THE SOCIO-EDUCATIONAL MODEL OF SECOND LANGUAGE ACQUISITION

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ABSTRACT

This article presents an overview of the socio-educational model of second language acquisition, indicating how it can be traced back to theoretical perspectives originating with W.E. Lambert. The model distinguishes between the cultural and educational contexts of formal language instruction and proposes measures of individual differences related to each. A major construct of the model is integrative motivation and it is proposed that it plays a major role in many facets of second language acquisition, from the development of achievement in the language to participation in extracurricular activities that will promote language learning. Much of the research was conducted in Canada with English speaking students learning French in regular school programs but more recently it has been extended to learning English as a foreign language. Results from 12 large samples in six countries indicate substantial relationships between a measure of integrative motivation and indices of achievement in English.

Recently, I published "Motivation and Second Language Acquisition: The Socio-Educational Model" (Gardner, 2010) in which I reviewed 50 years of research that a number of us conducted on the role of individual differences in second language learning. This is the second book that I've written on the subject; the first one was by Gardner (1985). Moreover, there was a previous book written by Gardner and Lambert (1972) that summarized a research project that we had conducted in 1960. A comparison of the three books will reveal that the first was largely a series of studies that investigated a number of measures of attitudes, motivation, language aptitude and achievement in French as a second language conducted in Canada and the United States. The second was written after a ten year research project in which P.C. Smythe and I conducted a number of studies in Canada designed to develop a formal theoretical model of the various roles that affective variables play in learning a second language. This research was concerned primarily with students learning French in Canada, mostly in core French courses at the elementary and secondary school level.

All of the research has as its foundation my MA and Ph.D. theses conducted at McGill University under Wally Lambert's supervision, as well as on theoretical notions he had about the process and implications of second language acquisition at that time and subsequently. From my perspective (cf., Gardner, 1985, p. 133), Wally's view of second language acquisition was that individuals' attitudes and orientation to language study influence their motivation to learn the language and that these variables along with language aptitude account for individual differences in second language proficiency. He proposed further that developing proficiency in the language had implications for one's self-identity which could eventuate in additive or subtractive bilingualism, depending on whether the affective and/or cognitive consequences were positive or negative. He hypothesized too that subtractive bilingualism was more likely characteristic of individuals from a minority group learning the majority language while additive bilingualism was probably more characteristic of members of the majority group learning a minority language. The socio-educational model of second language

acquisition does not link additive and negative bilingualism directly with group membership but it does propose that second language acquisition can have positive or negative affective consequences for individuals as competence in the language progresses because of the issue of identification with the second language community.

The socio-educational model of second language acquisition developed from an attempt to formulate a theoretical model that was based on empirical data, that considered various aspects of second language learning, and that eventuated in hypotheses that could be tested empirically. It too assumes that language aptitude forms a cognitive basis for language development but most attention is devoted to the influence of the affective variables. The focus was not on bilingual immersion programs but rather on core French programs, and oriented primarily towards children who were fluent in only one (the majority) language. The variables identified in the model are assessed by the Attitude Motivation Test Battery (AMTB), which has taken different forms over the years (see Gardner (1985; 2010) for two versions).

In its most recent form (e.g., Gardner, 2010), the socio-educational model of second language acquisition distinguishes between a Cultural and an Educational context, both of which it is argued must be considered, and focuses attention on four complex (i.e., aggregate) variables. Two of the variables reflect the distinction between the two contexts. The first, Integrativeness, assesses variables associated with the cultural context involving characteristics of the individual that makes him or her open to cultural input. In the AMTB it is assessed by three measures: integrative orientation, attitudes toward the target language community, and an interest in foreign languages. The second, Attitudes toward the Learning Situation, is focused on the educational component and involves affective reactions to any aspect of the learning environment. In the AMTB it is assessed by two variables: evaluation of the teacher and evaluation of the course. It is assumed that Integrativeness and Attitudes toward the Learning Situation will be positively correlated with one another, primarily because the reactions toward the classroom environment will be influenced in part by the perception of the environment that will be influenced by the individual's level of integrativeness.

In the model, it is hypothesized that the affective variables associated with each context influence the individual's motivation to learn the language, the third variable in the model. In the AMTB, motivation is assessed in terms of motivational intensity (effort), desire to learn the language, and attitudes toward learning the language. The fourth variable is language anxiety, assessed in the AMTB by language classroom anxiety and language use anxiety. It is assumed that individual differences in language anxiety develop as a consequence of experiences with the language, and that high levels of language anxiety will have a negative influence on the development of skill in the language. Two other variables are also often included in the AMTB; these are single measures of instrumental orientation and parental encouragement, which are sometimes found to be useful correlates of the other measures.

The model views language learning in the classroom context as a dynamic process in which the affective variables representing the educational and cultural contexts serve as the foundation for motivation and that motivation and language aptitude are the two major individual difference variables influencing relative achievement. It recognizes two language acquisition contexts, formal language training (e.g., the language classroom) and informal language experiences (various other contexts in which the language can be learned), proposing that motivation will play a bigger role than aptitude in the informal context largely because it will determine whether or not individuals will even avail themselves of the experience. It is proposed further that experiences in both contexts will have linguistic and non-linguistic outcomes. Linguistic outcomes include knowledge, fluency, etc., in the language, while non-linguistic outcomes include a host of variables including the various AMTB variables – interest, willingness to communicate, etc. Hence, it is not a simple matter that aptitude and motivation are fixed characteristics that determine achievement in the language. The process is in fact fluid and dynamic.

A major concept associated with the socio-educational model of second language is that of integrative motivation. It is argued that learning a second language in a school context is unlike learning other school subjects because it involves making features of another cultural community part of one's own self, and it is this difference that implicates the cultural context and thus integrativeness. It is proposed that the successful acquisition of a second language is facilitated by an integrative motive, and that features of integrative motivation are measured by the variables assessed in the AMTB.

The socio-educational model of second language acquisition was the basis of much of our research and we investigated its implications in a number of different ways. These studies were published in a number of articles but they are also reviewed in the 1985 and 2010 books. Initially, our focus was on the relationship of the AMTB variables to achievement in the second language because this is the clearest way to determine whether these variables are important in language learning. In essence, we reasoned that in classes where students had similar language learning environments, it was important to know potential correlates of achievement in the language because they would be indicative of variables influencing the learning process. Once we had identified what appeared to be the major motivational attributes implicated in language learning,

we turned our attention to other aspects of the learning environment. We demonstrated that experience in the program, and taking our tests on more than one occasion, can result in decreases in scores on Attitudes toward the Language Learning Situation, Motivation, and a to a lesser extent, Integrativeness, but that these losses might be moderated by the nature of the program. We found too that these variables accounted for individual differences in the tendency to drop out or continue with language study once it was no longer required. Also, we showed that these variables were influential in accounting for the amount of language attrition after language study ended primarily because they related to actual or attempted use of the language in the interim. And, we demonstrated that they were related to participation in excursion trips to the other cultural community and attempts to use the language while there; moreover, such participation had predictable effects on these variables. All of these results indicate that motivation has a more general effect than just accounting for differences in achievement.

Other studies have investigated the proposed structure of the socio-educational model of second language acquisition by employing structural equation modeling techniques (i.e., causal modeling). These findings have been replicated a number of times, supporting the generalizations referred to above, and have served to frame the general nature of the socio-educational model (see Gardner, 2010). In addition, we investigated teacher and student perceptions of strategy use as well as their relationship to student motivation and language achievement. The findings were informative in that they demonstrated relatively little relationship between the teachers' and students' perceptions of strategy use. Moreover, there was little correlation between teachers' perceptions and student motivation and achievement, but significant relationships between students' perceptions and motivation and achievement. Finally, we have conducted laboratory based studies to investigate specific hypotheses concerning motivation and aspects of vocabulary learning (i.e., rate of learning, study time, state levels of motivation and anxiety, etc...). Taken together, the results of all of this research confirm the validity of the socio-educational model of second language acquisition.

Most of our initial studies were concerned with the learning of French as a second language in the regular French programs in elementary, secondary, and later in university levels; some studies investigated the learning of English by francophone students. Because of our focus on the Canadian context, other researchers often commented that such results were applicable to Canada because it is a bilingual country, but that they wouldn't apply to other contexts. For example, it has been stated that since English is a global language, our research wouldn't apply to learning it as a foreign language in many countries.

As a consequence, in 2002 I obtained a grant from the Social Sciences and Humanities Research Council to conduct studies on the role of integrative motivation in learning English as a foreign language in six countries: Croatia, Poland, Romania, Spain, Brazil and Japan. In order to conduct this research we developed the International Attitude Motivation Test Battery (AMTB) for English as a Foreign Language, had colleagues in these countries translate it into their languages (and back translated) and then administer it to two samples varying in age and years studying English. In the European countries, two of the young samples were 12 years old while the other two were 13; the older samples were 14 in one country, 15 in two countries and 16 in the other. In Brazil, the two samples were 15 and 17 years old, while in Japan the students were at the university level and were 18 and 20 years of age respectively. The twelve samples varied in size from 132 to 232, with a mean of 177.

Our major interest in these studies was to investigate the factor structure of the battery in each sample, to compare the structures across the age levels and the countries, to assess the reliability of the various scales, and to assess the relation of the measures to English achievement. As presented by Gardner (2010) the factor analyses demonstrated a very high degree of consistency for all 12 samples, yielding three orthogonal factors. In each sample they were identified as Integrativeness plus Motivation, Attitudes toward the Learning Situation plus Motivation, and Language Anxiety confirming the basic structure of the socio-educational model. The factor composition was very similar in the European samples, but showed slightly less similarity in the other two countries, which could be due to cultural and/or age differences. The internal consistency reliability of the measures were comparable in all 12 samples and were generally quite high, however, indicating that the measures themselves were equivalent. The most reliable measures were Attitudes toward Learning English and Evaluation of the English Teacher, while the least reliable were Integrative and Instrumental Orientation. The median reliability of all the measures over all samples was .83.

In our earlier research we often investigated the correlation of measures of achievement with each of the AMTB measures, anticipating that some correlations would be higher than others. In more recent research we have directed our attention more to the correlation of achievement with a single measure of integrative motivation. We have proposed that individuals who are integratively motivated to learn a second language will evidence the ability or willingness to incorporate features of other cultural communities as part of their self-identity, will find the classroom experience favorable, will exhibit high levels of motivation, and will experience low levels of language anxiety. As a consequence, we have computed an

Integrative Motivation score as Integrativeness + Attitudes toward the Learning Situation + Motivation - Language Anxiety, and then computed the correlation of this score with measures of language achievement.

The results obtained with the international form of the AMTB were generally very clear. In those studies, we considered two criteria. One was the final grade obtained by the students at the end of the school year; these data were available for all samples except those from Japan. The correlations ranged from .21 to .50 for the young samples and .40 to .48 for the older ones yielding a median correlation of .45. The other criterion was self-ratings of proficiency in English made at the time the AMTB was administered. These correlations ranged from .47 to .67, with a median of .57. In his analysis of power in statistical analysis, Cohen (1988) defines a correlation of .50 as a strong degree of association, characterizing it as the practical upper limit of predictive effectiveness. These results suggest, therefore, that the construct of integrative motivation is clearly associated with achievement in English as a foreign language.

Much of the material discussed here is described in more detail in the 1985 and 2010 books, both of which reflect Wally's theoretical contributions, and his legacy is honored in the dedication to the 2010 publication. It reads "To: W. E. Lambert who led me to the research area, P. C. Smythe who urged that we formalize and investigate the model, and the students whose participation in our studies truly made this book possible".

REFERENCES

Cohen, J. (1988). S*tatistical Power Analysis for the Behavioral Sciences* (Second Edition), Hillsdale, NJ: Lawrence Erlbaum Associates.

Gardner, R. C. (1985). S*ocial Psychology and Second Language Acquisition: The Role of Attitudes and Motivation.* London GB: Edward Arnold.

Gardner, R. C. (2010). *Motivation and Second Language Acquisition: The Socio-Educational Model*. New York: Peter Lang Publications.

Gardner, R. C & Lambert, W. E. (1972). *Attitudes and Motivation in Second-Language Learning*. Rowley, MA: Newbury House Publishers.