BELIEFS ABOUT LANGUAGE LEARNING OF FOREIGN LANGUAGE-MAJOR UNIVERSITY STUDENTS

Mustapha .Z. Altan Erciyes University Turkey

ABSTRACT

Beliefs are a central construct in every discipline which deals with human behavior and learning. Teachers' beliefs influence their consciousness, teaching attitude, teaching methods and teaching policies. Teachers' beliefs also strongly influence teaching behavior and, finally, learners' development. The formation of teachers' educational beliefs in language teaching/learning process will exert an indiscernible effect on forming effective teaching methods and will bring about the improvement of learners' language learning abilities (Horwitz, 1985). The Beliefs About Language Learning Inventory (BALLI) was administered to a total of 248 foreign languagemajor university students at five universities. The participants were in the departments of English, German, French, Japanese and Arabic and they were all going to be the teachers of the language they were learning. Although most of the item alternatives drew slightly different percentages of responses, the overall pattern of responses remained strikingly consistent across language groups. The present findings indicate that students hold a range of beliefs with varying degrees of validity; in some cases, the term "myth" might be a more accurate characterization. Some results reported here may surprise language teaching educators and teacher trainers; others probably confirm their experiences and intuitions.

INTRODUCTION

During the last two decades, second language learning researchers have spent a lot of effort on the cognitive aspects of language learning. Research indicates that individual students differ considerably in their use of learning strategies (Altan, 2003; O'Malley Chamot, 1990; Oxford, 1992,1993; Oxford & Cohen, 1992; Wenden & Rubin, 1987). An important question is what causes students to approach a specific language task differently. What accounts for the individual differences observed even among learners with similar language proficiency? A reasonable answer may be found in learner perception. Since we are what we believe in, in recent years, researchers have increasingly focused on students' beliefs about the nature of language learning and the strategies they use.

Studies on language learning beliefs began with early research in individual differences between successful and less successful learners (Fillmore, Kempler, & Wong-Fillmore, 1979; Naiman, Frochlich, Stern, & Todesco, 1978; Nation & McLaughlin, 1986; Rubin, 1975, 1981).

On the one hand, people all over the world seem to have common and fixed beliefs about how languages are learned. Every month it is possible to see an article or just some news on the best techniques for learning a foreign language, the right age to begin learning a foreign language, and the nature of the foreign language learning process, especially during summer. In some news it is even admitted that language fluency can be obtained with very little effort in as little as three months of freetime study!

On the other hand, there is another group of people who believe that acquiring another language is a special "gift" that some people have and that most people do not have. If beliefs about foreign language learning are widespread in one culture, then foreign language teachers must consider that learners bring these beliefs with them into the classroom and therefore, teachers should spend some time helping learners getting rid of these misconceptions in order to be more effective language learners. This consideration becomes more important especially for the foreign language teacher educators. Teacher educators should train their student teachers aware of these misconceptions and prepare them ready to solve the possible problems in their future teaching. Some of these misconceptions should be taken very seriously for those educating foreign language teachers.

Many people think that children are biologically programmed to learn second languages quickly and easily. Current research challenges this biological imperative, arguing that different rates of L2 acquisition may reflect psychological and social factors that favor child learners (Newport, 1990). One exception is pronunciation.

The younger the child, the more skilled the child is in acquiring L2. Some researchers argue that the earlier children begin to learn a second language, the better (e.g., Krashen, Long, & Scarcella, 1979). However, research does not support this conclusion in school settings especially where emphasis has traditionally been placed on formal grammatical analysis. Older children are more skilled in dealing with this approach and therefore, might perform better. However, this argument does not explain findings from students of French immersion programs in Canada, where little emphasis is placed on the formal aspects of grammar (Genesee, 1987). As pointed out earlier, pronunciation is one area where the younger is better.

The more time students spend in a second language context, the more quickly they learn the language. Many educators believe children will learn English best through structured immersion, where they have ESL classes and content-based instruction in English. These programs provide more time on task in English than bilingual classes. Research, however, indicates that this increased exposure to English does not necessarily speed the acquisition of English. Over the length of the program, children acquire English language skills equivalent to those acquired by children who have been in English-only programs (Cummins, 1981).

Children have acquired L2 once they can speak it. Some teachers assume that children who can converse comfortably in English are in full control of the language. Yet for school-aged children, proficiency in faceto-face communication does not imply proficiency in the more complex academic language needed to engage in many classroom activities. Research on 1,210 immigrant children in Canada showed that children required much longer mastering the disembedded cognitive language required for the regular English curriculum than to master oral communicative skills (Cummins, 1980). All children learn L2 in the same way. People and some teachers think that all children learn L2 in the same way or at the same rate. Although student beliefs about language learning would seem to have obvious relevance to the understanding of student expectations of, commitment to, success in,

and satisfaction with their language classes, they have remained relatively unexplored. Especially with those who will be teachers of the languages they have been learning.

Holec (1981:27) argues that language learners must go through a sort of psychological preparation or "deconditioning" to rid themselves of preconceived notions and prejudices which would be likely to interfere with their language learning process. Holec (1987:145) lists some typical learner comments as "1. Learning a language is hard work; 2. For a Frenchman, learning Italian is easier than learning Japanese; 3. Spelling is one of the major difficulties when learning French".

LITERATURE REVIEW

Research on the beliefs about language learning since Horwitz's pioneering study in 1985 has shown that some of these beliefs held by learners have damaging effects on their learning. However, there is still a great shortage of research that investigates the beliefs of learners and especially on those who are foreign-language major students. Recent research on the beliefs of second and foreign language learners' beliefs has examined different learning settings in different cultures; Wenden (1986); Horwitz (1988); Oh (1996), Wen and Johnson(1997); Benson and Lor (1999). These research studies have collected and analyzed data on learners' beliefs in different ways and they were mainly done with those learning foreign languages. However, very few empirical studies have researched in-service teacher beliefs about language learning.

Peacock (2001) reports on a longitudinal study that investigated changes in the beliefs about second language learning of 146 trainee ESL students over their 3-year program at the City University of Hong Kong. Although he reports differences in three key areas, disturbingly, no significant changes have been found. These key areas are: learning a second language means learning a lot of vocabulary and grammar rules and the belief that those speaking more than one language well are very intelligent. Peacock (2001) concludes that these participants when preparing their classroom tasks, materials, etc. might over-emphasize the learning of vocabulary and grammar rules compared to the other classroom tasks necessary for foreign

language learning. And believing that those speaking more than one language are very intelligent might negatively affect their capacity to assess their future students' progress.

Data on language-learners' beliefs have been collected through closed (forcedchoice) questionnaires. Questionnaires on learners' beliefs have been developed and analyzed in two ways. The first involves grouping items a priori into *Logically-derived categories*, with the analysis of data focusing on similarities and differences in response patterns to items within a category. This is the approach used by Horwitzt's "Beliefs About Language Learning Inventory" (BALLI).

LANGUAGE LEARNING INVENTORY

The survey used in this study. The Beliefs About Language Learning Inventory (BALLI) was developed by Horwitz 1983 to assess student opinions on a variety of issues and controversies related to language learning. The BALLI contains thirty-four items and assesses student beliefs in five major areas: 1. difficulty of language learning; 2. foreign language aptitude; 3. the nature of language learning; 4. learning and communication strategies; and 5. motivations and expectations. Subjects are asked to read each item and then to indicate a response ranging from strongly agree to strongly disagree. A single composite score is not derived from the BALLI; rather, individual items yield descriptions of discrete student conceptions of language learning. BALLI had been developed very carefully while the questionnaire was being designed and items were being written, however no evidence of any attempt, either in the first or in subsequent uses of a questionnaire had been found to establish empirically the degree of stability, or consistency, of responses to questionnaires on beliefs about language learning (Sakui and Gaies 1999).

SUBJECTS

The BALLI was administered to 50 teacher education students at five universities respectively; English (Inonu University, Turkey), German (Uludag University, Turkey), French (Marmara University, Turkey), Japanese (Canakkale 18 Mart University, Turkey) and Arabic (Gazi University, Turkey). A total of 248 students responded the survey and these 74 (29.8) were males and 174 (70.2) were females.

Of the 248 students 52 (21%) were in the first year, 90 (36%) were in the second year, 77 (31%) were in the third year and 29 (12%) were in the fourth year. Subjects ranged from eighteen to forty years of age with a medium age of 22. All subjects were enrolled in teacher education programs and they were all trained to become the teachers of the language they learn. The programs follow the same syllabus designed by the Higher Education Council (YOK). All percentages reported are rounded to the nearest whole number.

STUDENT RESPONSES: BALLI

The difficulty of language learning: BALLI items 3,4,6,14,24 and 28 concern the general difficulty of learning a foreign language and the specific difficulty of the learner's particular target language. Items 24 and 28 assess the relative difficulty of different language skills, and item 6 surveys learner expectations for success.

Students from the five language groups overwhelmingly support the concept of a language learning difficulty hierarchy. Eighty-four percent of the English language, Eighty-six percent of the Arabic language, ninety-four percent of the German language, eighty-five percent of the Japanese and eightyseven percent of the French language students agreed with the statement, "some languages are easier to learn than others". Thus, the large majority of participants surveyed believed that the difficulty of the language learning is dependent, at least to an extent, on the particular target language studied.

The data also indicate some big differences between language groups on the relative difficulty of each specific target language. Ninety-five percent of Japanese language students and Eighty-four percent Arabic language students rated their respective languages as being very difficult to learn. They are followed by French (79%) and German language (66%). Only twenty-six percent of English language students agreed that English is very difficult to learn. Seventy percent of English language students claimed that English is an easy language to learn. For example, no one judged either Japanese or German to be a very easy language. The high percentages of Japanese and Arabic language students could

be explained with their writing systems and using alphabets other than Latin.

Time requirement for language learning were requested next. Regardless of differences in assessments of difficulty by the five language groups, their estimates of the amount of time required to learn a second language were quite similar. In response to the question, "if someone spent one hour a day learning a language, how long would it take him/her to become fluent?" estimates ranged from under a year to the assertion that a language cannot be learned in one hour a day. In each group, from four to twelve percent of the students felt that a second language could be learned in under a year. A substantial number of participants felt that a maximum two and a half years is sufficient for learning another language and from forty-eight to seventy-five percent of the students chose between 1-2 and 3-5 years. Nevertheless, each group also contained a group of participants (ranging from fourteen to twenty-two percent who felt it would take from five to ten years to learn a language under the conditions described

These participants were also generally very optimistic (ranging from fifty-seven to eighty-four percent) about their own prognosis as language learners. Only a very small number of Arabic, German, Japanese and French language students disagreed with the statement: "I believe that I will ultimately learn to speak this language very well." Interestingly, participants' estimates of the time required to learn a foreign language were closely related to their feelings about their own ultimate success. A cross tabulation of the scores showed that the great majority of participants who expect to "learn to speak this language very well" anticipate that it will take a moderate amount of time (ranging from 1-2 to 3-5 years). Although it is heartening to language teachers to see their students expecting to succeed, the responses to these items indicate that a large number of students expect to speak their target language very well in an unrealistic amount of time. Participants in the survey were studying the language they were learning at least for 6-10 years. Considering the actual proficiency level of the students learning a foreign language in the country, it seems a bit confusing how they can expect to learn a foreign language "very well" within 1-5 years.

Because pre-service teachers' judgments about the difficulty of language learning are critical to the development of their expectations for and commitment to it, the responses to the items in this section are particularly important.

Foreign Language Aptitude: BALLI items 1, 2,10,15,22,29,32,33, and 34 concern the general existence of specialized abilities for language learning and beliefs about the characteristics of successful and unsuccessful language learners. Thus, these items address the issue of individual potential for achievement in language learning.

Participants generally endorsed the concept of foreign language aptitude or special abilities for language learning. From fifty-two to seventy-three percent of all groups agreed with the statement: "some people are born with a special ability to learn a foreign language". Participants with a great majority perceived themselves as having special ability to learn a foreign language. Seventy percent of English, seventy-four percent of Arabic, seventy-seven percent of Japanese, eighty percent of German, and eighty-one percent of French language students agreed with the statement, "I have foreign language aptitude." These high percentages indicate that these participants have fairly positive assessments of their own language learning abilities.

On the other hand, the majority (seventy to eighty-six percent) agreed that everyone can learn to speak a foreign language. Taken together, the responses of these two items would appear to indicate that many people can learn a foreign language and they are in this lucky group who can learn a foreign language.

The questions dealing with beliefs concerning the characteristics of good language learners yielded interesting results. Consistent with common wisdom, the participants felt overwhelmingly that it is easier for children than adults to learn a foreign language. In contrast, two commonly encountered beliefs about differential language learning ability were not supported with the same majority by any of the respondent groups. Around fifty-eight percent of each group agreed with the statement that people who are good at mathematics or science are not good at learning foreign languages. The results were a bit mixed with the statement that women were better than men at learning

languages. Where fifty-three percent of French and sixty-two percent of English language students agreed with the statement; forty-two percent of German, forty-four percent of Japanese and fifty-two percent of Arabic language students disagreed with the statement. On the other hand, quite a number of participants neither disagreed nor agreed with the statement that "Turks are good at learning foreign languages."

The concept of foreign language aptitude can be the source of a negative outlook on language learning. A participant's belief that everybody can learn a foreign language but Turks are neither good nor bad at learning a foreign language can lead to negative expectations about their teaching in future.

The Nature of Language Learning: BALLI items 5, 8, 11, 16, 20, 25, 26, and 28 include a broad range of issues related to the nature of the language learning process. Item 8 and 11 concern the role of cultural contact and language immersion in language achievement. Item 25 determines if the learner views language learning as different from other types of learning, while items 16, 20, and 26 assesses the learner's conception of the focus of the language learning task. Finally, item 5 addresses the students' perceptions of structural differences between English and the target language.

Many people believe that learning another language is merely a matter of translating from the target language or learning grammar rules or new vocabulary words. Respondents generally shared these views except from the view that learning another language is a matter of translating from the target language. From seventy-one percent to ninety percent of the respondents in each group agreed that learning a language differs from learning other school subjects. In addition, a great majority of the respondents endorsed statements indicative of a restricted view of language learning. For example, sixtyeight to eighty-five percent of the participants in each language group endorsed the BALLI item that the most important part of learning a language is learning vocabulary words, and at least fifty percent of each group believed that learning a foreign language is mostly a matter of learning a lot of grammar rules. On the contrary, from forty-eight to ninety-two percent of each group disagreed with the

statement that "learning a foreign language is mostly a matter of translating from the target language."

A belief that learning vocabulary words and grammar rules is the most important part of language learning will almost certainly lead pre-service teachers to invest the majority of their time memorizing vocabulary lists and grammar rules at the expense of other language learning tasks in their possible future teaching. It is good to see that at least fifty percent of each group disagree with the statement that "learning a foreign language is mostly a matter of translating from the target language.

Learning and Communicating Strategies: BALLI items 7, 9, 12, 13, 17, 18, 19, and 21 address learning and communication strategies and are probably the most directly related to a learner's actual language learning practices. Item 17 and 21 refer to learning strategies, and items 7, 9,12,13,18, and 19 concern communication strategies.

First, with reference to traditional learning strategies, participants ranging from fifty-eight percent to eighty-eight percent endorsed repetition and practice in the language laboratory. The groups agreed almost unanimously (eighty-two to ninety-eight percent) that is important to "repeat and practice a lot". Interestingly, English language students were somewhat less intense in their support with both of the statements related to practice and repetition. This could be explained with the specific and purposeful emphasis given on more "meaningful practice" starting from the first year at English Language Teaching Department.

Responses concerning communication strategies are of special interest for those who use communicative approach or communication-centered teaching practices in their classes. Participants from all groups were in harmony in their support of assumptions commonly associated with a communicationcentered approach to language teaching. Most of the participants agreed that guessing a word in the foreign language is important and necessary and the great majority (at least eighty-one percent in each group) disagreed with the statement: "you shouldn't say anything in the foreign language until you can say it correctly." On the other hand, at least thirty percent of each group felt that beginning students would probably find it difficult later

in language learning to correct the errors if they are allowed to make in the beginning stages, and at least eighty- seven percent in each group stressed the importance of speaking with "an excellent accent" with respect to pronunciation, the Japanese and Arabic preservice teachers are more concerned about accents than are the other groups. This can be explained by the chance of other language groups meeting different people speaking the language they are learning. For example, it is very common to meet a French person speaking English. Such opportunities can lower anxiety related to the accent. However, it is rather difficult to meet a non-native speaker speaking either Japanese or Arabic.

At least forty percent in each group responded that they feel self-confident speaking in the target language in front of other people. Interestingly, the highest percentage comes from the English pre-service teachers who started practicing presentation skills from the preparation program. Motivations and Expectations: BALLI items 23, 27, 30, and 31 concern desires and opportunities the students associate with the learning of their target language.

A great majority of participants associated language skills with better job opportunities and "many opportunities" to use their new language. In the first case, Arabic language students and in the second case French language students were the most optimistic. In both cases, Japanese language students were the most pessimistic about. In addition, at least sixty-six percent of each group agreed that Turks think it is important to speak a foreign language. In this case, the English pre-service teachers were the less positive (sixty-six percent).

By sampling the participants' desire to get to know speakers of their target language, the next item represents a measure of the integrative motivation of these groups. While fifty-eight percent of the Arabic, sixty-five percent of the French, sixty-seven percent of the Japanese and seventy percent of the English language students agreed with the statement : " I would like to learn this language so that I can get to know its speakers better.", thirty-eight percent of the German language students disagreed with the statement. It is also interesting to note that the majority of the positive responses in each group were "agree" rather than "strongly agree". Since many of the German language participants were either born in Germany or lived there for a while and have returned to continue their education in Turkey, the high disagreement level of German participants can be explained by their prior experiences..

It seems, then, that this group of participants has strong level of instrumental motivation but a very moderate level of integrative motivation. Although many of them expect to be successful language learners, for the most part they do not have strong desires to get to know representatives of the foreign culture.

DISCUSSION & PEDAGOGICAL IMPLICATIONS

The similarity of beliefs among the different target language groups is an important finding of the survey reported here. Although most of the item alternatives drew slightly different percentages of responses, the overall pattern of responses remained strikingly consistent across language groups. As the nature of the data collection procedures employed precludes unambiguous explanations, any small differences found in the beliefs of a particular group of students could be due to measurement error, differences in student populations (the different proportions of males and females in each group, for example), the special nature of learning that language, or the instructional content of specific classes.

Although this study has emphasized the beliefs held by the majority of respondents, almost without exception each item drew the full range of response alternatives. In other words, for any given belief, participants' responses ran the gamut from strongly agree to strongly disagree. Therefore, the BALLI can be helpful to language teacher educators both by determining popular beliefs of their students who are going to be teachers in future as well as in identifying minority groups with different opinions.

The results of this study present only a static, cross-sectional view of student beliefs. The extent to which learner beliefs are variable over time, from person to person, and setting to setting needs to be explored.

As the language teacher is likely to be viewed as an "expert" about language related matters, his or her views whether expressed explicitly in class or implicitly by teaching practice could have a strong influence on the students' own beliefs. Therefore, it is believed that the ideas about language learning will have an important impact on their future students.

Although this research sought simply to categorize and report the beliefs about language learning of language-major university students, we should not ignore some of the specific beliefs these students hold since they will serve as future language teachers. Many researchers (Horwitz, 1988; Victor and Lockhart, 1995; Matsumoto, 1996) have repeatedly pointed out the value of insights gained from investigating learners' beliefs. For teachers, the insights gained, both in a precourse needs analysis and during an instructional program itself, by investigating learners' beliefs about language learning can lead to more effective instructional planning and implementation. For learners, the process of exploring beliefs can lead to the development of more effective language learning behaviors as well as to selfknowledge and autonomy. And perhaps more importantly, programs educating foreign language teachers can include components to increase awareness of their learners' beliefs about language learning in line with the goals of their programs and actual practices in the field.

As Tatto (1998) argues, we really do not have much empirical evidence showing the influence of teacher education on teachers' values and beliefs. Therefore, there is possibly a consensus that teacher education can have little influence on altering teachers' beliefs. Therefore, if trainees hold beliefs about language learning which might negatively affect their future students' learning, it is very important for the teacher educators to work on these beliefs and change them. While the evidence is accumulating that the learners'

REFERENCES

Altan, Mustafa Z. (2003). Language learning strategies and foreign language acheivement, *Education and Science*, 28 (129), 25-31

Benson, P., Lor, W.(1999). Conceptions of language and language learning. In: Wenden, A. (Ed.), *System*, 27 (4)

Cummins, J. (1980). The cross-lingual dimensions of language proficiency: Implications for bilingual education and the optimal age issue. *TESOL Quarterly*, 14, 175-187 beliefs about language learning are important, the beliefs of their teachers are also important. As Peacock (2001) suggests these types of correction activities should be an integral part of TESL core courses and the programs should be designed to create the change in their beliefs, values and attitudes so that real and effective change to happen.

CONCLUSIONS

The BALLI seems to have proven its usefulness in the elicitation and comparison of many student beliefs about language learning. The present findings indicate that students hold a range of beliefs e.g., "some people are born with a special ability to learn a foreign language" or "it is easier for children than adults to learn a foreign language" with varying degrees of validity. In some cases, the term "myth" might be a more accurate characterization of such beliefs.

This article has identified many discrete beliefs held by foreign language-major university students. This is a preliminary inquiry into the belief systems of foreign language-major university learners and the impact of beliefs on learning strategies and language achievement.

Thus, the findings confirm that preservice teachers arrive at the task of language learning with definite preconceived notions of how to go about it. Therefore, foreign language teacher educators and teacher trainers cannot afford to ignore these beliefs if they expect their students to be open to particular teaching methods and to receive the maximum benefit from them. Knowledge of learner beliefs about language learning should also increase teacher educators' understanding of how the future teaching of these people would be.

Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In *Schooling and language minority students: A theoretical framework.* Los Angeles: UCLA

Genesee, F. (1987). *Learning through two languages: Studies of immersion and bilingual education*. New York: Newbury House

Holec, H. (1981). *Autonomy and foreign language learning*. Oxford: Pergamon

Holec, H. (1987). The learner as manager: managing learning or managing to learn? In A. Wenden and J. Rubin. *Learner strategies in language learning*. Prentice Hall, Englewood Cliffs, NJ.

Horwitz, E. K. (1987). Surveying student beliefs about language learning. Learner strategies in language learning. In A. Wenden and J. Rubin. *Learner strategies in language learning*. Prentice Hall, Englewood Cliffs, NJ.

Horwitz, E.K. (1985). Using student beliefs about language learning and teaching in the foreign language methods course. *Foreign Language Annals*, 18 (4), 333-340

Horwitz, E.K., (1988). The beliefs about language learning of beginning university foreign language students. *The Modern Language Journal*, 72, 283– 294

Krashen, S., Long, M., & Scarcella, R. (1979). Age, rate, and eventual attainment in second language acquisition. *TESOL Quarterly*, 13, 573-582

Matsumoto, K. (1996). Helping L2 learners reflect on classroom learning. *ELT Journal*, 50, 143-149 Naiman, N., M. Fröchlich, H. H. Stern & A. Todesco. (1978). *The good language learner*. Toronto: Ontario Institute for Studies in Education

Nation, R. & McLaughlin, B. (1986). Experts and novices: An information-processing approach to the "good language learner" problem. *Applied Psycholinguistics*, 7, 41 56

Newport, E. (1990). Maturational constraints on language learning. *Cognitive Science*, 14, 11 18.

Oh, M.-J. (1996). Beliefs about language learning and foreign language anxiety: a study of American university students learning Japanese. *Unpublished doctoral dissertation*. University of Texas, Austin

O'Malley, J.M. & Chamot, A.U. (1990). *Learning Strategies in Second Language Acquisition*. Cambridge University Press

Oxford, R. (1992). Instructional implications of gender differences in second/foreign language learning styles and strategies, *Applied Language Learning*, 4 (1&2), 65-94

Oxford, R (1993). Individual Differences Among Your ESL Students: Why a Single Method Can't Work. *Journal of Intensive English Studies*, 7 27-42 Oxford, R. & Cohen, A. (1992). Language Learning Strategies: Crucial Issues of Concept and Classification. *Applied Language Learning*, 3 (1&2), 1-35.

Peacock, M. (2001.) Preservice ESL teachers' beliefs about second language learning. A longitudinal study. *System*, 29, 177-195

Rubin, J. (1975). What the good language learner can teach us. *TESOL Quarterly*, 9 (1): 41 51

Rubin, J. (1981). Study of cognitive processes in second language learning. *Applied Linguistics*, 11, 117-131

Rubin, J. (1987). Learner Strategies: theoretical assumptions. Research history and typology. In A. Wenden & J. Rubin. *Learner Strategies in Language Learning*. Prentice Hall, Englewood Cliffs, NJ.

Sakui, K., Gaies, S.J. (1999). Investigating Japanese learners' beliefs about language learning. *System*, 27, 473-492

Tatto, M. T. (1998). The influence of teacher education on teachers' beliefs about purposes of education, roles, and practice. *Journal of Teacher Education*, 49 (1), 66-77

Victor, M., Lochart, W. (1995). Enhancing metacognition in self-directed language learning. In Dickenson, L., Wenden, A. *System*: 23: 223–234

Wen, Q. and Johnson, R.K. (1997). L2 learner variables and English achievement: a study of tertiary-level English majors in China. *Applied Linguistics*, 18, 27–48

Wenden, A.L. (1986). What do second-language learners know about their language learning? A second look at retrospective accounts. *Applied Linguistics*, 7, 186–205

Wenden, A.L. (1987). How to be a successful language learner. In: Wenden, A. and Rubin, J. 1987. *Learner Strategies in Language Learning*, Prentice Hall, Englewood Cliffs, NJ: 119–129

Wong Fillmore, L. (1979). Individual Differences in Second Language Acquisition, in C. J. Fillmore, D. Kempler, and W. S. Y. Wang. *Individual Differences in Language Ability and Language Behavior*. Academic Press.