Extroversion and introversion as factors affecting adult English-as-a-second-language learners

David Augustine Baptiste

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EXTROVERSION AND INTROVERSION AS FACTORS AFFECTING
ADULT ENGLISH-AS-A-SECOND-LANGUAGE LEARNERS

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Education:
Teaching English to Speakers of Other Languages

by
David Augustine Baptiste
December 2005
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Nov. 28, 2005 Date
ABSTRACT

This project investigates the extent to which introversion affects English-language learners during the development of second-language literacy skills (listening, reading, writing, and speaking). The subjects selected for the research were students from two English-as-a-second language Level-Two groups at Mount San Antonio College in Walnut, California. Scores from the California English Language Development Test (CELDT) were examined to determine if the extroverted Level-Two groups scored higher or advanced more rapidly between three English CELDT levels (Beginner, Early Intermediate, and Intermediate) than did the introverted Level-Two groups. It was predicted that the extroverted English learners would be quicker to develop their listening, reading, writing, and speaking skills. Notable differences were found between the two types of learners with reference to the four literacy skills examined.
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CHAPTER ONE

INTRODUCTION

Background of the Project

The California Department of Education in its language census completed in 2000-2001 reported a total of 1,512,655 English learners (formerly referred to as limited-English proficient students) enrolled in California school districts in grades kindergarten through twelve. One out of every four California students is an English-language learner; most of these are Spanish speaking. The National Center for Education Statistics (McLaughlin & William, 2004), reported that

Hispanics are the fastest growing student group enrolled in the public school system. Research indicated that the majority of Hispanic children in the United States who are first entering elementary school have limited English proficiency (LEP). Hispanics make up the largest population of English-language learners (ELL) in the US. (p. 6)

The number of adults learning English has increased as immigrants assimilate into society. Community colleges are providing English-as-a-second-language (ESL) classes
because of the need, and giving adult English learners an opportunity to interact with others in a learning environment. As community colleges continue to experience high demand for ESL courses, the institutions will be challenged to deal with issues of learning English and offer programs and services that maintain access and motivate their students.

Definition of Terms

This project utilizes terms from psychology, linguistics, and social-action theory. Each term will be defined and some will be discussed further.

Language-Acquisition Terms

English Language Learner. A student who does not speak English or whose native language is not English, and who is not currently able to perform ordinary classroom work in English, is an English language learner (Massachusetts Department of Education, 2003). His or her overall proficiency level is below Early Advanced; alternatively, the overall proficiency level may be Early Advanced or higher but one or more of the skill-area proficiency levels is below Intermediate (California Department of Education, 2003).
Native Language (NL). The first language a child learns is the native language, also known as the primary language, the mother tongue, or the first language (L1) (Gass & Selinker, 1994).

Second Language (L2). Any language learned after learning the L1, regardless of whether it is the second, third, fourth, etc. (Gass & Selinker, 1994).

Second-Language Acquisition (SLA). The learning of another language or second language after the native language has been learned is considered second-language acquisition. Sometimes this term refers to the learning of a third or fourth language. This L2 can be acquired in a classroom, in a “natural” exposure situation, or in both (Gass & Selinker, 1994).

California English Language Development Test
Language Levels

The purpose of the California English Language Development Test (CELDT) is to evaluate students who are English learners to determine their levels of English proficiency, and annually assess their progress toward becoming fluent-English proficient. The CELDT covers four skill areas in English: listening, speaking, reading, and writing. It is administered in grades K-12 as a mandate
and in post-secondary contexts as an optional placement test.

**Beginner.** According to the CELDT, a learner who is not able to speak or understand English is characterized as a Beginner. The learner at this level physically shows understanding of spoken language in several ways: by following simple directions; pointing to objects when named; using one/two word responses; participating non-verbally; listening and attempting to echo parts of a song, poem, or chant; and responding appropriately when addressed in English (pointing, choosing, etc.) (California Department of Education, 2003).

**Early Intermediate.** A learner who understands simple social conversation is at the Early-Intermediate level. This learner can follow multi-step oral directions; speak with little hesitation; initiate simple conversation; express simplified ideas, opinions, and feelings; describe an object, person, or place; read 20-30 grade level high frequency sight words independently; and write complete, comprehensible sentences independently (California Department of Education, 2003).

**Intermediate.** A learner who can follow complex multi-step directions with teacher assistance can be characterized as Intermediate. This learner understands
extended conversation and dialogue; asks and answers questions in complete sentences; actively participates in group discussions; demonstrates some appropriate use of vocabulary; retells stories using expanded vocabulary and descriptive words; begins to summarize content area information read independently; and begins to use grammar appropriately (California Department of Education, 2003).

**Advanced.** A learner who explains and uses simple idiomatic expressions correctly approximating native English-speaking peers is at the Advanced level, capable of using clear and compressible pronunciation, expression, and intonation; demonstrating fluent understanding of English conversation that includes both literal and figurative meanings; comparing and contrasting elements of literature; reading fluently with appropriate intonation and expression; demonstrating advanced, independent pre-writing, editing and revising techniques; and using advanced grammar (California Department of Education, 2003).

**Comparing Extroverts and Introverts**

**Extroverts.** An extrovert is a person who thinks in a way that centers on the object, task, or person with whom they are interacting. The typical extrovert is sociable,
and does not like learning by reading or studying only (Dewaele & Furnham, 1999).

Introverts. An introvert is a person who thinks in a way that centers on his or her own feelings and thoughts about a situation. Introverts learn by reading or studying in quiet mental reflection. Introverts are in the minority; estimates by the Center for Gifted Education place them between 25-40 percent of the population.

Extroverts Versus Introverts: Learning Differences. One psychological study by Briggs and Myers indicated that extroverts perform better than introverts on speaking skills involving short-term memory (Dewaele & Furnham, 1999). In addition, biological evidence suggests that extroverts are different from introverts because extroverts are easily bored in the absence of high external stimulation (and so seek them out), and introverts become overwhelmed by high levels of external stimulation and so avoid them (Eysenck, 1992).

Reading, writing, social skills, listening, and speaking are elements that English-language learners acquire in their first language (Lightbown & Spada, 1993). According to Wakamoto (2000), if introverted students were able to learn how to use the language-learning skills that extroverted students successfully use in class, they could
progress successfully in second-language acquisition, increase their participation in class, and learn to socialize better with native speakers.

Throughout history, extroversion has been perceived more positively than introversion by psychological theorists (Lightbown & Spada, 1993). As Cahoon (2003) aptly phrased it, "We live in a society that values extroversion. Freud did not like introverts and thought introversion was a pathological flaw. He thought the goal of psychological development was for people to find gratification in the world of external reality" (p. 47).

Laney (2002) explained that there are three major differences between extroverts and introverts: "energy creation" (p. 15), reaction to stimulation, and methods of learning. The first difference is that extroverts are energized by socializing. In contrast, introverts feel energized when they spend time by themselves. This means that extroverted English learners are more likely to develop basic conversation skills because of their outgoing personalities. However, children who are quiet thinkers prefer to focus more on listening rather than speaking, especially when they are in the early stages of learning a new language (Johns & Torrez, 2001).
The second difference, according to Laney (2002), is that extroverted students enjoy being exposed to rich stimuli when learning a second language, because it maintains their heightened arousal level. Introverts prefer to learn a second language at a slower pace because they are easily overshadowed by the communication skills of their extroverted peers (Cahoon, 2003). Eysenck (1992) suggested that introverts have a higher level of stimulation within the cortex of the brain, and that people who are cortically over-aroused try to avoid any circumstances that increase their level of stimulation. Introverted English learners prefer to be independent rather than to interact with large groups. They may refuse to engage in activities that increase their levels of arousal (Wagstaff, 1998). Introverts are very sensitive to outside situations (noise, people, or other external stimuli), as well as internal stimuli (learning a new concept or a new language) (Dewaele & Furnham, 1999).

The third difference cited by Laney (2002) is that introverts prefer to learn only a few profoundly important facts about a topic, whereas on the opposite end of the spectrum, extroverts prefer a broader learning experience. Introverts prefer to learn a few facts in depth because they take longer then extroverts to retrieve information
from long-term memory. Therefore, introverts are at an inherent disadvantage when learning a new language (Dewaele & Furnham, 1999).

Educators need to create a learning environment where many styles of learning can be employed. Both introverts and extroverts have positive and negative outcomes as learners. The main concept is that both student and teacher make the learning environment positive and supportive of communication.

Purpose of the Project

The purpose of this research is to investigate if there is a significant difference in literacy skills between Level-Two extroverts and introverts after three years of English instruction at the community-college level. A second goal is to find out if the extroverted Level-Two groups scored higher or moved more rapidly between the five English language stages (Beginner [B], Early Intermediate [EA], Intermediate [I], Early Advanced [EA], and Advanced [A]) than did the introverted Level-Two groups. The last goal is to examine if there is a significant difference between the extroverted and introverted Beginner groups, the extroverted and
introverted Early-Intermediate groups, and the Extroverted and Introverted Intermediate groups after a given year.

Content of the Project

In this study it is hypothesized that English learners with extroverted personalities require a shorter period of time to develop second-language skills when compared with students who are introverted. This study first examines the extroverted/introverted personality trait, drawing upon previously published research. It then reports the results of the administration of the CELDT test to two groups during their progress from Beginning to Advanced English acquisition levels, comparing extroverts and introverts.

Significance of the Project

The goal of this project is to help teachers recognize and identify students' strengths and weaknesses in order to better understand individual differences in learning habits and study skills. Encouraging student participation--especially those with introverted personalities--will help students increase their self-esteem and foster English-language development.
CHAPTER TWO

REVIEW OF THE LITERATURE

The majority of English learners receive most of their English instruction from regular classroom teachers, many of whom have had no specialized training in this area. All teachers should have received training for teaching these students, but less than three percent possess a credential in language development (Banks & Banks, 2001). It is imperative that teachers understand how the dynamics of classroom communication influence second-language students' perceptions and participation in classroom activities. The objective of classroom instruction is to create an environment that is conducive to both classroom learning and second-language acquisition (Johnson, 1995). According to Skehan (1989), many factors such as intelligence, language aptitude, motivation, age, and personalities of learners affect the learning of English.

Theories of Second-Language Acquisition

There are four theoretical perspectives that explain how the English-language learner acquires a second language: behavioral theory, cognitive theory, Krashen's
monitor theory, and constructivism. Each of these will be discussed in turn.

Behavioral Theory

The behaviorist view was influential in the development of the "audiolingual" approach to language teaching. According to behaviorists, learning a first or second language is obtained by imitation and habit formation (Brown, Malmkaer, & Williams, 1996). Ellis (1997) described this as the belief that learning takes place when English-language learners receive linguistic input from speakers in their environment, input that is positively reinforced by correct repetition and initiations, and negatively sanctioned for incorrect production. As a consequence of reinforcing correct habits, proficient second-language sounds and patterns are developed.

A prime example is when a teacher develops learners' good language habits using pattern drills, memorization of dialogue, or choral repetition of structural patterns (Williams & Burden, 1997). To demonstrate this method, Williams and Burden used an exercise from L.G. Alexander's (1968) course book for children, Look, Listen, and Learn.

Repetition Drill: (Book open). [Instructions]

Ask the pupils to repeat the following
statements after you first initiate it in chorus
then in groups [using the following
procedure]...
Teacher: Look at the first picture.
There is a plate on the table. All together!
Look at the second picture.
There is some tea in the pot. All together!
(pp. 62-63)

The contrastive analysis hypothesis (CAH) proposed
that first-language habits interfered with the learning of
second-language habits. This hypothesis predicted that
when two languages are similar, the learner finds the
"target language" (the language to be learned) easier to
remember; and when the two languages are very different,
the learner will have a hard time remembering (Lightbown &
Spada, 1993). According to Williams and Burden (1997),
research has found that not all errors predicted by the
CAH are actually made. Therefore, the constructive
analysis hypothesis did not predict successfully what
"habits" learners needed to change.

Williams and Burden went on to characterize
behaviorism as an inadequate approach to learning in
general:
In choosing to concentrate only on that which is observable, behaviorism denies the importance of a fundamental element in the learning process, the sense that the learner themselves seek to make of their words, and the cognitive or mental processes that they bring to the task of learning. (p. 13)

Cognitive Theory

Cognitive psychologists tend to see second-language acquisition "...as having both an analyzed and automatic dimension. The analyzed dimension represents the extent to which learners are aware of the structure and organization of their linguistic knowledge, and the automatic dimension represents their ready access to that knowledge" (Richards, 1995, p. 88). During the early stages of second-language acquisition, the learner does not understand the second language's "linguistic system." In other words, English-language learners concentrate on any aspect of the language that they are trying to understand. Through experience and practice, learners are able to use a certain part of their knowledge automatically and unconsciously (Byrnes, 1998).

Information processing can occur at a conscious level of awareness, but this capacity is limited, as people
cannot consciously think about and monitor everything. Thus, various automatic mental control processes, schemata, and other mental mechanisms help the brain to deal with both familiar and unfamiliar situations.

Cognitive theories of second-language learning seek to explain the role of thinking and information processing in SLA (Diaz-Rico, 2004).

Krashen’s Monitor Theory

Monitor theory, proposed by Stephen Krashen, posited that acquisition occurs internally during the time a learner reads and hears a word or phrase that he/she understands. Language acquisition does not require extensive use of conscious grammatical rules, and does not require tedious drill work. The best methods are those that supply “comprehensible input” in low-anxiety situations, containing messages that students really want to hear (Lightbown & Spada, 1993). These methods do not force early production in the second language, but allow students to produce when they are ready, recognizing that improvement comes from supplying communicative and comprehensible input, and not from forcing and correcting production (Lightbown & Spada, 1993). In other words, Krashen suggested that what is formally taught about the second language (e.g., the adjective usually follows the
noun) is learned, not acquired. In the process of listening to a second language, the learner would naturally acquire a range of forms of the language (Brown, Malmkjaer, & Williams, 1996).

Krashen's monitor model is considered one of the most influential theories of second-language acquisition. It consists of five central hypotheses: (1) the acquisition-learning hypothesis: (2) the monitor hypothesis (3) the natural order hypothesis (4) the input hypothesis and (5) the affective filter hypothesis.

The Acquisition-Learning Hypothesis. According to Krashen (1998), learners approach second language in two different ways: The first approach is through learning, which he refers to as conscious knowledge of the grammar of a second language and its application in production. It is aided by the conscious monitoring of error correction (Scarcella, 1990). In other words, if children are consciously taught the rules and grammar of a language, they will be able to self-correct their speech either before or after they have spoken (Hadley, 2001).

The second approach is through acquisition, which is an unintentional process similar to the way children learn a first language (Lightbown & Spada, 1993). Language acquisition requires meaningful interaction in the second
language. Speakers are not concerned with the form of their speech but with the message they are trying to express and understand. The focus is on communication and not on grammar (Gingras, 1978). Thus learning and acquisition are complementary but in some sense opposite in the way second language is learned.

The Monitor Hypothesis. Krashen hypothesized that acquisition is the sole initiator of all second-language speech and is responsible for fluency, whereas learning (conscious knowledge of rules) can function only when there is sufficient time, the focus is on form, and the language learner user knows the rule being applied (Harley, Allen, Cummins, & Swain, 1990). Krashen explained that knowing the rules only helps refine what the learner has acquired through real communication (Lightbown & Spada, 1993). Language learned consciously is used to make corrections, to change the output of the acquired system before or sometimes after speaking (Ellis, 1997).

Scarcella (1990) stated that students use conscious learning to make corrections that improve the form of their English. She offered three conditions that need to be met in order to use the monitor:

1. Time: The learner has to have sufficient time to use the monitor.
2. Focus on form: The student has to be concerned with correctness.

3. Knowledge of rules: The learner must know accurate rules. (p. 61)

The Natural Order Hypothesis. This hypothesis states that children acquire the rules of language in a predictable sequence. The order of the grammatical structure does not change whether it is formally or informally taught (Gass & Selinker, 1994). This hypothesis predicts, for example, that English language learners will acquire the morpheme "-ing" before past-tense morphemes. The acquisition of grammatical structures follows a natural order, which is predictable. For a given language, some grammatical structures tend to be acquired early whereas others are acquired late. This order seems to be independent of the learners' age, L1 background, and conditions of exposure; and although the agreement between individual acquirers was not always 100 percent in the studies, there were statistically significant similarities that reinforced the existence of a natural order of language acquisition (Byrnes, 1998). There is evidence of "a particular developmental sequence, regardless of direct instruction in which linguistic structures are acquired" (Richards, 1995, p. 88).
A large number of studies have provided evidence that learners pass through similarly sequenced stages in development. The first stage is a "silent period" in which the learner accumulates language through listening to comprehensible input from English speakers. During this stage, teachers should not encourage students to speak before they are ready. When speech finally emerges, students use one-word or short phrases to respond to questions and communicate their ideas (Urbschat & Pritchard, 1994).

Young English learners first go through the "nonverbal period" where they realize they cannot use their home language and stop talking. This does not mean they do not try to communicate with others using other means, such as gestures or pointing. Secondly, they go through the "telegraphic speech" stage where they name or identify objects in English. Next is the "formulaic speech" stage where they use chunks or preformulated phrases of situations in observing others using them. Finally, the "productive language use" stage is when children acquire a number of vocabulary items and useful phrases and are able to build their own sentences (Tabors, 1997).
Vygotsky’s notion of the zone of proximal development (ZPD) is pertinent to this discussion. According to Eckman, Highland, Lee, Mileham, and Weber (1995), in order for English learners to progress through the ZPD they move from “object-regulation” (governed by the environment surrounding the learner) to “other-regulation” (the teacher provides strategies) and to “self-regulation” (the learner controls the activities given). Scarcella (1990) referred to this zone as “a map of a student’s sphere of readiness to acquire the second language” (p. 69).

The Input Hypothesis. Krashen stated that language is acquired in only one way: by receiving and understanding messages. An English learner will progress by understanding input that contains forms and structures more complicated than their current level of capabilities or grammatical knowledge (Krashen, 1988). According to Krashen, if a child is at stage i (a given stage), he or she can progress or acquire input that is slightly beyond the current level, thus i+1 (Gass, 1997).

Comprehensible input is spoken or written language that is delivered at a level the child can understand. At the same time, the level should be enough of a challenge that the child needs to stretch just a bit above his or
her current abilities. One way to provide this is to prepare the learner prior to reading (Drucker, 2003).

Ellis (1997) explained that an English learner is able to understand new grammar using background knowledge, which includes extra-linguistic information; as well as their prior knowledge. Lexicons of the native language are continuously available for consultation when the English learner is communicating in the second language (Singleton, 1992). Thus the input hypothesis predicates that a second language is best learned when new input builds upon prior proficiency.

The Affective Filter Hypothesis. According to Krashen (1985, p. 100), understandable input can be effective only when emotional conditions are most favorable, such as the learner’s experiencing enhanced motivation and self-confidence as well as lowered anxiety (Hadley, 2001). Krashen proposed that if the affective filter were up, the English learner would have a difficult time learning new information. However, if the filter is down, the English learner will be able to comprehend or acquire new information successfully (Gass, 1997). A learner who is tense, angry, anxious, or bored will be able to acquire little, if any, new information. Depending on the
learner’s state of mind, the filter limits what is acquired (Lightbown & Spada, 1993).

Motivation is the first affective variable that influences a student. When language-minority students find that the traditions of mainstream Americans are similar to those in their own culture, they are much more likely to succeed. However, if they find that the lifestyles of the mainstream Americans are different from or completely opposite to their own lifestyles, they may acquire the second language much more slowly and may even stop learning before they are proficient speakers (Scarcella, 1990). In contrast, learners who are very motivated to integrate themselves into the second-language culture process the target language more easily (Mayo & Garcia, 2003).

Anxiety is the second variable that affects a student. Three types of performance anxiety that could have a negative impact for the acquisition of a second language are communication apprehension (fear to speak in the second language), text anxiety, and fear of negative evaluation. One goal of instruction is to provide comprehensible input in an environment favorable to a low affective filter (Price, 1991). In this type of environment the students should be able to respond in both
the first language and second language; in addition, error correction by the teacher should be minimal (Harley, Allen, Cummins, & Swain, 1990).

The Constructivist View

Ernst von Glasersfeld, the "father" of constructivism, believed that education has two main purposes: to empower learners to think for themselves, and to promote in the next generation ways of thinking and acting that are deemed important by the present generation (von Glasersfeld, 1995). In his view, constructivist learning is best put into practice by presenting the learners with issues and concepts in the form of problems to be explored, rather than as facts to be digested and then regurgitated. To this end, the teacher's role is very important:

The teacher cannot tell students what concepts to construct or how to construct them but by judicious use of language they can be prevented from constructing in directions which the teacher considers futile, but which, as he knows from experience, are likely to be tried. (von Glasersfeld, 1995, p. 184)

Constructivism lies at the heart of this endeavor, as it offers valuable insights into cognitive as well as
affective aspects of the relationship between teachers and students. Teaching is not merely about conveying information and knowledge, but is also an expression of values and attitudes. What teachers usually get back from their students is what the teachers have brought to the teaching-learning process. In contrast, in constructivist learning, learners construct knowledge for themselves; each learner individually and socially constructs meaning as he or she learns. Constructing meaning is the essence of learning.

For Thomas and Harri-Augstein (1985), constructivist learning and, in general, all approaches to learning and teaching are organized attempts to bring some kind of meaning to human life. For them, education can be an enriching experience, as long as the meanings that emerge are personal and significant in the person’s life. Meaning should also be viable; that is, it should prove useful in mediating one’s transactions with stored knowledge and the surrounding world (Thomas & Harri-Augstein, 1995).

A teacher’s support for the learner influences the learner’s capacity as a constructivist. The student must control the pace of learning and the teacher act as a moderator who facilitates the process of learning.
Meighan and Meighan (1990) suggested that there are at least seven different ways in which teachers construe learners, and that such evaluative constructions have a profound influence on student learning. These constructs can be seen in terms of a continuum that mirrors the nature of the teacher-learner power relationship. The first three constructs are teacher dominated, whereas the latter involve enhanced learner participation.

According to him, learners may be construed as

- Resisters,
- Receptacles,
- raw material,
- clients,
- partners,
- individual explorers, and
- democratic explorers.

More specifically, the notion of learners as resistors posits learners as reluctant individuals who do not wish to learn. The term receptacle means students are viewed as containers to be filled with knowledge. The teacher is seen as having a “jug” of knowledge that is poured into the learners’ “mugs.” This is what Freire (1970) described as the “banking” concept of education,
where learners are like bank accounts where deposits are made and drawn upon.

The teacher can see students as raw material to be taken from early stage of development; and, by adding more information, to be made into a better product. This notion gives the teacher control over what and how the learner learns. A view of students as clients, partners, and individual explorers is learner oriented. Together or separately, this view is that learners have the ability to solve problems and create a learning environment. Lastly, the view of learners as democratic explorers encourages students to work as a whole, and together achieve more.

In summary, learners construct learning patterns for themselves; it helps them put into contrast what they are learning. The teacher's view of the learner influences the constructivist possibilities and thus the outcome of what is learned.

Factors Affecting English Learning

When English-language learners first attend elementary school they have to cope with a greater variety of social and linguistic demands than do native-English speakers (Tabors, 1997). Learning a second language is not easy for anyone, especially a young child or adult.
According to Zehler (1994), it has been erroneously claimed that children have superior second-language-acquisition abilities than older children and adults. Zehler explains that the reason young children can easily communicate with other peers is because they use simpler vocabulary and phrases. Researchers describe this level as "basic interpersonal conversational skills" (BICS), which consist of greetings, information requests, and expressions of feelings (Williams, 2001). English learners usually learn BICS within two to three years (Menken & Look, 2000; Williams, 2001). In contrast, research indicates that developing cognitive academic language proficiency (CALP) in reading, writing, and some content areas in English can take as long as five to seven years. Consequently, this creates a proficiency gap between the native-English speakers and English learners (Drucker, 2003).

Most researchers agree that both the rate and the degree of success of second-language learning are affected by individual learner differences. Hadley (2001) suggested that such factors as age, aptitude, attitude, motivation, cognitive style, and preferred learning strategies need to be considered in any comprehensive theory of second-language acquisition (SLA). Studies have documented
that in a classroom setting, some students progress rapidly, whereas others struggle along, making very slow progress. Some English learners never obtain nativelike command of a second language. Lightbown and Spada (1993) single out four main factors affecting SLA: intelligence, motivation, age, and personality. These will be discussed in turn.

The Role of Intelligence in Second-Language Learning

The traditional view of intelligence is that it is fixed at birth and unlikely to change after the age of five. Intelligence has been considered the main factor in predicting success or failure in schools (Williams & Burden, 1997). Numerous studies have used a variety of IQ tests and different methods of assessing language learning. Conventional IQ tests have been found to be good predictors of academic success at learning languages (Lightbown & Spada, 1993).

Dweck (1985) suggested that people's goals reflect not only their views about intelligence and ability, but also their behavior patterns in various situations. Those who choose performance goals are considered to view intelligence as something fixed and unchangeable. If their confidence in their own ability is high, they will
attribute their success to fixed intelligence. These same people may view failure as a learning experience that can be a helpful tool in providing information for future action.

Language aptitude refers to those verbal aspects of intelligence that facilitate second-language learning. Studies indicate the following:

- Achievement in a second language is positively related to language aptitude. Language aptitude refers to those verbal abilities that facilitate second language learning. Studies indicate that achievement in a second language is positively related to language aptitude. Using a standardized test is most likely the way to go in language learning research. (Gardner, Tremblay, & Masgoret, 1997, p. 346)

The field of SLA is in need of much more extensive research in the area of intelligence and language learning. The connection between second-language acquisition aptitude and intelligence is undertheorized at present.

**Motivation in Second-Language Learning**

Motivation plays a central role in second-language acquisition. High levels of motivation correlate
positively to success in second-language acquisition (Oxford, 1996). Recent studies show that very high levels of motivation characterize older beginners who achieve nativelike proficiency (Marinova-Todd, Marshall, & Snow, 2000). Macaro (2001) stated that there is a strong connection between the use of language-learning strategies and the motivation of learners. Macaro’s research addressed the following question: Do learners who have an intrinsic motivation to learn a language become high strategy users, or is it the case that learners who use a wide range of strategies efficiently become motivated by their own success? (p. 28).

There are two types of motivation incorporated into Gardner and Lambert’s (1972) socio-educational model: instrumental motivation and integrative motivation. Instrumental refers to the practical necessity for learning a language. In other words it describes a group of factors concerned with rewards, such as succeeding in a career or earning a degree (Williams & Burden, 1997). On the other hand, integrative motivation occurs when the learner is studying a language because of a wish to identify with the culture of the native speakers of that language (Mackay & Hornberger, 1996). The learner is interested to acquire word sounds, pronunciations, word
order, and other behavioral and cognitive features that are part of another culture" (Gardner, Tremblay, & Masgoret, 1997).

Gardner and Gardner (2003) investigated the relationship of second-language achievement to five attitude/motivation variables from Gardner's socio-educational model: integrativeness, attitudes toward the learning situation, motivation, integrative orientation, and instrumental orientation. The results of the study showed that the correlations between achievement and motivation are uniformly higher than those between achievement and integrativeness, attitudes toward the learning situation, integrative orientation, or instrumental orientation.

To the contrary, there are children or learners who decide not to learn a second language. If students do not have a purpose or an important reason to learn a second language, such students are unlikely to invest adequate effort (Mackay & Hornberger, 1996). Thus one cannot assume that all learners are automatically motivated or that all learners are motivated in the same way.

Age of Second-Language Acquisition

A great deal of research has been invested toward comparing how younger versus older learners make progress.
in their second-language learning. Through a wide variety of studies two questions have been raised: "When is it more appropriate to begin instruction in a second language?" and, "Is there a difference between how children and adults learn a second language?" (Macaro, 2001, p. 28).

Lenneberg (1967) was the first to clearly define the critical-period hypothesis, which states that successful language learning is extremely difficult, if not impossible, after a certain time, usually puberty. Studies have supported the claim that second-language learners who begin learning as adults are unable to achieve nativelike competence in either grammar or pronunciation (Ellis, 1997). However, to the contrary, recent studies found older beginners attain very high levels of second-language proficiency.

Research has found that second languages acquired before the critical age may be processed primarily by the left hemisphere. However one study found a significant difference in laterality effects between native and late-acquired non-native-English-speaking groups. This suggests increased right hemisphere activation during speech production in late-acquired second language. The right hemisphere participation may increase for second
languages learned after the critical-period age (Patkwoski, 2003). This point suggests that there is no clear agreement on the critical-period hypothesis.

The second question is concerned with the fact that the second-language learner has different learning experiences than the first-language learner. The older the learner, the more experienced he/she is in having acquired his/her first language. With age, an English learner becomes a more sophisticated learner (Hazan & Barrett, 2000). Tabors (1997) mentioned three disadvantages younger English learners may face. First, younger English learners may continue using their native language for a longer period of time than older children. Second, younger children may spend a longer time in the silent stage or nonverbal period. Third, younger children may take longer in acquiring formulaic phrases. They develop problem-solving strategies for breaking down phrases into useful or productive phrases in their new language. Thus age is a factor of how learners learn, which varies depending on the study being analyzed and the consistency of the time the student is learning.
Personality as a Factor in Second-Language Acquisition

Krashen has suggested that the main variable in second-language acquisition is the amount of comprehensible input the learner receives. The nature of the target-language input and the attributes of the individual together are responsible for the learner's ability and desire to make sense of the input (Gass, 1997). Figure 1 shows that the quantity and quality of input and personality attributes are main factors affecting the amount of comprehensible input that the learner receives and the amount of comprehensible output the learner generates (Urbschat & Pritchard, 1994).

Personality Attributes. Personality aspects form attributes that affect the extent to which learners actually use the language (output). Kumaravadivelu (1994) stated, "Intake factors include individual characteristics (e.g. age, anxiety), negotiation, tactical abilities (e.g. learning and communication strategies), affective variables (e.g., attitudes, motivation), knowledge (e.g. linguistic, metalinguistic), and environmental conditions (e.g. social and educational context)" (p. 34).
<table>
<thead>
<tr>
<th>Input</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity (e.g., length of residence, time on task, etc.)</td>
<td>Age</td>
</tr>
<tr>
<td></td>
<td>Cognitive abilities</td>
</tr>
<tr>
<td></td>
<td>L1 literacy</td>
</tr>
<tr>
<td>Quality (e.g., nature of instruction)</td>
<td>Personality</td>
</tr>
<tr>
<td></td>
<td>Personal confidence</td>
</tr>
<tr>
<td></td>
<td>Motivation</td>
</tr>
</tbody>
</table>

Communication Interaction

Comprehensive Input → Comprehensive Output

L2 Proficiency


Figure 1. Input and Attributes in Second-Language Acquisition

A highly outgoing child is more likely to seek out interaction with native speakers than one who is shy. The sociable child is likely to get more comprehensible input because of his/her personality. The child who is unwilling to socialize with other peers will remain isolated, thus limiting exposure to the new language (Tabors, 1997).

Numerous personality characteristics have been suggested that affect second-language learning (Scarcella,
Researchers studying young children's acquisition have observed that there seems to be a personality continuum stretching from socially outgoing (extroverted personality) at one end to reserved (introverted personality) at the other end (Tabors, 1997). For example, some studies have found that some types of successful English learning is highly associated with extroversion characteristics such as assertiveness and adventurousness. However, other types of learning is not associated with extroversion characteristics. The extroversion personality seems to be related to success in communicative ability, but not to grammatical accuracy or knowledge of linguistic rules (Lightbown & Spada, 1993).

**Extroversion and Introversion: A Comparison**

An extroverted English-language learner seems to face fewer difficult challenges during the process of acquiring a second language or advancing in literacy skills (listening, speaking, reading, and writing) than an introverted English-language learner. One reason is an extrovert seems to have a more independent personality than an introvert, who prefers to avoid contact with other peers when learning a second language. An extroverted English-language learner enjoys and seeks social contact from peers when learning a second language. In contrast
introverts tend to focus their attention on concepts and ideas and are more comfortable when they are expected to spend most of their time just thinking. In fact, introverts prefer to reflect before acting. In one study, Wakamoto (2002) found that extroverted English-language learners used more successful oral-learning skills than the average introverted English-language learner. These included strategies such as initiating conversations and asking for clarification from native-English speakers. The implication is that the personality trait of extroversion enhances overall communication ability in second-language acquisition.

**Psychological Differences between Extroverts and Introverts**

According to Ehrman and Dornyei (1998), there are three main differences between extroversion and introversion: "energy creation," "response to stimulation," and "approach to knowledge." Extroverts focus outside of themselves and are energized by activities, people, and things in the outside world (Ehrman & Dornyei, 1998). Research states that 75 percent of the population is extroverted (Wallace, 2000). Two studies reported that extroverted students generated significantly more contradictions and counter examples
during small-group discussions with other extroverts than introverts in their small group discussion. Research has shown that teachers who are extroverted may find it easier to interact with large-class groups all day than their introverted colleagues. They also tend to integrate small-group work and cooperative-learning activities (a number of related methods of organizing and conducting classroom instruction) into their lessons in order to enhance learning (Ehrman & Dornyei, 1998).

Introverts are energized by their inner thoughts, ideas, and feelings. They need to search for a peaceful place where they can recharge themselves or reflect. Introverts can easily get exhausted or “over-stimulated” (Laney, 2002). Introverts reach their tolerance levels much faster than extroverts when exposed to mental stimuli: They will blink their eyes sooner or turn the volume down sooner (Eysenck, 1981). There is evidence that popular music causes a stronger distracting effect on introverts’ performance on various cognitive tasks than on extroverts’ performance (Furnham & Stbrac, 2002). Introverts prefer to spend more time alone, writing poems, painting pictures, reading books, or thinking (Wallace, 2000). In East Asian countries, introverted students tend to be stimulated most by their own ideas and feelings.
Strategies for introverts are working alone, working in dyads with someone they know well, and limiting continuous group work (Rao, 2001).

The second difference consists in the way that extroverts and introverts experience external stimulation. Extroverts search for external stimulation (Laney, 2002). Extroverts reported enjoying social interaction and physical pursuits, and they also indicated a higher propensity for stimulating activities and unusual situations, with fewer tendencies toward avoiding stressful situations (Eysenck & Eysenck, 1995). According to Ehrman and Dorney (1998), extroverts are so similar to one another that observers can notice similar behaviors or traits: for instance, high energy, high optimism, social dominance, oral expressiveness, and impulsiveness. In contrast, introverts are easily stimulated by anything coming from the outside. An introverted person can feel overwhelmed when he/she receives too much noise or activity. In addition, they feel over-aroused when they have to be around people, or have to manage too many projects (Laney, 2002).

Researchers studying young children's second-language acquisition observed that there seems to be a personality continuum from shy and reserved at one end, to outgoing
and sociable on the other. They found that children who tend to be introverted were more likely to approach a second-language situation cautiously. They prefer spending their time practicing quietly with themselves before they move to the next stage.

To the contrary, extroverts search for external stimulation (Laney, 2002). Extroverts reported enjoying social interaction and physical pursuits, and they also indicated a higher propensity for stimulating activities and unusual situations, and fewer tendencies to avoid stressful situations (Eysenck & Eysenck, 1995).

The third way that introverts are different than from extroverts is that they prefer depth. In other words, they enjoy having more intimate friendships. They are not shy, unsocial, or self-centered. They prefer one-on-one conversations rather than large-group conversations (Laney, 2002). Introverts appear to be shy because they prefer to be alone, but they have the ability to function effectively with others (Eysenck & Eysenck, 1985). They prefer to limit their experiences, but feel each of them in depth. Introverts tend to prefer learning situations that are more solitary, prefer written versus. verbal formats, and are highly deductive in approach (Myers & McCully, 1985). Carrel, Prince, and Astika (1996) found
that of the 66 participants who completed the first semester and second semester Integrated Course, introverts significantly outscores extroverts. Their study showed a relationship between being introverted and being high-achieving, as measured by traditional language-achievement tests.

Dewaele and Furnham (1999) found several studies that indicate that extroverts perform better than introverts on verbal learning tasks such as short-term recall tests. Eysenck (1981) also found evidence that introverts take longer than extroverts to retrieve information from long-term memory. Dewaele and Furnham (1999) link the good conversational skills of extroverts to their physiological stress resistance and their lower level of anxiety.

Thus, looking at the three key psychological differences between introverts and extroverts, no single factor has adequately explained how personality traits influence second-language acquisition. One reason for this might be that linguists interested in SLA have been trained in different disciplines, such as linguistics, psycholinguistics, sociolinguistics, and neurolinguistics.

Sociability and activity has been linked to heredity. Some research has found that anxiety may be a negative contributor for people who have to deal with who they are
(self-concept) and how they let others know who they are
(self-expression), to the degree that this takes place
when learning another language (Horwitz, Horwitz, & Cope,
1991). Eysenck (1992) defined the extrovert as one who is
sociable, enjoys parties, has many friends, yearns for
excitement, and is impulsive. The introvert tends to be
quiet, thoughtful, reserved, reflective, skeptical of
impulsive decisions, and preferring, of a well-ordered
supported the theoretical perspective that temperament and
personality are synonymous and that extroversion belongs
to temperament domains. Thus the trait of
extroversion/introversion defines a continuum of both
temperament and behavior.

According to Myers (1992), many studies indicate that
introverts are less happy and satisfied with life than
extroverts. He attributed this optimism to their
temperament. Pervin (2002) suggested that traits used to
describe behavior do not always reflect behavior. He
criticized trait researchers for making judgments about
people in extreme ways. He stated that society generally
assumes that if people are seen as an extrovert, they tend
to see the person as spirited, exuberant, outgoing,
lively, and adventurous. However, they see an introverted
person as quiet, timid, and shy. Jung declared that the introvert tends to be suppressed, hiding the personality from the public eye.

Jung's theory stated that each human being is born with a temperament that places him or her somewhere on an introvert-extrovert continuum. The two dimensions relate to differences in sociability and impulsiveness (Jung, 1964). Jung also saw people as primarily interacting through one of the perceiving traits (concrete sensing or abstract intuition) or through one of the judging traits, logical thinking or values-based feeling (Smith, 1979). Carl Jung coined the term extrovert for people who try to stay in public view. Extroverts tend to focus their perception and judgment on people and objects; they are energized by what is going on in the outer world rather than the inner world of the mind. Extroverts usually prefer to communicate more by talking than by writing and to learn through experience. Thus, extroverts prefer to learn through acting rather than reflecting (Bates & Keirsey, 1985). They gather information from people, events, and social institutions. This can be referred to as the external environment (Erickson & Schultz, 1981). Here, information is gathered from sources such as friends, acquaintances, family, teachers, strangers,
current and past events, churches, schools, television, and other social institutions.

**Physiological Differences between Introverts and Extroverts**

Personality psychologists explain individual differences in terms of temperaments that describe peoples' personalities. Personality is determined by both biological and environmental factors (Dumenci, 1995). In comparison to someone who is an introvert, extroverted students' performance on a task is improved by the presence of others; they benefit from the company of others (Wagstaff, 1998).

Through recent research, scientists are beginning to understand how temperament is influenced by brain mechanisms. In a study of ten-to-twelve year-old children categorized in infancy as high or low reactive to unfamiliar stimuli, a group of researchers found out those who were highly by reactive (introverts) had larger wave V amplitudes compared to children who were less reactive (extroverts). This result implied that the two groups had two distinct types of temperaments, differing on a significant property of brainstem function (Woodward & McManis, 2001).
“D4DR or the personality chromosome is responsible for influencing the human temperament” (Laney, 2002, p. 28). The gene located on the 11th chromosome is responsible for a protein called a “dopamine receptor.” Its job is to encounter the neurotransmitter dopamine. This encounter or neuron release causes electrical charges. The D4DR gene defines the brain’s dopamine pathway, which is responsible for the shortage or release of dopamine in the brain. Dopamine is the brain’s motivation chemical, causing differences among peoples’ personalities. Low amounts of dopamine cause a lack of initiative or motivation; high amounts contribute to a person’s being easily bored and tending toward frequently seeking new adventures (Ridley, 1998).

Dean Hamer studied the D4DR gene by testing people who were thrill seekers (such as bungee-jumpers, skydivers, and ice climbers). He found that this particular group of people had a long D4DR gene, and were less sensitive to the neurotransmitter dopamine (Ridley, 1998). The people who were “low-novelty” seekers had short D4DR genes and were highly sensitive to dopamine (Bower, 1996). A group of researchers found that D4DR occurs often in some parts of the world and rarely in others (King, 1996). Dopamine is critical in how brain pathways are used
by extroverts and introverts. In addition, this neurotransmitter circuit affects both temperament and behavior (Laney, 2002). D4DR appears often in individuals who report high levels of “novelty seeking.” Hakan, Peter, and Jonas (2001) reported that participants with a long dopamine D4DR gene showed poor acquisition of fear conditioning compared with those with short dopamine D4DR.

Dopamine as a neurotransmitter is a factor in extroverts’ personalities. Extroverts need adrenaline, which this neurotransmitter produces. This adrenaline is partly responsible for why they are able to communicate so easily with others, are quick thinkers, and work well under pressure. However, dopamine tends to over-stimulate introverts and triggers the use of the neurotransmitter acetylcholine (Laney, 2002).

Acetylcholine is part of a family of five channel-forming proteins that are responsible for regulating communication between approximately 1000 cells in the nervous system (Hess, 2001). Acetylcholine affects memory and learning (Syitil, 2000). This means that introverts may start talking in the middle of a thought. They may have good memory but take a long time to retrieve information (Kosslyn & Koeing, 1995). This explains why introverts may have trouble remembering words or names.
when they are speaking loud. However, written words use a
different pathway in the brain, and introverts are often
able to write fluently (Laney, 2002).

Extroverts and introverts seek out different levels
of arousal: extroverts have a lower basic level and
introverts have a higher level. When extroverts find
themselves below the optimal level of arousal, they seek
out other people in order to increase their arousal level.
On the other hand, introverts avoid others because they
are easily aroused or sensitive to the “external world.”
They prefer to be with few close friends or to read a book
rather than to join big crowds or a party (Eysenck &
Eysenck, 1985). In a more recent study, 38 introverts and
38 extroverts completed a reading-comprehension task, a
prose-recall task, and a mental-arithmetic task. A
significant interaction between personality and background
was found only in the reading-comprehension task, but not
in the other two tasks. They also found that introverts
are affected more negatively by music and background
distractions than is the case with extroverts (Furnham,
2002). In summary, this research focused on the roles of
activation and arousal in determining overall differential
thresholds to stimuli. On the other hand, research
findings about the relationships among those personality
dimensions, their physiological differences, and cognitive processes have not been consistent; they have resulted in conflicting theoretical explanations for the interaction of these dimensions.

In conclusion, this chapter has explored the approaches that diverse theorists have used to examine SLA from various perspectives. As a review, personality psychologists state that temperaments are personality driven by both biological and environmental factors, whereas content-based pedagogy like focus discipline research that fosters a learning environment within which students become partners and participants in meaningful interaction with peers and teachers to design learning contexts, examine interdisciplinary issues, and articulate knowledge. The question remains, what are the most important overall factors in second-language acquisition? All factors play an important role in laying out directions for future research, and also for informing practice in language teaching.
CHAPTER THREE
RESEARCH PROCEDURES

The purpose of project is to determine if extroverted Level-Two groups of English learners at a local community college scored higher and moved more quickly between the five English-language-learner levels than did introverted Level-Two groups. Specifically, when compared with other ESL students at the same level of instruction, did the students who tested as extroverts over the course of the twelve-week semester attain significantly higher pass rates than did the introverts through each level group?

Sample Characteristics

Quantitative study was conducted in six Level-Two classrooms from an urban community college in California. The target students were Level-Two English learners who had been assessed when at Pre-Level One, Level One, and Level Two using the California English Language Development Test (CELDT).

The CELDT Test in Pre-Level One and Level One assesses two language skills: listening and speaking. At Level Two the test focuses on four skills: listening, speaking, reading, and writing. Students' scores placed
them in one of five groups: Beginner, Early Intermediate, Intermediate, Early Advanced, or Advanced.

A total of 54 English learners participated in the survey: 25 males and 29 females. The ethnic makeup of these students was as follows: 52 Hispanic, one Vietnamese, and one Russian student. The subjects were assigned to either the Introvert group or the Extrovert group by using observations and the measurement tools stated below.

The introverted and extroverted students were identified through an 18-point checklist observation form. This form asked the instructor to identify the students’ learning styles and social characteristics.

The students were retested each semester. The data from each group were compiled from their Pre-Level-One, Level-One, and Level-Two CELDT scores. Their data were then evaluated according to the students’ Pre-Level-One CELDT scores (listening and speaking). The data were then charted to determine the differential growth on the part of students who were Beginner, Early Intermediate, and Intermediate learners.

The Extroversion and Introversion Checklist Observation Form (see Appendix) was taken from the University of Wisconsin Extension Parenting Program. It
was written and created by LeFebvre, a professor at the University of Wisconsin (LeFebvre, 2000). The 18-item form was designed to identify students as extroverts or introverts. The survey instrument consisted of a checklist with two columns, A or B.

**California English Language Development Test**

Students began their studies by being placed in one of three programs. Pre-Level-One students participated in one of three programs: the Language Enrichment Program, the English Plus Program, or the English-Only Program. The CELDT in Pre-Level One and Level One is administered in listening and speaking. At Level Two, the test consists of reading and writing in addition to listening and speaking.

**Checklist**

During the period January 10, 2004 to February 25, 2004 two teachers were responsible for conducting the observations and scoring the Extroversion and Introversion Checklist Observation Form (See Appendix) for each student. Each teacher independently calculated and scored the 54 student observation checklists, and then compared their results. If students scored five or more points on the checklist side A they were designated as extroverted personalities, whereas students who scored between five or more on the checklist side B were designated as
introverted. Five students were used to pilot-check the Extroversion and Introversion Checklist Observation Form. Once the checklist was scored, the students were placed in the extrovert or introvert group. Out of the 54 Level-Two students, 31 were designated introverts and 23 extroverts.

Student Placement

Scores were used to determine students' level placement (Pre-Level One, Level One, or Level Two) based on four skills, listening (L), reading (R), writing (W) and speaking (S). Table 1 shows the placement level according to score.
Table 1. Placement Level According to California English Language Development Test Score

<table>
<thead>
<tr>
<th>Level</th>
<th>Group</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Level One</td>
<td>Beginner (B)</td>
<td>220-404</td>
</tr>
<tr>
<td></td>
<td>Early Intermediate (EI)</td>
<td>405-455</td>
</tr>
<tr>
<td></td>
<td>Intermediate (I)</td>
<td>456-499</td>
</tr>
<tr>
<td></td>
<td>Early Advanced (I)</td>
<td>500-541</td>
</tr>
<tr>
<td></td>
<td>Advanced (A)</td>
<td>542-710</td>
</tr>
<tr>
<td>Level One</td>
<td>Beginner (B)</td>
<td>220-421</td>
</tr>
<tr>
<td></td>
<td>Early Intermediate (EI)</td>
<td>422-469</td>
</tr>
<tr>
<td></td>
<td>Intermediate (I)</td>
<td>470-516</td>
</tr>
<tr>
<td></td>
<td>Early Advanced (I)</td>
<td>517-560</td>
</tr>
<tr>
<td></td>
<td>Advanced (A)</td>
<td>561-710</td>
</tr>
<tr>
<td>Level Two</td>
<td>Beginner (B)</td>
<td>220-450</td>
</tr>
<tr>
<td></td>
<td>Early Intermediate (EI)</td>
<td>451-492</td>
</tr>
<tr>
<td></td>
<td>Intermediate (I)</td>
<td>493-527</td>
</tr>
<tr>
<td></td>
<td>Early Advanced (I)</td>
<td>528-560</td>
</tr>
<tr>
<td></td>
<td>Advanced (A)</td>
<td>561-710</td>
</tr>
</tbody>
</table>

In determining if the extroverted Level-Two English learners moved more rapidly between the five English-language-learner levels than did the introverted learners, it was important that all data review was consistent and fair. Using the observation checklist and the CELDT gave an objective view in the areas of what was evaluated. The placement level according to each score in

53
the above table shows the score placement for each group and level.

The success of any quantitative study is best judged by the quality and usefulness of the data gathered. From both the collection and the gathering of data, it was a success. While one would not argue that survey research, observation, or standard interviewing is ideal for all types of research problems. Knowing that the method chosen effectively measures a complex situation down to a single point, which is easy to grasp and discuss.
CHAPTER FOUR
ANALYSIS OF THE DATA

Extroverts' and Introverts' Results

According to the research procedures presented in Chapter Three, this chapter examines outcomes that are characterized by the use of small samples of students at various score levels according to CELDT results. These responses are compiled into tables that allow the evaluator to compare the behavior of the individual being tested to the range of responses given by people in the norm group.

Tables 2 and 3 show the California English Language Development Test (CELDT) scores in listening, reading, writing, and speaking for the 54 targeted students during their Pre-Level-One, Level-One, and Level-Two college semesters. The individuals' scores were recorded and by means of the score, the individual was placed into the corresponding CELDT-level group. Tables 2 and 3 show gender, program level, and CELDT scores for the subjects.
Table 2. Extroverts' California English Language Development Test Scores by Program Level

<table>
<thead>
<tr>
<th>Student</th>
<th>Gender</th>
<th>Pre-Level One</th>
<th>Level One</th>
<th>Level Two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>L/S</td>
<td>L/S</td>
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</tr>
<tr>
<td>1</td>
<td>F</td>
<td>460</td>
<td>432</td>
<td>492</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>447</td>
<td>485</td>
<td>527</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>388</td>
<td>474</td>
<td>560</td>
</tr>
<tr>
<td>4</td>
<td>F</td>
<td>478</td>
<td>515</td>
<td>527</td>
</tr>
<tr>
<td>5</td>
<td>M</td>
<td>442</td>
<td>493</td>
<td>516</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>493</td>
<td>481</td>
<td>541</td>
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<td>F</td>
<td>429</td>
<td>481</td>
<td>516</td>
</tr>
<tr>
<td>8</td>
<td>M</td>
<td>449</td>
<td>493</td>
<td>560</td>
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<td>9</td>
<td>M</td>
<td>497</td>
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<td>560</td>
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<td>M</td>
<td>493</td>
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<td>499</td>
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<td>M</td>
<td>399</td>
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### Table 3. Introverts' California English Language Development Test Scores by Program Level

<table>
<thead>
<tr>
<th>Student</th>
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<th>Level Two</th>
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<td>43</td>
<td>F</td>
<td>442</td>
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<td>47</td>
<td>F</td>
<td>489</td>
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<tr>
<td>54</td>
<td>M</td>
<td>437</td>
<td>520</td>
<td>541</td>
</tr>
</tbody>
</table>
Table 2 presents the extroverts' Pre-Level-One and Level-One overall CELDT scores on listening and speaking, as well as their Level-Two CELDT scores on listening (L), reading (R), writing (W), and speaking (S). For example, the listening and speaking CELDT scores of student #1 in Pre-Level-One were 460 (equivalent to I) and decreased to 432 (equivalent to EI). In Level Two, her listening scores increased to 492 (equivalent to EI), and her speaking scores decreased to 436 (equivalent to B).

Table 3 presents the introvert's Pre-Level One and Level-One overall scores on listening and speaking, as well as the Level-Two scores on listening (L), reading (R), writing (W) and speaking (S). For example, the Listening and speaking scores of student #24 at Pre-level-one were 374 (equivalent to B) and increased to 434 (equivalent to EI) at level one. At Level Two his listening score increased to 455 (equivalent to EI), and his speaking score was 436 (equivalent to B).

Table 4 summarizes the number of students by level who were classified as Extrovert or Introvert. The number of Introverts was 33 percent greater than Extroverts at the Beginner level, 75% greater at the Early Intermediate level, and slightly less than Extroverts at the Intermediate level, for a total of almost 36% more
Table 4. Number of Extroverts and Introverts by Level

<table>
<thead>
<tr>
<th></th>
<th>Extroverts</th>
<th>Introverts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginners</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Early Intermediate</td>
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<td>14</td>
</tr>
<tr>
<td>Intermediate</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>31</td>
</tr>
</tbody>
</table>

Tables 5, 6, and 7 compare Extroverts and Introverts at three levels. Each comparison table will be presented and analyzed in turn.

Table 5. Pre-Level-One Scores by Personality

<table>
<thead>
<tr>
<th>Personality</th>
<th>CELDT Level</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrovert</td>
<td>Beginners</td>
<td>8</td>
<td>386.25</td>
</tr>
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<td></td>
<td>Early Intermediate</td>
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<td>434.54</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>7</td>
<td>487.86</td>
</tr>
<tr>
<td></td>
<td>Total/Average</td>
<td>23</td>
<td>433.96</td>
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<tr>
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<td>Beginners</td>
<td>11</td>
<td>303.27</td>
</tr>
<tr>
<td></td>
<td>Early Intermediate</td>
<td>14</td>
<td>435.21</td>
</tr>
<tr>
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<td>Intermediate</td>
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<td>473.50</td>
</tr>
<tr>
<td></td>
<td>Total/Average</td>
<td>31</td>
<td>395.81</td>
</tr>
</tbody>
</table>

Table 5 shows that the 8 of the extroverts who were classified as Beginner had a mean score of 386.25,
compared to introvert Beginner learners at 303.27. The 8 extroverts classified as Early Intermediate had a mean of 434.50, whereas the number of introverts at this level scored 435.21. The remaining seven extroverts classified as Intermediate had a mean of 487.86, in comparison to the introverts at 473.50. In total, the table shows Beginner extroverts to outscore introverts, Early Intermediates learners scoring almost even, and Intermediate extroverts with a slight advantage.

Table 6. Extroverts’ and Introverts’ Level-One Scores

<table>
<thead>
<tr>
<th>Personality</th>
<th>CELDT Level</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrovert</td>
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<td>Early Intermediate</td>
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<td>Intermediate</td>
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<td>522.43</td>
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<td>493.35</td>
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<td>Early Intermediate</td>
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</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>6</td>
<td>520.50</td>
</tr>
<tr>
<td></td>
<td>Total/Average</td>
<td>31</td>
<td>471.61</td>
</tr>
<tr>
<td>Total</td>
<td>Beginners</td>
<td>19</td>
<td>444.26</td>
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<td></td>
<td>Early Intermediate</td>
<td>22</td>
<td>488.45</td>
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<tr>
<td></td>
<td>Total/Average</td>
<td>54</td>
<td>480.87</td>
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</table>

Table 6 shows that the eight extroverts classified as Beginner had a mean score of 473.75, whereas all
introverted Beginner learners attained a score of 422.82. The extroverts classified as Early Intermediate learners had a mean of 487.50, compared to the 14 introverted Early Intermediates at 489.00. The seven extroverts classified as Intermediate had a mean of 522.43, whereas the six introverts classified as Intermediate had a mean of 520.50. In total, this table shows mixed results, with extroverted beginners and intermediates leading introverts.

Table 7. Personality Versus Level-Two Listening Scores

<table>
<thead>
<tr>
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<th>CELDT Level</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
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<tr>
<td></td>
<td>Early Intermediate</td>
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<td>545.78</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>7</td>
<td>546.86</td>
</tr>
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<td>Total/Average</td>
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<td>Early Intermediate</td>
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<td>527.31</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>6</td>
<td>492.33</td>
</tr>
<tr>
<td></td>
<td>Total/Average</td>
<td>31</td>
<td>518.13</td>
</tr>
<tr>
<td>Total</td>
<td>Beginners</td>
<td>19</td>
<td>536.00</td>
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<tr>
<td></td>
<td>Early Intermediate</td>
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<td>534.86</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>13</td>
<td>521.69</td>
</tr>
<tr>
<td></td>
<td>Total/Average</td>
<td>54</td>
<td>532.09</td>
</tr>
</tbody>
</table>

Table 7 shows that the seven extroverts classified as Beginner had a mean of 561.57, compared to the 12
introverted Beginner learners at 521.08. The nine extroverts classified as Intermediate had a mean of 546.86, compared to the Intermediate introverts at 492.33. In total this table shows extroverts' score exceeding those of introverts at all levels.

Table 8. Personality and Level-Two Speaking Scores

<table>
<thead>
<tr>
<th>Personality</th>
<th>CELDT Level</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
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<td>Beginners</td>
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<tr>
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<td>Early Intermediate</td>
<td>9</td>
<td>545.78</td>
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<td></td>
<td>Intermediate</td>
<td>7</td>
<td>499.78</td>
</tr>
<tr>
<td></td>
<td>Total/Average</td>
<td>23</td>
<td>496.09</td>
</tr>
<tr>
<td>Introverts</td>
<td>Beginners</td>
<td>12</td>
<td>480.17</td>
</tr>
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<td>Early Intermediate</td>
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<td>467.50</td>
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</tr>
<tr>
<td>Total</td>
<td>Beginners</td>
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<td>484.53</td>
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<tr>
<td></td>
<td>Total/Average</td>
<td>54</td>
<td>489.02</td>
</tr>
</tbody>
</table>

Table 8 shows that the seven extroverts classified as Beginner had a mean of 492.00, whereas the mean for introverts Beginner learners was 480.7. Extroverts classified as Early Intermediate had a mean of 4.99.78, compared to introverts at 494.62. The seven extroverts classified as Intermediate had a mean of 495.43, whereas
the mean for introverts was 467.50. In total, this table shows the advantages to extroverts at all three levels.

Table 9. Personality and Level Two Reading Scores

<table>
<thead>
<tr>
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<th>CELDT Level</th>
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<th>Mean</th>
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<tbody>
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<td>Early Intermediate</td>
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<td></td>
<td>Intermediate</td>
<td>7</td>
<td>447.22</td>
</tr>
<tr>
<td></td>
<td>Total/Average</td>
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<td>430.57</td>
</tr>
<tr>
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<td>Beginners</td>
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<td>433.57</td>
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<td>Early Intermediate</td>
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<td>451.85</td>
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<td>Intermediate</td>
<td>6</td>
<td>483.50</td>
</tr>
<tr>
<td></td>
<td>Total/Average</td>
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<td>438.50</td>
</tr>
<tr>
<td>Total</td>
<td>Beginners</td>
<td>19</td>
<td>426.68</td>
</tr>
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<td></td>
<td>Early Intermediate</td>
<td>22</td>
<td>449.95</td>
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<tr>
<td></td>
<td>Total/Average</td>
<td>54</td>
<td>489.02</td>
</tr>
</tbody>
</table>

Table 9 shows that the seven extroverts classified as Beginner had a mean of 419.00, compared to introvert Beginner learners at 431.17. Extroverts classified as Early Intermediate had a mean of 447.22, whereas introverts classified as Early Intermediates attained 451.85. Seven extroverts classified as Intermediate had a mean of 430.57, whereas introverts at this level scored 438.50. In total, this table shows introverts overtaking
extroverts at both the Early Intermediate and Intermediate levels.

Table 10 shows that the extroverts classified as Beginner had a mean of 427.29 compared to the introvert Beginner learners at 448.33. Extroverts classified as Early Intermediate had a mean of 461.56, compared to the introverts at 473.62. The seven extroverts classified as Intermediate had a mean score of 458.57, in contrast to the Intermediate introverts at 447.17. In total, this table shows Extroverts besting introverts only at the Early Intermediate level.

Table 10. Personality and Level Two Writing Scores

<table>
<thead>
<tr>
<th>Personality</th>
<th>CELDT Level</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
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<td>Extrovert</td>
<td>Beginners</td>
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<td>427.29</td>
</tr>
<tr>
<td></td>
<td>Early Intermediate</td>
<td>9</td>
<td>461.56</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>7</td>
<td>458.57</td>
</tr>
<tr>
<td></td>
<td>Total/Average</td>
<td>23</td>
<td>450.22</td>
</tr>
<tr>
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<td>Beginners</td>
<td>12</td>
<td>448.33</td>
</tr>
<tr>
<td></td>
<td>Early Intermediate</td>
<td>13</td>
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</tr>
<tr>
<td></td>
<td>Intermediate</td>
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<td>447.17</td>
</tr>
<tr>
<td></td>
<td>Total/Average</td>
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<td>458.71</td>
</tr>
<tr>
<td>Total</td>
<td>Beginners</td>
<td>19</td>
<td>440.58</td>
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<td></td>
<td>Early Intermediate</td>
<td>22</td>
<td>468.68</td>
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<tr>
<td></td>
<td>Intermediate</td>
<td>13</td>
<td>453.31</td>
</tr>
<tr>
<td></td>
<td>Total/Average</td>
<td>54</td>
<td>455.09</td>
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</tbody>
</table>
Table 11 summarizes the data in Tables 5 through 10, collapsing listening and speaking scores across Pre-level One, Level One, and Level Two, and combining Beginner, Early Intermediate, and Intermediate classifications. A discussion of these results follows.

Table 11. Personality and English Proficiency: Summary

<table>
<thead>
<tr>
<th>Personality</th>
<th>Literacy Skills</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrovert</td>
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<td>Speaking</td>
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<td></td>
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<td>449.14</td>
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<td>Introvert</td>
<td>Listening</td>
<td>513.58</td>
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<tr>
<td></td>
<td>Speaking</td>
<td>480.76</td>
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<td></td>
<td>Reading</td>
<td>440.58</td>
</tr>
<tr>
<td></td>
<td>Writing</td>
<td>456.37</td>
</tr>
</tbody>
</table>

Table 11 shows that extrovert students in listening show a mean of 551.40 verses 513.58 for introverts, whereas speaking shows a mean of 495.74 for extroverts in contrast to 480.76 for introverts. In reading, extroverts scored a mean of 432.27 versus 440.58 for introverts; an extrovert mean of 449.14 compares to an introvert mean of 456.37.

In conclusion, these data show that extroverts outscore introverts in listening and speaking, whereas the
opposite is true for reading and writing. This may suggest that reading and writing are skills in which a learner who is an introvert has less interaction with others and is controlled by the learner themselves without external stimuli.

In summarizing this chapter, students at three academic levels were scored as extroverts or introverts on a personality checklist. The extroverts, perhaps due to their communication skills, outscored introverts on speaking and listening skills overall.

In reading and writing skills, however, introverts outscored extroverts. Given a larger sample size, more rigorous statistical analysis could test for significance of this data set.
CHAPTER FIVE
SUMMARY

During Pre-level One, the introvert Beginner learners scored lower than the Beginner extrovert group in their listening and speaking CELDT scores. There were also some notable differences between the Intermediate (Level Two) introverts and Intermediate extroverts. Research suggests that dopamine (a neurotransmitter in the brain) can increase the extroverts' outgoing personality. The adrenalin that is produced by this neurotransmitter may be partly the contributor for why extroverts search for any opportunity to communicate with the others native English speakers. Further, they can be quick thinkers and can do well on tests, especially when the test focuses on listening and speaking skills (Laney, 2002). On the contrary, introverts scored lower than extroverts because it takes longer for introverts to retrieve information, and introverts tend to forget things when they are under pressure (Kosslyn & Koeing, 1995). However there were no significant achievement differences between the two Early Intermediate (Level Two) personality types.

The Level-One CELDT scores results showed that the introvert Beginner group performed lower in listening and
speaking skills than the extrovert Beginner group. Analyzing the Pre-Level-One group raw data, some of the Beginner introvert students did not move to the next listening and speaking level. Research studying young children’s second-language acquisition found that introverted students were more likely to approach second-language situations cautiously. They prefer practicing quietly with themselves before they could move to the next stage (Tabor, 1997).

On the contrary, all the Beginner extrovert students moved to the next listening and speaking levels. This could be because extroverts seek any learning opportunity that offers social interaction with other (Myers & McCually, 1985). Overall, Level-One extroverts scored higher than the Level-One introverts. Extroverts’ outgoing and social personality may allow them to seek opportunities to practice their second-language skills (Wagstaff, 1998). Introverts’ reserved and independent personalities may not give them enough opportunities to practice their second language, and may limit them to one-on-one conversations rather than large-group conversations (Laney, 2002). Nevertheless, there was no notable difference between the other two CELDT levels, Early Intermediate and Intermediate.
In the Level-Two groups, the three extrovert groups did better in the listening and speaking sections than the introvert groups. Dewaele and Furnham (1999) reported that extroverts perform better than introverts on verbal learning tasks, such as short-term recall tests and connecting short-term memory. Moreover Eysenck (1981) found that introverts take longer than extroverts to retrieve information from long-term memory; and this affects their thinking processes when they need to communicate. However across the three classifications (Beginner, Early Intermediate, and Intermediate), introvert groups scored better in the reading and writing sections than the extrovert groups, except for the Intermediate introvert group on writing. Researchers found that written words use a different pathway in the brain, and this may be why introverts are able to write fluently (Laney, 2002). Because introverts enjoy spending time alone, often some of their favorite hobbies are writing poems and reading books.

Evaluating the two personalities, the extrovert groups did better in listening and speaking than the introvert groups. On the other hand the introvert groups did better in the reading and writing than the extrovert groups, perhaps because some native English-learner
introverts have difficulty remembering words or names when they are verbally communicating with others (Laney, 2002).

Conclusion

The purpose of this study was to investigate if introverted students required a longer period of time to develop their literacy skills than did extrovert students. After reviewing the Level-Two groups' Pre-Level-One, Level-One and Level-Two CELDT scores, there is evidence to suggest there has been considerable growth in listening and speaking among the extrovert students that were targeted. The Level-Two CELDT scores also implied that introvert students did better in reading and writing when compared with students with extroverted personalities.

Recommendations

Level-Two introverted English-language learners faced some difficult challenges during the process of acquiring a second language, especially in the listening and speaking sections. This research demonstrates that in some areas, the introverts' independent personalities hindered them from practicing their listening and speaking skills successfully. Literature recommends that introverts might be trained in learning the strategies that encourage the conversational success of extroverts (Wakamoto, 2002). To
improve upon this study, a longer time period of observations could be made to determine the students’ personality. Additionally the teachers’ input or recommendation should be considered when learning strategies are taught to students characterized as one or another of the personality types. A follow-up to this study could be observed if introverted students still have difficulty developing their listening and speaking skills in comparison to extroverted students.
APPENDIX

THE INTROVERSION AND EXTROVERSION
CHECKLIST OBSERVATION FORM
The Introversion and Extroversion Checklist Observation Form

Student Name: __________________________________________________________

1. Check either Side A or Side B

   Student prefers to:

<table>
<thead>
<tr>
<th></th>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>__ Think out loud</td>
<td>__ Keep thoughts to self</td>
</tr>
<tr>
<td></td>
<td>__ Show energy and</td>
<td>__ Watch first, then try</td>
</tr>
<tr>
<td></td>
<td>enthusiasm for activities</td>
<td>__ task or activity</td>
</tr>
<tr>
<td></td>
<td>__ May easily be distracted</td>
<td>__ Can ignore distraction</td>
</tr>
<tr>
<td></td>
<td>__ Are attracted to action</td>
<td>__ Like to spend time alone</td>
</tr>
<tr>
<td></td>
<td>and activity</td>
<td>__ to get re-energized</td>
</tr>
<tr>
<td></td>
<td>__ May act before they</td>
<td>__ Like to observe or think</td>
</tr>
<tr>
<td></td>
<td>think</td>
<td>__ about things before</td>
</tr>
<tr>
<td></td>
<td>__ May say things before</td>
<td>__ Pause before answering</td>
</tr>
<tr>
<td></td>
<td>thinking them through</td>
<td>__ new questions</td>
</tr>
<tr>
<td></td>
<td>__ Like variety and action</td>
<td>__ Enjoy individual or small group</td>
</tr>
<tr>
<td></td>
<td>__ Interrupts and finishes</td>
<td>__ Start conversations from</td>
</tr>
<tr>
<td></td>
<td>others’ sentences when</td>
<td>__ from their point of view</td>
</tr>
<tr>
<td></td>
<td>excited and want to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>share their ideas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>__ Thinks out loud while</td>
<td>__ Think ahead and then</td>
</tr>
<tr>
<td></td>
<td>__</td>
<td>__ talking to others</td>
</tr>
<tr>
<td></td>
<td>__</td>
<td>__ responds to others</td>
</tr>
</tbody>
</table>

1.1 Total Responses ______ Total Responses ______

(If students score 5 or more in Column A they are extroverts)
(If students score 5 or more in Column B they are introverts)

REFERENCES


