Tseng, Dörnyei, & Schmitt, 2006). It is worth noting that the items in this instrument can be described as based on self-efficacy. Metacognitive control comprises the following items “When

learning vocabulary, I have my special techniques to keep concentration focused”, “When learning vocabulary, I think my methods of controlling my concentration are effective”, “When it comes to learning vocabulary, I have my special techniques to prevent procrastination”, and “When it comes to learning vocabulary, I think my methods of controlling procrastination are effective”. These items are not outcome expectations, as they refer to beliefs concerning control what and how they learn, not expected outcome. There include plenty of expressions like: I believe, I think, I know how, I am confident, I feel satisfied with, I cope with suggesting perceived control over vocabulary learning. The items include words like effective, efficient, special techniques, methods and often refer to achieving or reaching goals. The vast majority of items, practically all statements in commitment, metacognitive, satiation and emotion control scales, refer to self-efficacy. The only scale that includes items that are not related to self-efficacy is environmental control: i.e. “When learning vocabulary, I am aware that the learning environment matters”.

The quasi-experiment was carried out from October to January during the whole semester in two groups of learners, experimental and control one (73, 43 F, 30 M). The students participated in 1h 30min weekly course of Legal English, while the experimental group treatment comprised vocabulary training, the control group was only treated with standard Legal English learning. The leading course book was *English for Legal Professionals*, Express series, by A. Frost, published by Oxford University Press in 2009. The SRCVoc-Polish version was used twice in both groups at the beginning and at the end of the semester to measure the self-regulating capacity before and after the treatment. The results were analysed with the use of SPSS PASW statistics version 18. Strategy training comprised up to 5–10 minutes of each weekly lesson plus homework and focused on the strategy training in the context of Legal English vocabulary learning. Strategy training included metacognitive awareness raising based on the results of the pilot study. To invigorate the process of learning and to increase its attractiveness, strategies were rehearsed in groups, pairs and individually, which also accounted for

the socio-affective strategy training. They were practised both at class and at home to familiarise students with them fully and thoroughly. Self-regulatory instruction was carefully integrated with the curriculum in order to ensure proper implementation and to avoid a dichotomy between self-regulatory process and learning content. The goal was threefold: a) to raise the awareness of the factors and strategies in the area of vocabulary learning, b) to offer a wide repertoire of alternatives to enable learners to reach educated decisions in this field and c) to increase learners' self-efficacy. Strategy training comprised both metacognitive and cognitive strategy training. The teacher taught self-regulatory techniques by demonstrating his or her own use of process-monitoring forms. The training enabled students to take responsibility for their learning by self-monitoring and analysing their own data in pairs, groups and individually. The teacher encouraged self-monitoring highlighting that refining strategies is a must and a key part of the training. In that way, students could raise their self-efficacy by doing challenging tasks and were assured that the obstacles could be overcome through careful selection of learning strategies while self-regulatory techniques are applied appropriately. A repertoire of strategies was presented and practiced but it was stressed that the further application of strategies was up to the learners. It is worth remembering that to consciously choose effective strategies, students must be acquainted with an array of them and their suitability to a given task must be clear.

Strategy training, which is the primary focus of this article, comprised the following aspects:

- (1) Raising awareness of factors influencing vocabulary learning; gauging strengths and weaknesses of students.
- (2) Goal setting and general introduction to the Vocabulary Learning Strategy Based Instruction (VLSBI) programme. Time management tips: suitable times for study, correct use of break-taking during studies, the best succession of vocabulary learning cycles.
- (3) Identification of personal Vocabulary Learning Strategies (VLS); reflecting on the process of vocabulary learning, learners' strengths and weaknesses,

general characteristics of their approach to vocabulary learning; self-evaluation; task and strategic analysis; self-monitoring and peer learning in order to provide support and assistance: group work, discussions, pair work.

(4) Planning and organising effective learning; modelling and encouragement; strategy refinement.

a) Scheduling the repetition: use of increasing spaced intervals, shorter, but more often scheduled repetition.

b) Changing the order of the repetition.

c) Using colours for various word classes and other vocabulary learning aspects to aid memory.

(5) Increasing self-awareness of learners and their learning; implementing a cyclic self-regulatory approach; self-monitoring and peer learning in order to provide support and assistance.

(6) Task and strategic analysis; checking usefulness of strategies for the task; choosing the appropriate cognitive strategies to ensure the best results.

(7) Maintaining motivation; overcoming hurdles; self-monitoring.

(8) Combining strategies to increase effectiveness; analysis of the task.

(9) Obtaining and using resources; modifying strategies.

(10) Monitoring, time management; eliminating unproductive habits.

(11) Evaluating.

The training was combined with the cognitive training as self-regulated learning requires complex cognitive control processes and effective cognitive strategies. Cognitive strategy training involved direct training in the use of various strategies. It comprised also opportunities to practice and reflect on the effectiveness of various techniques, their appropriateness to the task and in the given learning situation. As Legal English words are mostly of low frequency, abstract and appear almost only in the legal context, the teacher used the ways of quickly giving attention to the words (based on Nation, 2008, p. 98):

(1) Using L1 translation.

(2) Using a known L2 synonym or/and definition.

(3) Breaking the word into the parts and giving the meaning of the parts.

- (4) Giving example sentences with the word in context to show the meaning.
- (5) Commenting on the underlying meaning of the word and other referents.
- (6) Referring to Latin cognates as students are familiar with Latin due to an obligatory course in Legal Latin.

The teachers used the following techniques to draw attention to the form of the word:

- (1) Writing the word on the blackboard.
- (2) Giving the stress pattern of the word and its pronunciation.
- (3) Getting the students to repeat the pronunciation of the word.
- (4) Showing the prefix, stem and suffix that make up the word.
- (5) Pointing out any spelling irregularities in the word (e.g. enterprise vs. entrepreneur).

And the following ways to draw attention to the use of words were practised:

- (1) Showing the grammatical pattern the words fit in (e.g. transitive/intransitive, countable/uncountable, etc.).
- (2) Giving a few collocations.
- (3) Mentioning restrictions of use (e.g. formal/informal, only used in the US/UK, old-fashioned).
- (4) Providing a well-known synonym/antonym, category of the word (e.g. terms of contract).

The three main strategies used for the experiment were chosen based on their effectiveness and popularity. Wordlists are widely used among students, word cards are regarded by many researchers as one of the most effective methods and are one of the most researched methods, and semantic maps enable students to organise vocabulary in a spatial manner. In strategy instruction semantic elaboration and word parts were also used as the theoretical background provides ample evidence that this is useful for learners.

## Discussion of results

SRCVoc – Polish version was tested for internal consistency reliability ( $\alpha = 0.855$ ) which confirmed both overall reliability and reliability of subscales ( $\alpha = 0.61$  to  $0.74$ ). The problems that Polish students face were marked the most significantly in the area of metacognitive and satiation control. Both skewness and kurtosis were excellent and confirmed a normal distribution. Metacognitive control ( $M = 3.52$ ) proved to be the most problematic in the area of preventing procrastination ( $+0.4$  for M;  $M = 4.28$ ,  $F = 3.91$ ) and keeping concentration focused ( $+0.4$  for M;  $M = 4.01$ ,  $F = 3.64$ ), even more for male students than for female ones. The satiation control problems were marked the most in becoming impatient with learning ( $M=3.59$ ,  $F = 3.44$ ) and the ways of eliminating boredom ( $M = 3.54$ ,  $F = 3.45$ ). The problems are similar among female and male learners. Among all the subscales the most problematic areas are connected with special techniques to make vocabulary learning more effective. The statements concerning methods and techniques have the highest scores which confirm that students generally believe them to be their weaknesses.

It is worthwhile to note that these techniques may be introduced through strategy training incorporating both metacognitive and cognitive strategies aiming at developing of self-efficacy. Furthermore, conducting of the pilot study can be perceived as an awareness raising activity concentrated on factors influencing vocabulary learning. The use of it entails learners' reflection over their strengths and weaknesses in this area. Moreover, self-reflection over effectiveness of the process of learning is a vital part of strategy training. Based on author's experience students are, for example, often unaware of the fact that conditions of learning may adversely affect the process of learning, but they can control these factors and optimise their learning in the area of environmental control.

Based on the results of the pilot study the following requirements of the strategy training were formulated: enhancing motivation with the use of var-

ied and more attractive activities in the area of deliberate vocabulary learning, training in the effective use of strategies to avoid impatience and boredom, practising of strategies in groups of learners to increase situational intrinsic motivation and self-determined forms of motivation (Dörnyei, 2001, p. 32). As far as the feeling of boredom and impatience are concerned, Zimmerman, Bonner and Kovach (2009, p. 42) highlight that they may be overcome by rewarding feelings connected with self-regulatory capacity development and increasing self-efficacy.

The t-test for paired samples was carried out to compare the scores in self-regulating capacity before (Scale 1) and after the treatment (Scale 2) first in both groups.

Table 1. Statistics for paired samples in the experimental group

Statistics for paired samples for experimental groups						
		M	N	SD	t	df
Pair 1	Commitment1	2.8021	48	.69182	1,842#	47
	Commitment2	2.6215	48	.65345		
Pair 2	Metacognitive1	3.6701	48	.86260	3,107**	47
	Metacognitive2	3.2240	48	.85247		
Pair 3	Satiation1	3.3670	47	.90568	2,761**	46
	Satiation2	2.9770	47	.91711		
Pair 4	Emotion1	2.8262	47	.91614	1,379	46
	Emotion2	2.6507	47	.81957		
Pair 5	Environmental1	2.6146	48	.77863	1,907#	47
	Environmental2	2.3698	48	.74196		

#  $p < 0.1$

\*\*  $p < 0.01$

Source: own.

The t-test confirmed the positive influence of the treatment as means in the post-test (Scale 2) are better (lower) than means in the pre-test (Scale 1). As we can see there is a significant difference between the following subscales:

(1) Metacognitive 1 and Metacognitive 2,  $t(47) = 3.11$ ;  $p < 0.01$

(2) Satiation 1 and Satiation 2,  $t(47) = 2.76; p < 0.01$

Moreover, in the following scales there is significant statistical tendency in the following scales:

(1) Environmental 1 and Environmental 2,  $t(72) = 2.26; p = 0.063$

(2) Commitment 1 and Commitment 2,  $t(72) = 1.99; p = 0.072$

The difference, however, is not significant for Emotion 1 and Emotion 2 subscales.

The t-test was also carried out in the control group. The t-test confirmed the positive influence of the treatment as the means in the post-test (Scale 2) are better (lower) than the means in the pre-test (Scale 1).

Table 2. Statistics for paired samples for control groups

Statistics for paired samples for control group						
		M	N	SD	t	df
Para 1	Commitment1	2,7500	25	,60381	,908	24
	Commitment2	2,6000	25	,81330		
Para 2	Metacognitive1	3,8800	25	,80078	2,297*	24
	Metacognitive2	3,4367	25	,76121		
Para 3	Satiation1	3,3467	25	,73782	,245	24
	Satiation2	3,3100	25	,81739		
Para 4	Emotion1	2,8400	25	1,03047	,601	24
	Emotion2	2,7400	25	,98816		
Para 5	Environmental1	2,5133	25	1,11692	1,200	24
	Environmental2	2,2933	25	,79499		

\*  $p < 0.05$   
Source: own.

As we can see there is a significant difference only between the following subscale:

(1) Metacognitive 1 and Metacognitive 2,  $t(24) = 2.29; p < 0.05$

There is no significant difference between any other subscales.

Based on the statistical data we can conclude that only in the experimental group there is a significant difference or at least a significant tendency for

improvement in four out of 5 subscales. The significance in metacognitive subscales is  $p < 0.001$ , which is the highest norm for significance. The means in the SRCVoc post-treatment were lower in the experimental group in all those subscales, which means that the students overall perceived themselves as better. Only in the results of emotion subscale there was no significant difference. At the same time, in the control group there is no significant difference except metacognitive subscales,  $t(24) = 2.29$ ;  $p < 0.05$ . In both subscales that were reported as the most problematic for students there is a significant difference after the treatment in the experiment group. That would suggest that strategy training has been appropriately designed to assist in the targeted area of learning control and has been successful.

The component of Vocabulary Learning Strategy Based Instruction (VLSBI) proved to be crucial in assisting learners from the experimental group in their vocabulary learning. The results confirmed improvement in the target area of metacognitive and satiation control and also an improvement could be seen at the level of statistical tendency in two additional scales: commitment and environmental. The results cannot be generalised and the findings should be confirmed by other studies in this area in various contexts as the results of the experiment could be influenced by the context. Overall, the research confirmed that through a well-designed programme incorporating the VLSBI, the problems with control over the process of learning can be effectively addressed and the perceived control over the vocabulary acquisition may be enhanced by strategy training.

## Conclusion

The results of a quasi-experiment conducted with the use of strategy training may suggest that the strategy training affects positively self-efficacy of students and it is another argument for introducing well-prepared strategy training into language learning courses. If students have problems with their vocabulary learning those problems may be addressed by relevant comprehensive

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strategy training including cognitive and metacognitive strategies. The development of self-regulatory skills is a “lifelong pursuit for all of us” (Zimmerman, Bonner, & Kovach, 2009, p. 136) and creating a responsive environment by showing that developing strategic competence is worth the time and vital. As Zimmerman, Bonner and Kovach (2009, p. 135) argue “instruction in self-regulation processes is an investment in student growth” and “will yield numerous dividends throughout the course and beyond”. As the students refine the capability to self-regulate learning they develop learning efficiency, and their perceived self-efficacy for accomplishing learning tasks. Through well-designed strategy training, the problems with control over the process of learning and perceived self-efficacy for accomplishing learning tasks can be effectively addressed.

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## References

- Anderson, N. (2005).** L2 strategy research. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 757–772). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bandura, A. (1997).** *Self-efficacy: the exercise of control*. New York, NY: Freeman
- Boekaerts, M., Pintrich, P.R., & Zeidner, M. (2000).** *Handbook on self-regulation*. San Diego: Academic Press.
- Cohen, A.D. (2011).** *Strategies in learning and using a second language*. Harlow, England: Longman.
- Cohen, A.D., & Macaro, E. (2007).** *Language learning strategies: Thirty years of research and practice*. Oxford: Oxford University Press.
- Dörnyei, Z. (2001).** *Motivational Strategies in the Language Classroom*. Cambridge: Cambridge University Press.
- Dörnyei, Z. (2005).** *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: Lawrence Erlbaum.
- Dörnyei, Z., & Ryan, S. (2015).** *The psychology of the language learner revisited* (p. 143, 148, 153, 155). New York: Routledge.
- Graham, S. (2007).** Learner strategies and self-efficacy: Making the connection. *Language Learning Journal*, 35, 81–93.
- Graham, S., & Macaro, E. (2008).** Strategy instruction in listening for lower-intermediate learners of French. *Language Learning*, 58(4), 747–783.

**Kossakowska-Pisarek, S. (2014).** *Optimising the process of vocabulary acquisition with the use of strategy training: The case of law students.* Unpublished PhD thesis.

**Kossakowska-Pisarek, S. (2016).** Pedagogical implications of positive psychology: Positive emotions and human strengths in vocabulary strategy training. In D. Gabryś-Barker, & D. Gałajda (Eds.), *Positive Psychology Perspectives on Foreign Language Learning and Teaching* (pp. 93–114). Springer.

**Mills, N., Pajares, F., & Herron, C. (2007).** Self-efficacy of college intermediate French students: Relation to achievement and motivation. *Language Learning*, 57, 417–442.

**Nation, P. (2001).** *Learning Vocabulary in Another Language* (pp. 222–223). Cambridge: Cambridge University Press.

**Nation, P. (2008).** *Teaching vocabulary: Strategies and techniques* (p. 98). Heinle Cengage Learning.

**Oxford, R.L. (2011).** *Teaching and researching language learning strategies* (p. 98). Pearson Education Limited.

**Pintrich, P.R. (Ed.) (1995).** Understanding self-regulated learning. *New directions for teaching and learning*, 63, 3–12. San Francisco: Jossey-Bass.

**Schmitt, N. (1997).** Vocabulary learning strategies. In N. Schmitt, & M. McCarthy (Eds.), *Vocabulary: Description, acquisition and pedagogy* (pp. 199–227). Cambridge: Cambridge University Press.

**Schmitt, N. (2000).** *Vocabulary in language teaching.* Cambridge: Cambridge University Press.

---

**Schunk, D.H. (1995).** Self-efficacy and education and instruction. In J.E. Maddux (Ed.). *Self-efficacy, adaptation and adjustment: Theory, research and application* (pp. 281–303). New York: Plenum Press.

**Schunk, D.H. (2003).** Self-efficacy for reading and writing: Influence on modeling, goal setting and self-evaluation. *Reading and Writing Quarterly: Overcoming Learning Difficulties*, 19(2), 159–172.

**Schunk, D.H., & Usher, E.L. (2011).** Assessing self-efficacy for self-regulated learning. In B.J. Zimmerman, & D.H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 282–297). NY: Routledge.

**Schunk, D.H., Zimmerman, B.J., & Barry, J. (Eds.) (1998).** *Self-regulated learning: From teaching to self-reflective practice*. New York: Guilford Press.

**Stoeger, H., & Ziegler, A. (2011).** Self-regulatory training through elementary-school students' homework completion. In B. Zimmerman, & D.H. Schunk (Eds.), *Handbook of Self-Regulation of Learning and Performance* (pp. 87–101). New York: Routledge.

**Tseng, W., Dörnyei, Z. & Schmitt, N. (2006).** A new approach to assessing strategic learning: the case of self-regulation in vocabulary acquisition. *Applied Linguistics*, 27(1), 78–102.

**Weinstein, C.E., Acee, T.W., & Jung, J. (2011a).** Self-regulation and learning strategies. *New Directions for Teaching and Learning: Self-regulated Learning*, 126, 45–53.

---

**Weinstein, C.E., Meyer, D.K. Husman, J., McKeachie, W.J., & King, C.A. (2011b).** Teaching students how to become more strategic and self-regulated learners. In M. Svinicki, & W.J. McKeachie, *McKeachie's Teaching Tips: Strategies, Research, and Theory for College and University Teachers* (pp. 292–307). Wadsworth: Cengage Learning.

**Zimmerman, B.J. (2002).** Becoming a self-regulated learner: An overview. *Theory into Practice*, 41(2), Spring.

**Zimmerman, B.J., Bonner, S., & Kovach, R. (2009).** *Developing self-regulated learners. Beyond achievement to self-efficacy* (p. 8, 10, 42, 135–136). American Psychological Association: Washington D.C.

