

Exploring Physics English Prep Students' Approach to Foreign Language Learning

M. Naci KAYAOĞLU¹ 

¹ Assist. Prof. Dr., Karadeniz Technical University, Faculty of Letters, Trabzon-TURKEY

Received: 05.08.2009

Revised: 19.08.2010

Accepted: 20.10.2010

The original language of the article is English (v.8, n.3, September 2011, pp.3-14)

ABSTRACT

The present study explores Physics English Prep students' language beliefs and approaches to different aspects of language learning in an attempt to account for plausible reasons for their relatively failure in mastering English as a university requirement prior to their subject education. Given the fact the Physics students were observed to be relatively unsuccessful at the end of a-six month intensive English preparation program as evidenced by the department's yearly academic report (only 11% passed the English prep program), learners' beliefs systems were chosen to be an important factor as they were assumed to affect language behavior and language learning in general in many ways. One specific outcome of the overall findings is that learners appear to hold a range of beliefs with varying degrees and these beliefs can influence the student's language learning strategies and ultimate success. The findings also yield certain pedagogic implications that making students' belief systems explicit may also sensitize us to the variety of notions students hold and to the possible consequences of specific beliefs for learning or not learning a foreign language.

Keywords: Foreign Language; Language Beliefs; Physics Students.

INTRODUCTION

Many good classroom teachers appear to ignore a self-evident truth that foreign language learners enter the class with many preconceived ideas about language learning arising from the experiences and what they have been exposed to inside and outside class, and also their own personalities and motivation. Regardless of all theories, approaches and long-heated debates the learners have always been at the centre of learning and actively involved in the process of learning by attending to the new information, constructing and reconstructing meaning and relating new information to the existing one. While Piaget's work is the most cited and referred one in many disciplines including applied linguistics, we ironically turn our



deaf air to the most salient feature of Piaget's work which is the individual's own world and experiences that s/he brings to the task of learning. This feature was to be known as constructivist approach, the aim of which is to understand the ways in which learners try to make sense of their world and construct their own views (Williams & Burden, 1997).

We construct what we know on the basis of our own experience. In other words, it is our experience that forms the only world in which we consciously live. Thus all kinds of experience are unique in the sense that they are personal, and essentially subjective. Knowledge is a dynamic process between the knower and the known and cannot be taken in isolation from the people who have active role in the process of constructing knowledge (Williams & Burden, 1997). As Miller (1993) suggests, humans do not only consume information but also build a storehouse of knowledge by actively selecting and interpreting information in the environment. Cognitive organisms develop attitudes towards their experiences because certain parts of experience may appeal to people and other may not. Consequently human beings are inclined to repeat likeable experience and avoid the ones that are not liked. Therefore, knowledge is constructed in relation to what has worked in the past and assumed to work again. In his discussion of knowledge, von Glasersfeld (1995) holds the view that

Knowledge does not constitute a "picture" of the world. It does not represent the world at all-it comprises action schemes, concepts, and thoughts, and it distinguishes the ones that are considered advantageous from those that are not. In other words, it pertains to the ways and means the organizing subject has conceptually evolved in order to fit into the world as he or she experiences it (von Glasersfeld, 1995,114).

So, what are labeled "facts" in the mind of individuals should not be regarded as the element of an observer-independent world but the natural results of an individual's experience. Knowledge is not dependent on "truth" but on our individual experience, which is our own peculiar reality we choose to live.

With this respect, language learners build up their belief systems gradually on the combination of various elements such as objectives, values, experiences, assumptions, thoughts and beliefs, which serve as a learning triggering scheme to much of the learner's decision making and action. This constitutes what has been called the culture of learning that highlights the importance of learners' beliefs and views about different aspects of language learning as one of the variables being investigated in this study.

By the time students come to university for English prep school, they have naturally accumulated a great deal of experience and preconceptions as they have been exposed to hundreds of hours of teaching from a variety of teachers in their previous education. Then, it is fair to suggest that they have formed certain views about what constitutes effective or ineffective learning and what is fundamental to a successful language learning. Moreover, a foreign language means different things to different students. For some it represents a golden opportunity to realize certain aspirations and future expectations. Some learners at university level regard it an awkward job to be done. Some students develop resistance to learning English as they simply associate it with the language of imperialism. It is, for this reason, instructive to uncover the underlying beliefs that learners possess about foreign language learning and more importantly how these beliefs influence their language learning process. In support of this, Richards and Lockhart (1995:52) suggest that "learners, too, bring to their learning their own beliefs, goals, attitudes and decisions, which in turn influence how they approach their learning". Learner's beliefs are assumed to affect language behaviors and language learning. Williams and Burden (1997) take a very similar position and point.

Every learner will bring a different set of knowledge and experiences to the learning process, and will “construct”, in different ways, their own sense of the situation with which they are faced (Williams & Burden 1997:96).

Learners’ belief systems not only have to do with learners’ motivation to learn and their expectations about language learning but also influence the kind of language learning strategies they choose to use. Emphasizing that students hold a set of beliefs about the nature of learning and what they intend to achieve, Biggs (1993) comes up with three different ways in which students approach their learning: surface, deep and achieving. The surface approach is instrumental and aims at gaining a qualification with a pass-only intention or with fear of failure. In the deep approach to learning, students are deliberately engaged in the task to actualize interest and competence. The achieving approach is similar to the surface approach since the intention is to obtain high grades for their own sake. It is obvious to assume that students apply different strategies in line with these three different approaches.

A growing body of research suggests that beliefs play a critical role in learning experience and success. In a study of learning perceptions carried out by Söljö (1979), university students were asked to describe their perceptions of learning. They were found to hold a range of different views of learning which were later grouped into five perceptions of learning:

- learning as the quantitative increase in knowledge,
- learning as memorizing and reproduction,
- learning as acquiring facts, skills for use in practice,
- learning as the abstraction of meaning and,
- learning as interpreting and understanding reality in a different way.

Altan (2006), using Horwitz’ BALLI with 248 students majoring in English, German, French, Japanese and Arabic at five universities, found out that there were consistencies in terms of language beliefs across all groups. A more comprehensive study (involving EFL and ESL learners) by Kayaoğlu (1996,1997,2011) on Turkish language learners’ beliefs provides support for the existing literature that Turkish language learners have accumulated a great deal of knowledge and experience through which they interpret and respond to the task of language learning. It has also become clear that students also bring their own beliefs and “theories” to their learning process and that these appear to affect both the ways in which they learn and the outcome of that process. In contrast to Horwitz (1987) who sees the origins of learners’ beliefs in many cases as “myth”, Kayaoğlu (1997) identifies a number of social, educational, economic, situational and affective components which together appear to establish a total attitudinal position. The factors found to be critical in language learning in Kayaoğlu’s study in relation to language beliefs were ability, aptitude, possession of a good ear and memory, age, teacher-related issues self-efficacy, self-confidence, extroversion /introversion, motivation and attitudes, first language, effort, time, vocabulary, grammar, lack of practice, foreign country, background, learning style, pronunciation, culture, persistence, setting, native speaker, use of the mother tongue, continuity, listening, difficulty of languages and autonomy.

Several second language-learning models appear to assign an important role to learner’s beliefs (Bialystok 1978; Naiman et al. 1978) either as a pre-existing factor or, in the case of Bialystok’s model, as an interactive complimentary component. For instance, in her model of second language learning, Bialystok (1978) attaches an important role to learners’ beliefs in an effort to account for discrepancies both in individual achievement and achievement in

different aspects of second language learning. Bialystok's (1978) model appears to be based on three levels which are *input*, *knowledge* and *output*—each representing some unique stage in the learning and use of a second language. While learners' exposure to the language is called input level, output level refers to the manner in which language is used for comprehension and production and responses are produced as a function of the stored information. The "knowledge level" refers to three kinds of information that the learner brings to language learning, described as *other knowledge*, *explicit linguistic knowledge*, and *implicit linguistic knowledge*, and each is considered to contribute in some unique way to the attainment of language proficiency. Explicit linguistic knowledge includes all the conscious facts and information the learners hold about the language such as knowledge about grammar and vocabulary items. *Implicit linguistic knowledge* refers to the learners' acquired or intuitive knowledge to produce responses in the target language. Therefore, any information which is automatic or used spontaneously is thought to be represented in implicit linguistic knowledge. *Other knowledge* refers to all other information the learner brought to the language including knowledge about other languages and the culture of the language learners.

METHODOLOGY

a) Sample and Setting

The participants in this study included 69 physics students aged between 18-20, attending the intensive English preparatory program at the School of Foreign Languages at Karadeniz Technical University in Trabzon, Turkey. At the time of data collection the participants had already been attending the language program for five months. Their language proficiency in English was identified in advance as beginner by placement test designed by the School of Foreign Languages. The Convenience sampling technique was used in the selection of the participants

The study was undertaken at Prep program (Department of Basic English) at School of Foreign Languages at Karadeniz Technical University, Trabzon, Turkey. Each year about 1800 students are enrolled in our school for a full academic year of intensive compulsory English course prior to their subjects in their departments. The students who come from 21 different departments are required to take certain courses in English in their major subject and produce papers in English.

All candidates, regardless of their previous language study at the university, are given an English proficiency test as a university requirement in September before they are allowed to start their program. This examination consists of two parts: written and oral. The candidates are placed in intermediate or beginning classes according to the results of the examination. Those who fail in the English Prep Program are expected to repeat the course or pass the English proficiency test, given three times a year, by the end of four-year university education

The school offers all language skills: reading, writing, speaking and listening. With the ever-growing popularity and demand among the students for participating in the ERASMUS program that provides mobility grants to many thousands of students, the school places greater value on communication skills.

b) Data Collection Instrument

In the present study, a modified version of the questionnaire Beliefs About Language Learning (BALLI) was used as a data collection instrument. The BALLI was originally developed as 34 Likert-scale items by Horwitz (1987) to assess students' opinions and assumptions on various issues related to different aspects of language and language learning.

It has also been used as an instrument for research and training purposes in workshops for discussions with staff and language learners in order to elicit the different opinions students hold about language learning, to sensitize teachers to these different beliefs and improve learners' language learning strategies.

The thirty-four items in the questionnaire are intended to investigate students' beliefs about learning in five major areas: (1) foreign language aptitude; (2) the difficulty of language learning; (3) the nature of language learning; (4) motivation and expectations; and (5) learning and communication strategies. The 34-item instrument asks respondents to indicate, in a multiple-choice format, their agreement (strongly agree to strongly disagree, on a five- point scale) in a given statement. As Horwitz points out, the BALLI does not necessarily have clear-cut right and wrong answers. However, it has proven useful as a means of exploring students' beliefs. It can, thus, be considered to be a systematic way of documenting the range and the extent of beliefs, and of exploring their consequences for foreign language strategy use and language learning.

However, for the present study modification and adaptations to the questionnaire were made because of differences in settings, context, population, and lexis/translation. For instance, some questions in the original questionnaire are apparently unique to ESL settings in America or to an American-dominant environment. Other factors (obtained from the field work) such as ability and self-efficacy related views which did not exist in the original questionnaire were included in the modified questionnaire (see appendix A). The extended Turkish questionnaire was administered to a representative sample group of learners at the same school for piloting purposes and conducted to the students. Cronbach's alpha (internal consistency) value is .8435. The data was analyzed through the use of SPSS (Statistical Package for Social Science, version 10.5)

c) Data Analysis

The choice of which statistical test to use for data analysis was decided on what is called "the level of measurement of the data" as certain statistical tests were only appropriate for certain levels. This refers to four main levels of measurement: nominal, ordinal, interval and ratio. Therefore, to this end, descriptive statistics (univariate analysis) were used to summarize patterns in the responses of the subjects in the sample. Frequency distributions were conventionally the best tool to present the information in an informative way that allows us to see how the sample is spread or distributed in the various categories of each variable. The quantitative data were subsequently entered into the computer and SPSS package (15. version) was used to perform statistical procedures.

The physics students' responses to the items in the questionnaire are presented through nine major categories that the questionnaire statements were designed to investigate. Responses to the 1-5 Likert scale (strongly agree to strongly disagree) were collapsed into 3 categories (agree, disagree and no idea) to discern major tendencies and presented with percentages in separate tables.

FINDINGS

The questionnaire, as pointed out earlier, examines students' opinions and assumptions on various issues concerning the different aspects of language and language learning. These beliefs were classified into ten related categories according to which analysis was done as follows:

Table 1. *Motivation for Language Learning*

	Percentage		
	Agree	Disagree	No Idea
It is very important for me to learn English very well	95.8	4.2	
If I learn English well, it will be better for my future career or job	97	1.5	1.5

Table 1 above concerns learners' general interest and degree of expressed motivation for learning English as a foreign language. It is remarkable to note that great majority of subjects (95%) are well aware of the role of learning a foreign language for their future career or job in spite of low achievement in foreign language learning. 97% believed that English would contribute to their future job.

Table 2. *Difficulty of Language Learning*

English	Frequency	Percentage
A very difficult	24	34.8
A difficult	23	33.3
A medium difficulty	18	26.1
An easy	3	4.3
A very easy language	1	1.4

Table 2 concerns perceptions of the general difficulty of English as a foreign language. The subjects' beliefs about the relative difficulty of foreign language learning indicate that the majority of students (68.1%, collapsing the two first related categories into one) considered English difficult. Only 5.5% found it easy. The present data does not allow us to find the reasons for the source of their perception in relation to the difficulty of language learning. In other words, it is not clear whether they arrived at this conclusion as a result of their language learning experience or they had preconception about this issue. Yet, it is interesting to observe that most of the subjects found learning English difficult.

Table 3. *The Length of Learning a Foreign Language*

Length	Percentage
Less than a year	1.5
1-2	6.1
3-5	6.1
6-10	50
16-20	36.4
Not possible	-

Table 3 presents learners' beliefs about time requirements for language learning. The responses given to the question "If someone spent one hour a day learning a language, how long would it take them to speak the language very well" were found to be correlating with those given to the item in Table 3. A very small percentage of students (1.5 %) felt that a foreign language could be learned less than a year and (6.1%) 1-2 years. Fifty percent of the learners expressed it could take 6-10 years to learn a foreign language and 36.4% 16-20 years, indicating that they believed that it required a long time to learn a foreign language.

Table 4. *Relative Difficulty of language learning skills*

	Percentage		
	Agree	Disagree	No Idea
Some languages are easier to learn than others	68.1	5.7	26.1
It is easier to speak than understand a foreign language	36.7	61.4	2.9
It is easier to read and write English than to speak and understand	47.1	8.8	44.1

Table 4 deals with the relative perceived difficulty of different language skills. Great majority of learners (68.1%) agreed that some languages are easier to learn than others. When it comes to speaking skill as compared to understanding, most of the learners (61.45) found speaking more difficult than understanding a foreign language. A similar pattern was found for the comparison between writing-reading and speaking-understanding. In all cases, speaking, which is a productive skill was perceived by subjects relatively most difficult.

Table 5. *Perception of Ability, Good Ear and Memory in Language Learning*

	Percentage		
	Agree	Disagree	No Idea
Some people have a special ability for learning foreign languages	84.1	11.6	4.3
One should have a good ear in order to learn a language well	86.7	7.4	5.9
Good memory is very important for learning languages	86.8	7.4	5.8

Table 5 reports responses to the ability related items. These show that the great majority of subjects believed (84.15) that some people had a special ability for learning a foreign language, indicating a strong belief in the role of a specific ability in learning a foreign language. It is quite remarkable and meaningful to observe that a similar distribution of responses was found for the items regarding to the importance of having a good ear and memory for learning foreign languages (86.7 % and 86.8% successively). The subjects overwhelmingly believed that having good ear and memory is very important for language learning.

Table 6. *Perception of possessing Ability, Good Ear and Memory in Language Learning*

	Percentage		
	Agree	Disagree	No Idea
I have a special ability for learning foreign languages.	18.8	53.8	27.4
I believe that I have a good memory for languages.	16.4	64.2	16.4
I believe that I have a good ear for languages.	26.9	61.1	12.1

The items in Table 6 attempted to explore subjects' perception of possessing ability, good ear and memory for language learning. A substantial number of students (53.8%) believed that they did not have a special ability for language learning. Subjects' responses to the two other items revealed a similar pattern. Most of the learners (64.2) felt that they did not possess a good memory and (61.1) a good ear which they believed to be necessary for language learning as indicated in Table 5.

Table 7. *Beliefs about Foreign Language Aptitude*

	Percentage		
	Agree	Disagree	No Idea
It is easier for children than adults to learn a foreign language	68.1	7.7	24.1
It is easier for someone who already speaks a foreign language to learn another one	61.8	16.1	22.1
Those who are good at mathematics and science are good at learning foreign language	10.1	69.6	20.3
People who are good at social sciences are good at foreign languages	36.2	36.2	27.5
Women are better than men at learning foreign languages	62.1	16.6	16.6
People who speak more than one language are very intelligent	62.7	23.8	13.5
No matter how hard some people study English, they cannot learn English very well	58.8	14.7	26.5

Items included in Table 7 sought to probe learners' views about foreign language aptitude. Most of the learners (68.1%) believed that being young, referring to children, is an advantage over adults to learn a foreign language. One of the interesting findings was that most of the students were found to associate intelligence with language learning. For example, 62.7 percent of the students hold the view that people who speak more than one language are very intelligent and 61.8 agreed that someone who speaks one language can learn another one easier. One of most astounding results was that a great majority of the learners (69.6%) did not agree that those who are good at mathematics and science are good at learning foreign language, reflecting a low self-esteem about themselves. The item that people who are good at social sciences are good at foreign languages received the same amount of agreement and disagreement (36.2% each). From most of the learners' point of view women are better than men at learning foreign languages (62.1%). Perhaps the most important finding from the table was that most of the subjects (58.8%) hold the view that some people cannot learn English very well no matter how hard they study. This may not be surprising when considered together with the responses given to ability related factors to which most subjects were found to attribute success in language learning.

Table 8. *Persistence and effort*

	Percentage		
	Agree	Disagree	No Idea
When I am having difficulty with homework or language tasks, I am usually able to find out other ways to achieve them	22.4	62.7	14.9
If a language activity seems difficult, I usually tend to give up	57.4	29.4	13.2

The items in Table 8 concern learners' persistence and effort in relation to language learning. Responses given to the items show clearly that the majority of subjects (57.4%) were not persistent when they faced difficulty in the process of language learning. Similarly 62.7% gave up when they faced difficulty.

Table 9. *Beliefs about Nature of Language Learning*

	Percentage		
	Agree	Disagree	No Idea
It is necessary to know about English- speaking cultures in order to speak English	33.4	52.1	14.5
It is best to learn English in an English- speaking country	88.2	4.4	7.4
Learning a foreign lang. is mostly a matter of learning vocabulary	85.3	8.8	5.9
Learning a foreign lang. is mostly a matter of learning grammar rules	44.1	47.1	8.8
Learning a foreign language is different from learning other academic subjects	87.3	3.0	19.7
The most important part of learning English is learning how to translate	70.8	21.5	7.7

Table 9 concerns beliefs about the nature of language learning. It is important to note that the vast majority of the students (88.2%) believed that it is best to learn English in an English- speaking country, which might be an "excuse" for not having been able to put all their effort into learning. While 87.3 percent of the students stated that learning a foreign language is different from learning other academic subjects, translation and vocabulary received overwhelmingly a great agreement (70.85% and 85.3% successively). The item concerning the role of knowing about English speaking cultures in order to speak English received only 33.4 % agreement from the learners. In terms of grammar, the learners were found to be divided into two groups. While 44.1% believed that learning a foreign language is mostly a matter of learning grammar rules, 47.1% felt positive about the item.

Table 10. *Views about Learning and Communication Strategies*

	Percentage		
	Agree	Disagree	No Idea
It is important to speak English with an excellent pronunciation	76.8	15.9	7.2
You shouldn't say anything in English until you can say it correctly	45.6	36.7	17.6
It is good to guess if you do not know a word in English	25	57.4	17.6
It is important to repeat and practice a lot	69.1	25.0	5.9
If you are allowed to make mistakes in the beginning, it will be hard to get rid of them later	51.5	19.1	29.4
It is important to watch English TV or video programs	86.4	7.6	6.1
I feel comfortable speaking English with other people	29.9	58.2	12
It is useful to practice English with other students	35.3	45.6	19.1

Table 10 deals with views about learning and communication strategies. Considering the fact that the English prep program that subjects had been attending when the data was collected focused on communicative function of English, responses to these items become more important. Most of the learners (76.8%) placed a very high value on speaking the target

language with excellent pronunciation. Similarly, a substantial number of students (45.65) believed that they should not say anything in English until you can say it correctly. Students' responses to these items indicate a very similar pattern in certain practices. Then, it is not surprising to see that only 25% of the learners valued the role of guessing as communicative strategy while 57.4 % disagreed with the item. More than half of the learners (51.5%) negative about making mistakes even in the beginning in the sense that making mistakes was to be avoided at the expense of not communicating in the target language. With this information in mind, it is quite normal to observe that only 29.9 % of the learners felt comfortable speaking English with other people. While most of the learners (86.4%) believed that watching English TV or video programs is important, only 35.3% felt positive about practicing English with other students or people in learning English.

CONCLUSION

The overall analysis of the responses given by physics students who attended English Prep Program suggests that the subjects held various beliefs and certain fixed ideas about various aspects in learning foreign language. Perhaps, one of the most remarkable results was that most of the learners, overwhelmingly, believe the necessity of having a special ability, a good ear, and a good memory for learning foreign languages. This data becomes more important when we consider the fact that most of the learners feel that they lack the above-mentioned abilities. Giving great importance to having a good ear, memory and language learning-related ability, the learners who expressed not to have possessed these abilities are not logically expected to pursue a certain goal and use certain behaviors necessary for success.

Given the fact that a growing body of research suggests a relationship between language beliefs and achievements, it is more likely that the beliefs that physics students hold about language learning have impact on their language behavior. The nature of data does not allow us to establish a cause-effect relationship between the learners' thoughts and behavior, yet psychology as a discipline in its own provides sufficient evidence for the strong link between thought and action. For instance, Ellis (1998), the creator of rational emotive behavioral therapy, indicates some irrational beliefs and thoughts which could be destructive and keep people from reaching goals. When a person holds goal-stopping irrational beliefs, then the consequence is likely to be negative. These, in return, lead to unrealistic expectations which can make people feel unsuccessful because behaviors stem from the way of individuals' perceptions, thoughts and beliefs. Because of the distinct sets of language learning beliefs, Physics students appeared not to develop autonomous language learning behavior, which is key to language learning. This can be partly explained by the fact that a great majority of the learners oppose the idea that those who are good at mathematics and science are good at learning foreign language. This obviously suggests that the learners possess a very low self-esteem about their capabilities as language learners. Another result that gives us greater confidence in our conclusion about the learners' low self-efficacy is that majority of the learners (58.8%) hold the view that no matter how hard some people study English, they cannot learn English very well. Referring to attribution theory that can be defined as the reason or meaning which individuals give to the causes of events in their environment (Weiner 1976), physics students can be argued to attribute their successes or failures to more external factors than to their own efforts. The issue of why the learners were operationally categorized unsuccessful in spite of possessing high motivation can be interpreted with the fact that learners' perceived locus of causality for achievement outcome and consequent expectancy determined their level of willingness to undertake and persist at language learning

activities. The learners are not persistent and avoid putting adequate effort into the task of language learning as reported in Table 8.

Nevertheless, suffering from lack of qualitative data, overall analysis provided us with a better understanding of students' approaches to the task of language learning which would assist us in adopting a more rational approach to learning/teaching activities in their classes. Teachers may need to run special sessions to enable learners to get rid of irrational beliefs, which undermine their effort and persistence. For instance, making mistake is considered a very healthy sign of making progress in language learning and students, for this reason, are encouraged to do so. Most of the learners in this study were found to avoid making mistake and therefore adopt a very passive role whereas language learners are expected to take a central role. Although the present study did not investigate language learners' language behaviors, certain preconceptions and misconceptions that physics students hold are more likely to hinder their progress and prevent them from using several language learning strategies in and outside classroom. They simply developed and maintained misconceptions about their own learning and consequently may have attributed their failure to factors beyond their power. This is not to account for their failure, but a very strong implication for us to understand the whole process through which they go. It is clear from the implications of these findings that we need to first identify learners' beliefs about language learning and then encourage them to adopt more rational and perhaps autonomous approaches to their language learning.

REFERENCE

- Altan, M. Z. (2006). Beliefs about language learning of foreign language-major university students. *The Australian Journal of Teacher Education*, 31(2), 45-52.
- Bialystok, E. (1978). A theoretical model of second language learning. *Language Learning*, 28 (1), 69-83.
- Biggs, J. (1993). What do inventories of students' learning processes really measure? A theoretical review and clarification. *British Journal of Educational Psychology*, 63, 3-19.
- Ellis, A. (1998). Three methods of rational emotive behavior therapy that make my psychotherapy effective. (ERIC Document Reproduction Service no: ED 424 516).
- Horwitz, E. K. (1987). Surveying student beliefs about language learning. In A. Wenden and J. Rubin (Eds.) *Learner Strategies in Language Learning*. Englewood Cliffs, New Jersey: Prentice Hall International.
- Kayaoğlu, M. N. (2011). *Language learning Strategies: Theory, Practice and Issues*. VDM Verlag Dr. Müller. Saarbrücken. Germany
- Kayaoğlu, M. N. (1997). *An Investigation of The Learning Strategies of Turkish EFL and ESL Adult Learners and The Relationship Between Their Beliefs about Different Aspects of Language learning and Their Strategy Use*. Unpublished PHD Thesis. Bristol University. UK
- Kayaoğlu, M. N. (1996). *What does a good learner do that a poor learner does not?* A paper presented at the Bristol Conference: International Issues in Learning and Teaching. January, Bristol.
- Miller, P. H. (1993). *Theories of Developmental Psychology*. New York: W. H. Freeman and Company.
- Naiman, N., Frohlich, M., Stern, H. H., & Todesco, A. (1978). *The Good Language Learner*. Toronto: Ontario Institute for Studies in Education.
- Richards, J. C. & Lockhart, C. (1995). *Reflective Teaching in Second language*. Cambridge: Cambridge University Press.
- Söljö, R. (1979). *Learning in the learners' perspectives, some common-sense conceptions*. Reports from the Institute of Education. University of Gothenburgh, 77.
- von Glasersfeld, E. (1995). *Radical Constructivism: A way of knowing and learning*. London: Falmer.
- Weiner, B. (1976). Attribution theory, achievement, motivation, and the educational process. *Review Of Educational Research*, 42, 201-215.
- Williams, M. & Burden, B. (1997). *Psychology for Language Teachers: A social constructivist approach*. Cambridge: CUP.