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## Compiling a checklist guide for English Language development curricular programs

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COMPILING A CHECKLIST GUIDE FOR ENGLISH LANGUAGE  
DEVELOPMENT CURRICULAR PROGRAMS

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

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
Interdisciplinary Studies

---

by  
Carrie Lynn Martin  
June 2001

COMPILING A CHECKLIST GUIDE FOR ENGLISH LANGUAGE  
DEVELOPMENT CURRICULAR PROGRAMS

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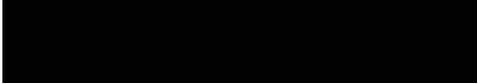
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by  
Carrie Lynn Martin  
June 2001

Approved by:

  
\_\_\_\_\_  
Sam Crowell, Chair  
Language, Literacy and Culture

6-05-01  
Date

  
\_\_\_\_\_  
José Hernández  
Language, Literacy and Culture

## ABSTRACT .

The purpose of this study is to create a curricular checklist guide that facilitates quality instruction for elementary level, grades K-6, second language learners. This study investigates the historical perspective behind bilingual education as well as the role of culture in student's learning. Most importantly, general curricular components are researched as well as existing second language learning theories and brain based learning theory.

In this country, second language learners have unique needs that must be considered and acknowledged, particularly in the classroom setting. There are so many cultures and languages present that the demand is great for a program designed to facilitate such a population. Without the necessary components in a school curriculum program to help aid them into a world of multi-languages and multi-cultures, their success is inevitably at stake.

## ACKNOWLEDGMENTS

I would like to take this opportunity to say thank you to the many people who helped me through this process.

Sam Crowell, you have been and will continue to be a role model in my journey as an educator. Thank you for being an invaluable mentor through my master's process. I would also like to thank Jose Hernandez. With your guidance and wisdom I have been able to reach the end of another 'zone'.

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## CHAPTER ONE

### INTRODUCTION

Our world is comprised of many different people, languages, cultures and beliefs. Over time, technology has given great opportunity and allowed the human race to become acquainted with one another in ways never before thought possible. In today's world, we have the power to see anything or anyone through various modes of transportation, video, literature or even with the World Wide Web.

With this wealth of opportunity come a need and a responsibility to understand and respect other cultures, languages and values. From the beginning moments of our country, we have been a multicultural nation. However, there is little record of history to show for support in such diversity. The historical trend shows that there are struggles between those who identify themselves as part of a dominant culture and those who identify themselves as part of a minority culture.

Within this struggle lie the children whom, by no fault of their own, are at the mercy of these forces.

The children that concern me the most are the second language learners whom are being compelled, in most cases, to give up their primary language for English. Not only are these students acquiring a new language, but are also being expected to simultaneously master academic content in that language (Gersten, Jimenez, 1998, p.91). These children are innocent bystanders of a larger political battle.

Unfortunately, I do not view myself as substantial or qualified enough to challenge this political battle. But I am willing to investigate what it is we as teachers currently need to do to help these students while they are in the crossfire. In fact, all teachers should be equally aware, as the number of second language teachers, especially in the state of California, is growing exponentially. I am concerned with what it is these students need in their voyage to mastery of the English language, and how I should strive to meet those needs. Thus, this study focuses on what the necessary curricular components are to meet the demands of these second language learners.

There are a few smaller related questions that I am also looking to answer with this study. One is that I want to also look into what the needs are of all second language learners, not just second language learners of English. Also, I want to know to what extent does theory lend itself to the classroom practice. Finally, I want to know how brain based learning theory applies to second language learners.

I begin this project with a review of the literature related to the topic. In the literature review, I have covered several topics. It begins with a historical review and cultural perspective with respect to second language learning and bilingual education. It concludes with a look at necessary curriculum components.

The major portion of the review is theory. I have included second language learning theories, cognitive theories, brain based learning theory, sociocultural theory, and sociolinguistic theory. They each give a different but necessary perspective of beliefs on second language learning.

After reviewing the literature, I will then proceed to piece together what components are needed for a second language learning curriculum in the form of a checklist. After creating my checklist, I will share it with a few selected experts and teachers for feedback on its quality and coherence. I will then analyze the results from completing this project. Finally, I will conclude with some implications for further study.

## CHAPTER TWO

### LITERATURE REVIEW

#### Historical Perspective

Depending on the time period, the value of knowing more than one language has constantly changed over the course of United States history. Díaz-Rico, Weed (1995) state, "Bilingual education has existed in the US since the colonial period, but over the two centuries of US History it has been alternately embraced and rejected." What becomes most important in this review is to gain a sense of where this bilingual roller coaster has been, where it is now, and where will it be taking our second language learners. As Hakuta (1990) states, ". . . studies are inseparable from the intellectual traditions that serve as powerful undercurrent and shape the questions that are asked . . ."

Long before the United States became a country, bilingualism was common with working and educated classes. In 1664, there were eighteen distinct languages present in the colonies. By the time of the American Revolution, there was an abundance of German,

Dutch, Swedish, and Polish. Although English was considered to be the official language of the classroom environment by 1879, there was not enough manpower to enforce it (Diaz-Rico, Weed, 1995). English instruction was the norm, but if there were communities with large populations of immigrants, then languages other than English were present in the classrooms (Baker, 1993).

Bilingual schools were provided in effort to maintain the students' linguistic heritage. In 1694, there were German schools present in Philadelphia (Diaz-Rico, Weed, 1995). By the 1880's, German schools were in many communities, such as Baltimore, Cincinnati, Cleveland, Indianapolis, Milwaukee, Pennsylvania, Minnesota, Dakota, and St. Louis (Diaz-Rico, Weed, 1995, Baker, 1993). By the 1900's about four percent of all US elementary schools were German. In the mid 1800's, there were French/English schools in Louisiana and Spanish/English schools in New Mexico (Diaz-Rico, Weed, 1995).

After the 1900's bilingual education faced a drastic change. The number of immigrants increased exponentially (Baker, 1993). In the East, there were a

high number of Jewish, Italian and Slavic immigrants which upset the settlers. In the West, there were a high number of Mexican and Asian immigrants (Diaz-Rico, Weed, 1995). Therefore, the language policy in education began moving toward assimilationism and monolingualism. For example, by the turn of the century, the state of California and New Mexico had English only laws (Baker, 1993).

With this assimilation movement and other political agendas came difficulty for bilingual children. Not only was it emotionally difficult for them because they were seen as handicaps, but academically as well (Diaz-Rico, Weed, 1995). As Cummins (1989) states, "Between 1920-1960 bilingual children performed at considerably lower levels on a variety of cognitive and academic tasks; many also experienced emotional difficulties." In addition, the onset of World War I banned all German out of schools. With World War II, Japanese was banned in schools. Furthermore, in the 1960's, Texas schools were using what was called "Spanish detention", for Spanish students who chose to use their native language while at school (Diaz-Rico, Weed, 1995).

In 1960, a resurgence of bilingual education took hold once again. In 1968 the Bilingual Education Act, also known as Title VII, was passed to provide remedial funding for the 'language handicap' second language learners have (Diaz-Rico, Weed, 1995, Ramirez, 1985). It was the first acknowledgement from congress on this matter. What sparked the passing of this law was a large group of Cuban immigrants into Florida who requested bilingual schooling. Their children received instruction in a dual-immersion method, where the children were learning both English and Cuban simultaneously. The teachers were successful in teaching these children both fluency and literacy in both languages (Diaz-Rico, Weed, 1995). Drop out rates were high for minority children in many other programs, so implementation of what Cummins (1989) calls "compensatory education programs" were used to combat the low achievement.

Thus, in the 1970's, bilingual education moved to two main types of programs in an effort to save the second language learner's primary language- additive bilingualism and subtractive bilingualism. Additive

bilingualism is when the second language is added to the preexisting language. Subtractive bilingualism is where the primary language is replaced with the second language (Cummins, 1989). The trend in bilingual education was turning.

In the 1980's, bilingualism was no longer believed to be a handicap, but actually a positive way of stimulating the brain in intellectual, complex ways (Cummins, 1989). Despite this wonderful new discovery of bilingualism, it was still viewed as some sort of threat to American status (Nieto, 1992). As Diaz-Rico and Weed (1995) state, "Since the 1980's, language loyalties have become a subtle way to reframing racial politics." So, an assimilation movement took place once again. By 1988, sixteen other states in the union passed a law making English the official language of their state. This movement, known as the English-as-Official-Language Movement, has been singly responsible for the opposition present about bilingual education in the 20<sup>th</sup> century (Diaz-Rico, Weed, 1995). But in 1989, the focus shifted again to develop and expand bilingual

programs, as maintaining the primary language became an important goal (Diaz-Rico, Weed, 1995).

Currently, there are many existing countries that are officially bilingual: Canada, Belgium, Finland, Israel, Cameroon, Switzerland, Ireland, and India. Europe and West Africa are also considered bilingual, but for economic purposes (Diaz-Rico, Weed, 1995). In the United States, the legal immigration rate between 1980 and 1990 is very close to the number of immigrants between 1900 to 1910 (Nieto, 1992). The National Clearinghouse for Bilingual Education quoted in 1995 that nearly two million students in US schools speak Spanish as their primary language (Gersten, Jimenez, 1998). By the year 2020, the number of children speaking a primary language other than English is believed to be close to six million (Nieto, 1992). Collier and Thomas (1999) calculate that to be approximately forty percent of the nation's school age children. That makes for a large portion of the US population to ask to assimilate by giving up their language and culture for another. In addition, these vast changes in demographics in the US ". . . have profound implications for education" (Nieto,

1992). By default, this redefines many teachers as teachers of second language learners (Gersten, Jimenez, 1998, p.91).

Today, the struggle for what is best for these second language learners continues. As Nieto (1992) states, ". . . the most common model of bilingual education in the US is the transitional bilingual education approach." This approach is focused on teaching students English as quickly as possible so they can mainstream to the English classroom.

But this is not to say that the most common is the best approach. Clearly, there is a priority at stake for some sort of education that will best provide for the needs of second language learners. The unfortunate part is that the issue is not that simple.

Over the course of history, there have been four major trends in bilingual education. One is that minority groups have been dominated by the Anglo-majority for centuries. There has been segregation and inferiority at schools, punishment for using primary language skills and cultural pride erased. Two, discrimination has moved from being physical to

psychosocial. Three, immigrant children were not discriminated against until the 1900's. Therefore, they did not have to deal with an inferior self-image. Finally, school failure has been attributed to the child and not on the school, system, or encompassing culture (Cummins, 1989).

Ramirez (1985) quotes Richards (1972), "He argues that 'nobody can be expected to learn the language of a social group if at the same time he is denied the means by which he can become a member of that group.'" How else could a child be part of a group if his own culture and values are not adhered? The bilingual child, just as well as any child, is there to learn and deserves respect and appreciation for who they are and what they bring to the learning environment.

### Culture

Culture is an essential part of language. "To learn a language is to learn a culture," as stated by Brinton and Snow (1997). Language is the primary means by which people express their cultural values (Nieto, 1992). Learning a language can be viewed under three perspectives. First, language can be viewed as a

problem, or an obstacle that gets in the way of assimilating to a majority culture. Second, language can be viewed as a human right. Thirdly, language can be viewed as a resource, where preservation of language is valued due to cultural and economic benefit (Baker, 1993). Depending on the view an educator may hold in the classroom also affects how a child's culture is viewed as well.

Culture is like a pair of contact lenses that can be used to see how groups of people organize, experience and formulate their reality (Brinton, Snow, 1997, Nieto, 1992). Nieto (1992) states that there are at least seventeen different ways of understanding reality. She also states that until we have learned to see all seventeen of them, then we only have part of the truth. The aspect of culture that is the most important is not the apparent differences in foods, music, and clothing, but the ordinary, everyday things that take place. These day to day things make up the reality for that culture (Brinton, Snow, 1997).

Thus, Gunderson (1991) discusses the vital role of culture in ESL programs.

They (students) vary in age, color, cultural background, world view, language ability, motivation, interest, sex, socioeconomic status, educational background, and belief in the value of education. These are important variables to consider in the designing of ESL programs.

In addition, Nieto supports that no program can cure all the problems of our learners unless it addresses ". . . the fundamental issues of discrimination and stratification in schools and society" (1992).

In addition, Cummins (1989) also states that programs that build a strong sense of self worth and ability help promote second language learners' academic success. One idea to promote self-confidence is to develop a Classtory, or a history of the class. Each member of the class writes a biography about their culture, language spoken, and the things they do with their friends and family. These biographies are bound together to make a book for all students to view (Nieto, 1992).

In ESL programs it would also be wise to consider how American culture plays a part in the programs. American culture is unlike any other in that many people live in one common land yet come from all over the

world. Nieto says, "What is 'American' is the complex of interactions of old, new, and created cultures" (1992). There have always existed sub cultures within the American culture, but no one single sub culture has predominated. Thus, Nieto further explains how the main American cultural question is no longer how others will assimilate to it or not. It now becomes "How far can society, and the institutions of society such as schools, be pushed to accommodate the changing definition of American" (Nieto, 1992).

Education in the United States has been based on the values of democracy, freedom, and equal access (Nieto, 1992). According to Nieto (1992), the European American, middle class experience is the most taught in the US classroom. But Nieto (1992) states,

If we define curriculum as the organized environment for learning in a classroom and school, we see that it is never neutral but represents what is thought to be important and necessary knowledge by those who are dominant in society.

Therefore, students learn to know what is taught in the classroom as truth and what occurs in their home as untrue, or unimportant. Students want to rejoice in

their cultural pride and want it recognized (Nieto, 1992). This mismatch of the lives between home and school is not consistent with what second language learners need. They need an environment that appreciates their differences among others (Nieto, 1992). Therefore, the aspect of culture cannot afford to be overlooked in the classroom.

This conflict that arises between the native culture and the new language culture of second language learners has always existed. To summarize one of the consequences felt by an immigrant on assimilation, Gersten and Jimenez (1998) quote a line from the novel *Lucy* by Jamaica Kincaid, "Outside I seemed one way, inside I was another; outside false, inside true." If this feeling were true for all second language learners, the acculturation process can be seen as very difficult (Ramirez, 1985). Especially when students are expected to assimilate. Nieto (1992) discussed how researchers have found that when young children learn English in school and lose their native language, major disruptions in home family life occurs.

Research has demonstrated repeatedly that building a child's knowledge in their primary language only improves their ability to function in another language (Cummins, 1989). Yet, despite this encouragement for bilingualism in second language learners, assimilation has been pushed. In 1986, Cummins and Swain listed three principles that were necessary for successful bilingual programs. One is to support the development and maintenance of the first language. Two is to use the two languages separately for instructional purposes. Three is to encourage bilingualism and let the benefits be known (Cummins, Swain, 1986). But historically, there has been little support for these necessary steps. Cummins (1989) states, "The lack of rational policy analysis suggests that the call for English immersion programs is more strongly based on political than on pedagogical considerations."

Nieto (1992) explains how students who resist the assimilation process become more successful in school because they demand respect for their culture and language. "When students' language is used as the basis for their education, when it is respected and valued,

students tend to succeed in school" (Nieto, 1992). In fact, she encourages accommodation without assimilation in order to boost school achievement.

Nieto (1992) also summarizes how culture and school failures are linked. The failures can be caused by a combination of things, such as attitudes, behaviors, a mismatch between home and school expectations, and structures. The structural factors can be broken into two parts - structural factors and cultural/linguistic factors. The structural factors relate to racism, policies, and practices. The cultural/linguistic factors mark a discontinuity between home and school on culture and language (Nieto, 1992). Cummins (1989) also supports this idea by stating that school failure is not because children are not learning English. Therefore, one's identity with their native culture is a far better determinant of school achievement than proficiency in English (Cummins, 1989).

A status of a culture and language can also have an effect on how a second language is acquired (Ramirez, 1985). Depending on the circumstances of the language status, such as Spanish being a primary language in

Southern California, knowledge of this language "is not considered an asset but at best a crutch to use until they master the real language of schooling" (Nieto, 1992). Because of this belief, bilingual schooling for second language learners is not viewed as a cultural asset. It is viewed as "a way station while students learn English" so that they may be rapidly mainstreamed into an all-English environment, or assimilated (Nieto, 1992).

So, Baker (1993) states that bilingual education "needs to be understood within the historical context of in-migration as well as political movements such as civil rights, equality of educational opportunity and melting pot policies." Without this sense of context or cultural understanding, understanding needs of second language learners will be impossible.

One important aspect to keep in mind when obtaining a cultural awareness of students is to think of what type of educational setting would allow second language learners opportunities. These opportunities not only include a way to have a sense of worth and pride about their culture but also opportunities to achieve things

that more dominant cultures acquire. As Friere (1985) states, "How does one make education meaningful in a way that makes it critical and, hopefully, emancipatory."

Although research (Baratz-Snowden, 1988) shows that socioeconomic and cultural factors make educational success different for each student, this can be overcome with a cultural understanding from the teacher. Schools and teachers need to be sensitive to how they view the languages and cultures present in their contexts (Nieto, 1992).

. . . teachers need to learn to respect even those viewpoints with which they may disagree, not to teach that which is 'politically correct' but rather to teach students to develop a critical perspective about what they hear, read, or see (Friere, 1985).

Second language teaching cannot exist in a political vacuum. Teachers need to remember to be sensitive to the cognitive demands as well as the need for contextual support for these learners (Baker, 1993). In addition, they need to remember that students can only be empowered or disabled through them (Cummins, 1989). Encouraging students to take risks, be curious, and to question is a must (Nieto, 1992).

A successful education is something that anyone can and should have, regardless of cultural boundaries. It is a matter of believing it can happen. As Nieto (1992) states, "...intelligence is something that one cultivates, studies hard for, and eventually achieves."

### Theoretical Framework

Theory is an explanation for what we observe happening around us. Knowing theory is helpful because it unites and explains common experience, and allows teachers to go beyond common experience (Griffiee, Gorsuch, 1999). Johnson (1989) states there are four critical building blocks to consider when developing a complete theory of language teaching. The concepts are the language itself, the culture of the language, learning theories and styles, and teaching approaches.

In addition, second language theories need to be able to describe the individual and contextual conditions that are needed for successful second language learning to occur (Baker, 1993). Another needed requirement, as stated by Ramirez (1985) and Cummins and Swain (1986) is that there is sensitivity to

the many factors involved in second language learning, such as personal (age, traits, attitudes, motivation), situational (setting, instructional approaches, teacher characteristics) and linguistic (similarities and differences between L1 and L2). There is caution in focusing on the L1 and L2 differences because as Richard-Amato (1996) states, "The fact is that most of the errors students make in L2 cannot be traced to the differences between L1 and L2." Finally, Cummins and Swain (1986) state how we need a theory that will also describe the developmental process of a second language learner.

Theory is not something that educators like to profess, but is the single most important item that defines what should be happening in the classroom. In the ESL field, most teacher training programs focus on linguistics and methods, ignoring the theory. As a result, most teachers never develop their thinking about theory and how it can relate to their own teaching practices. Teachers learn that theory and practice are two separate things and developing theory becomes more of a luxury rather than a necessity (Griffiee, Gorsuch,

1999). Griffée and Gorsuch state, " The question is not 'Do we need theory?' but 'What kind of theory do we need?'" (1999).

When it comes to teaching language, especially a second language, it is imperative to have some theoretical guidelines to follow. As Johnson (1989) best describes it, ". . . the thorny nature of language education," language teaching is not easy and is a complex process. The unfortunate thing with second language theory is that there is little consensus among researchers in the field as to the nature of language proficiency (Cummins, Swain, 1986). Perhaps, teacher training programs are not the only ones to blame for the lack of theory present in schools. The issues are even unclear at a theoretical level (Cummins, Swain, 1986).

One of the main problems with second language learning theory has been due to the fact that second language learning has not belonged to any particular field of study (Nunan, 1988). Linguists and cognitive theorists have both contributed their view to second language learning theory. However, the two are

completely vast in their perspective of it. Mitchell and Myles (1998) state,

The dichotomy (between linguistic vs. cognitive approaches) is somewhat crude, however, and different aspects of the second language learning process, such as the development of linguistic competence as well as the ability to use language, are increasingly becoming integrated in more complex models which take account of linguistic development as well as cognitive development.

Perhaps there is a need for the two to blend to form a single theory on second language learning.

There has been a couple of consistent commonalties among several researchers. One, is a need for a focus on the different usage of language in different settings, mainly social and academic. Cummins and Swain (1986) say,

In summary, several theorists whose primary interest is in the developmental relationships between thought and language have argued that it is necessary to distinguish between the processing of language in informal everyday situations and the language processing required in most academic situations.

Another, is that ". . . much of the research has documented that students generally need a minimum of 5-7 years to develop the level of English proficiency needed

to succeed academically in school" (Nieto, 1992). It is stated by Cummins (1989) that it takes longer, up to nine years, to achieve native-like status.

Perhaps the inconsistencies that exist in the field is because there is no one right theory (Crawford, 1988). Crawford states that theory is just a matter of putting together what makes sense for you. When talking about second language teaching, Gersten and Jimenez (1998) state,

We believe that it makes more sense to synthesize research from the fields of bilingual education and cognitive strategy instruction and from the general knowledge base on effective instruction as a prelude to improving teaching.

Thus, it makes sense to use some sort of theory rather than none.

In summary, based on the literature of second language learning theory there is no single theory in existence that gives a complete, detailed picture of the complex process that occurs for second language learners. As Mitchell and Myles (1998) say, ". . . we are left with a reinforced impression of great diversity." Regardless of the fact that there are so

many distinct theories, educators cannot ignore the fact that theory is needed in the learning environment. It simply is a matter of deciding what theory best explains their needs. Educators need to inform themselves of what is currently available to them so they can make educated and wise decisions about their classroom approaches.

Cummins, Swain (1986), Ramirez (1985), and Baker (1993) inform us that second language learning theory needs to account for the individual and contextual conditions that play a part in second language learning. Cummins and Swain (1986), as well as Gersten and Jimenez (1998) remind us to take in consideration the difference between social and academic language. Mitchell & Myles (1998) ask us to find a way to blend linguistic and cognitive approaches to second language learning.

With these thoughts in mind, the theory related to second language learning is described in the following section of this paper. The discussion will begin with the seven major hypotheses existent in the field today, which are the Universal Hypothesis, Neurofunctional Theory, The Variable Competence Model, Discourse Theory,

Acculturation Model, Accommodation Theory, and the Monitor Model (Ellis, 1986). Following, will be a discussion of other related learning theories that inform my topic of what components should be included in a second language curriculum program. These theories include Second Language Proficiency Theory, Brain Based Learning Theory and related Cognitive Theories.

#### The Universal Hypothesis

This theory of second language acquisition is grounded in the field of linguistics. Richard-Amato (1996) quoted from a study completed by Roger Brown (1973) that children across a variety of different languages use similar linguistic structures in language development. The study also showed that children made similar errors and that language structures are learned in the same order. Thus, Richard-Amato (1996) states how there are "similar linguistic principles shared by all languages."

She stated how there are three main principles to this theory. The first includes the idea that "linguistic universals impose constraints on the form that interlanguages take." The second says, "Learners

find it easier to acquire patterns that conform to linguistic universals than those that do not." Finally, "Where the primary language manifests linguistic universals, it is likely to assist interlanguage development through transfer" (Richard-Amato, 1996).

So how does Universal Grammar help those learning a second language, if any? Based on the principles described above, the language patterns shared by all languages are useful. For example, in a recent empirical study completed by Epstein, Flynn, and Martohardjono, it was discovered that both L1 and L2 learners of English seem to both prefer object-controlled, infinitive structures, especially at an early stage of acquisition (1996). It was also determined in this study that Universal Grammar is defined when the learner acquires the L1. When an L2 is being acquired, then the Universal Grammar constrains the acquisition process. It is rather difficult to pinpoint how the patterns of language acquisition are transferred to the L2 from the L1. But this process can be accommodated if one assumes that Universal Grammar remains available (Epstein, Flynn, Martohardjono, 1996).

## Neurofunctional Theory

This theory was an attempt by Lamendella in 1979 to explain the connection that exists between neural anatomy and language functions (Ellis, 1986). As quoted by Richard-Amato (1996), Lamendella states there are two language acquisition types - primary and secondary. In primary language acquisition, a child acquires one or more languages between the ages of two to five. In secondary language acquisition, two further types can take place - second language acquisition which takes place in a natural learning environment after the age of five, or foreign language learning which takes place in a more formal learning setting such as a classroom.

In the brain there are different neurofunctional systems that control the process of language acquisition. One is called the communication hierarchy, which is responsible for language and other forms of interpersonal communication. The other is called the cognitive hierarchy, which is responsible for a variety of cognitive information processing activities that are a part of language use.

Neurofunctional Theory does not attempt to name a specific location in the brain where language acquisition takes place. According to Ellis (1986), the left hemisphere of the brain is believed to carry most of the language productions over the right hemisphere. Nonetheless, this theory presents an explanation to further understanding the complex process of second language acquisition.

#### Variable Competence Model

This theory “. . .claims that the way a language is learnt is a reflection of the way it is used” (Ellis, 1986). Thus, language acquisition has two parts; one being a process of language use, such as procedures and rules, and the other is the product, whether it be planned or unplanned (Ellis, 1986, Richard-Amato, 1996). The product can be either both or one of the following - a variable competence or a variable application. With variable competence, the user knows the rule system of a language. With variable application, the user knows how to use those rules in different contextual situations.

It is also suggested that second language acquisition follows a general sequence. First, there is

a knowledge store in the brain that contains interlanguage rules. Next, the learner has a capacity for language use, which includes primary and secondary discourse and cognitive processes. The primary processes are in charge of engaging in unplanned discourse while the secondary processes draw on knowledge during the planned discourse (Ellis, 1986). Ellis states, "Primary and secondary processes account for how L2 learners actualize their linguistic knowledge in discourse" (1986). Then, the L2 performance is variable, depending on the development of L2 rules and processing apparent in the planned/unplanned discourse. Finally, L2 development occurs when new rules are used in discourse (Richard-Amato, 1996). Richard-Amato quotes Ellis, ". . . rapid development along the natural route occurs when the learner has the chance to negotiate meaning in unplanned discourse" (1996).

### Discourse Theory

Discourse theorists, such as Brown & Yule, Fox, Hymes and Hatch, believe that face to face interaction is a vital component in second language acquisition. The more a learner practices in speaking, the better

their second language becomes (Diaz-Rico, Weed, 1995). Richard-Amato states, "Language development should be considered in terms of how the learner discovers the meaning potential of language by participating in communication" (1996). Thus, this theory is an expanded inquiry of communicative competence in order to understand how conversation is used to negotiate meaning (Diaz-Rico, Weed, 1995).

The Discourse Theory is based on the notion of four kinds of knowledge: knowledge about the second language, competence in the native language, ability to use the functions of language, and general world knowledge. All four of these knowledge bases blend together in order to be used in effective communication in the second language. Ellis (1986) quotes Hymes' view of communicative competence and states, ". . . the learner discovers the meaning potential of language by participating in communication."

It is also based on four principles, as described by Hatch in 1978 (Richard-Amato, 1996). One, the discourse theory believes that second language acquisition follows a natural order of syntactical

development. Two, it states that native speakers tend to alter their speech when speaking with non-natives. Three, the rate of second language acquisition is influenced by three conversational strategies, which are: the learner learns L2 grammar in the same order as the frequency of the different features of input, the learner generalizes rules in the new language and later critiques these into smaller parts, and the learner also will first construct sentences vertically before elaborating on them horizontally. Finally, after all these natural steps are taken the learner begins to use the second language in conversation (Richard-Amato, 1996).

#### Acculturation Theory

This theory focuses on the natural way in which a second language is acquired. However, it does not necessarily focus on the internal processes of second language acquisition (Baker, 1993). In 1980, Brown defined acculturation as ". . . the process of becoming adapted to a new culture" and that ". . . language is one of the most observable expressions of culture" (Ellis, 1986, Richard-Amato, 1996). Schumann (1978)

also states, “. . . second language acquisition is just one aspect of acculturation and the degree to which a learner acculturates to the target language group will control the degree to which he acquires the second language.”

Therefore, there exists a social and psychological distance between the learner and the target language culture that determines the acquisition process. The social factors, which occur first, affect the learner as a member of the new language group. The psychological factors, which occurs after the social distance is in place, relates to affective factors which affect the learner individually (Richard-Amato, 1996).

There is a list of social factors that encourage second language acquisition to develop, as described by Schumann in 1978 (Baker, 1993). For example, the target language group must be viewed as being socially equal to the second language learner group. Without this equality, learners are less likely to learn the new language. Also, both groups need to desire assimilation of the learner's social group to the target language group. In addition, both groups need to be willing to

share social facilities as the target group utilizes them. The learner group must also be smaller than the target group in order to ease assimilation. Finally, the second language culture is similar to the target group culture (Baker, 1993).

Since the psychological factors pertain more so to the individual and not the group, these have a direct affect on student learning. One of the factors is language confusion, where the learner has doubt in their capabilities in using the L2. Another factor is culture shock, where disorientation, stress, fear, and anxiety are created from the differences felt between cultures. There is also a degree of motivation and inhibition that comes from the learner.

Schumann is also quoted by Ramirez (1985) that in addition to the social and psychological factors, there are others as well. One of the factors relates to the role of cognitive processes. The learner can use skills such as imitation, generalizations, make inferences and relate learning to prior knowledge and experiences. Another additional factor is the linguistic product produced from the learner. Such examples are morphemes,

questions and negatives. With consideration of all these factors that come into play when learning a second language, ". . . this theory explains why some children with aptitude and ability fail to learn or use a second language" (Baker, 1993).

Schumann (1978) did a study and also discovered that when the social and/or psychological distances are too vast, it will impede the learner's language growth beyond the early stages of acquisition. This is a process that Schumann refers to as pidginization. Ellis (1986) states, "When pidginization persists the learner fossilizes." The learner simply stops his growth in the second language until the social or psychological factors change.

#### Accommodation Theory

This theory is similar to the Acculturation Theory in that it explains second language acquisition in a natural setting, and does not focus on the internal processes. The difference is that while the Acculturation Theory creates an actual distance between the learner and the target language group, the Accommodation Theory focuses on how this social distance

is perceived. Giles and Byrne (1982) completed a study, as quoted by Richard-Amato (1995) and Ellis (1986), and wanted to explore how intergroup uses of language reflected basic social and psychological attitudes in inter-ethnic communication. They discovered that the relationship between ingroups and outgroups are constantly changing, as stated by Baker (1993).

From this study, Giles and Byrne were able to identify five characteristics of a person who would most likely be successful in acquiring a second language. One characteristic is the learner would have a weak identity with his or her own ethnic group. Another characteristic is that the learner would not be concerned about his or her own social status or feel inferior to the dominant group. Also, they would perceive their ethnic group as having low vitality in comparison to the dominant group. This learner would need to see ethnic group boundaries and soft and open, rather than hard and closed. Finally, the learner would need to hold sufficient status within his or her own ethnic group, such as with employment, gender, power, or religion (Baker, 1993, Ellis, 1986).

## The Natural Approach

In the 1960's Asher was looking for another approach to teaching second languages rather than the traditional audiolingual approach. One of his alternatives he created was TPR, or Total Physical Response (Richard-Amato, 1996). Asher (1982), as quoted by Richard-Amato (1996), follows the suggestion that second language learning should be learned naturally. Asher bases his method on four principles. One is that comprehension precedes production. Two, production must be allowed to emerge in stages. Three, the curriculum needs to be based on communicative goals. Lastly, activities should be constructed to lower the learner's affective filter (Richard-Amato, 1996).

Asher (1972) also claimed that there are three essential parts to the way children learn their first language. Based on his study, he determined that first language acquisition is a role model for second language acquisition. "Each of these elements is a clue for creating a powerful strategy to learn a second language" (Asher, 1972). One of the parts is that listening is mastered before speaking. The second part is that

listening skills may also create a readiness in children to speak. Thirdly, there exists an intimate relationship between the language and the child's body.

### The Monitor Model

The Monitor Model is a second language theory developed by Krashen, who has become well known in the education field on the topic. According to Richard-Amato (1996), some see it as the most comprehensible theory in second language acquisition thus far. However, others see it as severely flawed. Baker (1993) states and Nunan (1988) support,

. . . Krashen's theory has often dominated educational research and education debate in second language acquisition. Krashen's Monitor Model comprises five central hypotheses plus other variables that need considering in second language acquisition.

The five central hypotheses are the Acquisition-Learning Hypothesis, the Natural Order Hypothesis, the Monitor Hypothesis, the Input Hypothesis, and the Affective Filter Hypothesis.

In the Acquisition-Learning Hypothesis, acquisition and learning are viewed as being two separate processes in second language acquisition. Learning is seen as

knowing about a language, such as grammar, vocabulary, and errors. While acquisition is seen as an unconscious process used in real communication. The acquisition processes of L1 and L2, like in the Natural Approach, are viewed as being very similar (Baker, 1993, Richard-Amato, 1996).

The Natural Order Hypothesis refers to the way in which conversational English is acquired. In 1982, Krashen discovered that L1 and L2 grammatical structures of the language are acquired in a predictable order, for both children and adults (Richard-Amato, 1996). This order also refers to the acquisition of English morphemes. It also includes that when a learner engages in natural communication, then this predictable order will occur (Baker, 1993).

The Monitor Hypothesis explains the relationship that exists between acquisition and learning. It states there is an editing device, or a monitor, that is used when there is time permitted while language is in use, when there is pressure to communicate correctly, or when the correct rules of speech are known (Baker, 1993). In the monitor, acquisition initiates an enunciation and is

accountable for fluency. Then, learning serves to develop a monitor (Diaz-Rico, Weed, 1995).

The Input Hypothesis is based on the notion that information must be comprehensible before a learner can process it. Cummins and Swain (1986) state that "Comprehensible input is crucial to grammatical acquisition because creating meaning is the necessary first step to acquiring grammar." The notion of 'i + 1' that Krashen created, as discussed by Diaz-Rico, Weed (1995) and Richard-Amato (1996), means that knowledge presented to second language learners should be at their level of comprehensible input, or 'I', plus a little more to encourage growth in the new language.

The Affective Filter Hypothesis is another device that services the acquisition of language by filtering the intake from the environment, which is discussed by Dulay, Burt, & Krashen, 1982 (Ramirez, 1985). It is also reviewed that there is an existing dynamic between the learner and the environment. Such things as age, personality, past language experience, attitude, motivation, self-confidence and anxiety are all emotional variables that get processed by this affective

filter and affect the level of language acquisition (Baker, 1993, Diaz-Rico, Weed, 1995, Ramirez 1985). As quoted by Brown,

If we were to devise theories of second language acquisition or teaching methods which were based only on cognitive considerations, we would be omitting the most fundamental side of human behavior (Richard-Amato, 1996).

However, it is quoted by Baker (1993) that "Krashen does not explain the cognitive processes that underlie acquisition and learning." Other complaints also exist about Krashen's Monitor Model. Cummins and Swain (1986) state, "Although comprehensible input may be essential to the acquisition of a second language, it is not enough to ensure that the outcome will be native like performance." In addition, it has been said that little of his work is grounded in empirical research (Nunan, 1988).

Regardless of what the complaint is on Krashen, it cannot be ignored that his work has moved second language acquisition theory to the cutting edge. In response to his theory, Krashen claims that all successful second language programs should include the following: meaningful comprehensible input, tolerance of

linguistic errors, and no requirements for learners to speak (Ramirez, 1985). Baker (1993) also adds that teachers need to use a natural approach, prepare the learner for real life communication situations, remember the affective filter, and that formal grammar should be limited.

### Brain Based Learning Theory

Although this learning theory is not directly affiliated with second language learners, it encompasses these students by explaining how complex and intricate the human brain is in any learning environment. Leslie Hart was quoted by Sousa (1995),

With our new knowledge of the brain, we are just dimly beginning to realize that we can now understand humans, including ourselves, as never before, and that this is the greatest advance of the century, and quite possibly the most significant in all human history.

This theory has many parts to it. I will begin by discussing the parts of the brain and what each part does, followed by listing the twelve principles of brain based learning and presenting a diagram of the working memory of the brain. Afterwards will be a discussion of how the brain creates memory, how it learns and

transfers that knowledge from one memory location to another. I will also discuss briefly the existing theories of left brain versus right brain. Finally, I will mention some assessment measures that are brain compatible.

"The human brain is complex like a jungle in that it exists to simply survive yet the ecosystem it creates is so dynamic" (Gregory, Parry, 1998). Diaz-Rico and Weed state how learning is the brain's primary function. "Many aspects of the brain help to process reality simultaneously, using thoughts, emotions, imagination, and the senses to understand and interact with the environment" (Diaz-Rico, Weed, 1995). In addition, Gregory and Parry (1998) ask why we teach second languages in a structured fashion, we learn language in a completely random way. They state, "To survive, we have to perceive patterns quickly, weigh them, take action, and store the information for future use"(1998). So as Caine and Caine (1994) say, "We are biologically driven to make sense of our world. Why not capitalize on this?"

The brain has three major parts: the R-complex or the reptilian brain, the Limbic System, which controls the emotions, and the Neocortex, or the thinking brain. The R-complex or the reptilian brain houses the brain stem, which controls vital body functions such as breathing, pulse, and reflexes. It also contains the cerebellum, which monitors movement from all the nerve endings in the body. The Amygdala and the Hippocampus is located in the Limbic System, which is located deep inside the Cerebrum. The Amygdala retains emotional memory while the Hippocampus creates memory by turning working memory into long term storage. The Neocortex contains the Cerebrum. This is where thinking, memory, speech, muscular movement take place. The Neocortex makes up approximately five sixths of the total brain (Caine, 1994, Sousa, 1995).

The brain is made up of two types of brain cells, nerve cells and glial cells. The nerve cells contain neurons that have finger like dendrites on the edges. The brain contains about one hundred billion neurons (Gregory, Parry, 1998). The glial cells hold the neurons together and protects them. The dendrites wait

for connections with dendrites from other neurons. When the neurons connect, a synapse occurs and the process of learning occurs (Sousa, 1995). Recent studies have shown that the more complex the skill demanded of a person in their occupation, the more dendrites were discovered on the neurons in their brains (Sousa, 1995).

The brain is a fascinating organ. With this knowledge, Caine (1994) has created twelve brain-based learning principles. One, the brain is a parallel processor. Two, learning engages the entire physiology. Three, the search for meaning is innate. Four, the search for meaning occurs through patterning. Five, emotions are critical to patterning. Six, the brain processes parts and wholes simultaneously. Seven, learning involves both focused attention and peripheral perception. Eight, learning always involves conscious and unconscious processes. Nine, two different memories exist: a spatial memory system and a set of systems for rote learning. Ten, we understand and remember best when facts and skills are embedded in natural, spatial memory. Eleven, learning is enhanced by challenge and inhibited by threat. Twelve, each brain is unique.

To go along with the principles, there exists an Information Processing Model that describes the process of the working memory of the brain, or in the Neocortex. To begin, the brain uses the sensory memory, or the five senses (sight, hearing, touch, taste, and smell) to obtain information from the environment and that information then goes to the perceptual register. The perceptual register determines whether the brain should pay attention to the stimulus or ignore it (Sousa, 1995, Gregory, Parry 1998). If it chooses to ignore it, the information gets thrown out. If it chooses to keep the information, it then sends it to the short-term memory. The short-term memory uses it and then goes through the same processing manner, asking itself whether keep the information or throw it out. If the short-term memory keeps it, it sends the information to the working memory. The working memory works very closely with the long-term memory. The long-term memory houses the cognitive belief system, where the purpose and/or meaning for the piece of information can be evaluated. If the long-term memory decides to keep the information, it is stored until needed for further experiences. If

the long-term memory does not find the information valuable, it returns the unwanted item to the working memory, where it is thrown out (Sousa, 1995).

There are two types of long term memory - the procedural memory, or the 'how' and the declarative memory, or the 'what'. Declarative memory can either be classified as episodic memory, such as a narrative or semantic memory, such as something meaningful and purposeful. Thus, for optimal learning environments it is best to work with both episodic and semantic memory. This way, information is not only made sense of, but it becomes meaningful for the learner as well, and retention increases. One example would be to use closure in the classroom. Without sense and meaning, new information will most likely not be stored (Sousa, 1995). Another way to increase retention of knowledge in long term memory is to make connections between separate pieces of information so generalizations can be made. Not only will this increase retention, but will increase the likelihood of successful retrieval into the working memory (Gregory, Parry, 1998).

While long term memory is for the most part permanent, short term and working memory are quite different. Short memory only holds information for about thirty seconds or less and working memory can only handle a few items at once (Sousa, 1995). But, Gregory, Parry (1998) and Sousa (1995) state how chunking information together is an effective way to increase the working memory's capacity. This fact certainly shows opposing evidence for direct teaching. However if direct teaching is used, Gregory and Parry suggest, ". . . stop every 10-15 minutes and allow students to discuss the presentation's main ideas" to allow for debriefing of the working memory (1998).

As demonstrated in the Information Processing Model, these three memory stores constantly interact with incoming information. Bits of knowledge can go from the short-term memory to the working memory to the long term memory and back to the working memory again. Sousa (1995) states that every time information is retrieved from the long-term memory into working memory, that information becomes more deeply embedded and is relearned.

Another aspect of memory is experience. Caine (1994) states, ". . . our experiences shape our brains, and then our brains shape our experiences." The brain learns by building on past experiences. The brain constantly goes through this pruning process after each experience, deciding what is most meaningful. This process is most active between the ages of two to eleven (Sousa, 1995). Therefore, children who are exposed to enriched and complex environments have more highly developed brains, which increases their ability to learn (Caine, 1994).

One interesting notion is that since our environment shapes our brain, our teaching in the classroom does not reflect how today's children are being programmed to learn. Generally speaking, fifty years ago when children had experiences provided for them, abstract and symbolic programs were quite resourceful in the schools. But today's children are receiving their experiences through the passive consumption of television. When the abstract and symbolic programs are combined with children who lack

the experience, they don't match up (Gregory, Parry, 1998).

So, where an experience takes place is a huge part of how information is stored in the brain. This is a notion that can be capitalized on in the learning environment, such as taking a field trip to supply the experience, as many of today's students are starved for real-life experiences (Gregory, Parry 1998). However, Caine (1994) suggests that the human brain does not automatically learn enough from our experiences. What is critical is how the experience is used. Thus Caine (1994) suggests for teachers to teach students how to capitalize on experiences and how to appropriate them.

Experiences are also helpful in other ways for shaping the brain's learning process. One way, is that the brain learns, retains and recalls from experiences by depending partly on emotion. As Caine (1994) states, "Emotion energizes memory." Sousa also states, ". . . the perceptual register and short term memory use experience as the criterion for determining the importance of incoming data to the individual" (1995). If the emotions, view incoming content as 'bad' due to

previous experiences, then the perceptual register will refuse that content (Sousa, 1995). Christison (1999) stated how ESL teachers have always seen their second language learners experiencing this.

Another term for this refusal process is downshifting, where the brain gears down to its more primitive, survival state. Higher level processes, such as thinking, can only take place when there is no environmental threat. Thus, in the learning environment, it is essential that a 'relaxed alertness' be provided, or in other words, a low threat but a high challenge (Caine, 1994).

The brain also uses experience to develop language. As Caine (1994) states, "We learn our native language by a partially random and a partially orchestrated immersion in a variety of interactive experiences. Speaking and writing are ways of making those experiences understandable."

Our retention of knowledge has a lot to do with the way it is presented to us. For example, the brain tends to have what is called a primary-recency effect. This means that we tend to remember information the best when

it comes first and last. After information is presented to the brain, there is a high interest by educators to know how much information has been retained. Sousa (1995) states, "If a learner cannot recall new learning after 24 hours, there is a high probability that it was not stored and, thus, can never be recalled." He also states that the brain has about a 5% retention of what we hear, a 10% retention of what we see, 20% of what we hear and see, 30% of what we can demonstrate, 50% of group discussion, 75% of practicing by doing, and 90% of teaching others.

Our retention rates can also be affected by age. From ages 0-5, the capacity of the working memory is limited to approximately two items. From the ages of 5-14, the capacity increases to approximately five items and beyond age 14 it rises to about seven items. This is because the brain has a fatigue time and begins to incorrectly process after intent focus has been placed on one particular item. Children ages 0-10 have a fatigue time of 5-10 minutes and from ages 11 and up is about 10-20 minutes (Sousa, 1995).

Retention of information can also be affected by rehearsal. The brain actually needs rehearsal to precisely retain information. Using things like mnemonic devices help students to recognize the patterns in things. But Sousa (1995) says, "Since practice makes 'permanent', allowing students to rehearse something for the first time while away from the teacher is very risky . . . they will learn the incorrect method well." Therefore, the teacher needs to scaffold, or support, the learner until they are successful.

The brain's memory functions using two distinct systems. Both systems, the taxon system and the locale system naturally interact with one another to create meaning. The locale system houses memories that exist in relationship to where we are. This exists for purposes of survival. It creates a spatial map to guide our movements and interactions within our surroundings and that stays with us. The map formation is motivated from novelty, curiosity, and expectations that are inside each of us. This spatial map can be enhanced by sensory input, such as a simulation of Native American life (Caine, 1994).

The taxon memory system is used to remember lists, or taxonomies. This system creates habits, and thrives on practice and rehearsal. Extrinsic motivation is necessary because the single items that are memorized are isolated from context and are not initially meaningful (Caine, 1994).

In a classroom environment, both of these memory systems come into play and depend on one another. Without the help from the locale memory system, learning becomes meaningless and segmented. Thus, thematic teaching is imperative because themes create a context, or a mental map of the information. On the contrary, if the taxon memory system is not learned in relationship to some form of context, the information remains in isolated bits (Caine, 1994).

In the brain there are two distinct hemispheres - the right and the left. The left hemisphere is considered to be more logical and analytical whereas the right hemisphere is considered to be more creative and spatial. Thus, the left hemisphere would most easily recognize words, letters and numbers and the right hemisphere would take more to faces, places and objects.

Learners, namely second language learners in the early stages, who tend to be more right-brain dominant will have different needs than a learner who is more left-brain dominant will (Sousa, 1995).

To assist these students in the learning environment, there are methods educators can use to facilitate students' learning. "Teachers, then, need to ensure that their lessons contain activities that stimulate and involve both hemispheres during the learning process" (Sousa, 1995). Activities that use imagery, timelines, and concept maps are valuable. This gives an opportunity to approach concepts both verbally and visually, logically and intuitively.

If teaching to the right brain dominant students, there are particular methods that are most useful. For example, visual cues and hands-on learning is very effective. Also, allowing direct experience through role-playing, simulations, and student interaction time works well. Giving these students options in their assignments, such as an oral or written report. Or when teaching a lesson, they are linked to previous lessons

and closure is used often. Finally, the use of similes and metaphors are powerful (Sousa, 1995).

For the left brain dominant student, there are recommended methods as well. For example, the talkers can be distributed to spark discussion amongst the classroom. Also, allow students to read, write and compute often. Bulletin boards should be tied directly to content. The whiteboards and chalkboards should have clean erasures. Creating and analyzing metaphors is helpful for these learners. Lastly, stress the importance of being on time and encourage students to set goals, attain them, and reward themselves (Sousa, 1995).

Regardless of the right brain or left brain dominance, about 95% of all new learning during our lifetime is through sight, hearing and touch (Sousa, 1995). Our brains do not learn like machines, where we can control how and when it will happen. Learning takes place over time (Caine, 1994). Learning can take place in two ways - rote learning and contextual learning. Rote learning is not very effective for long term memory, however contextual learning is (Gregory, Parry

1998). Contextual learning facilitates all the complex memory systems in the brain. It is very difficult to not learn in a contextual learning environment because we are always in a physical context (Caine, 1994).

Understanding how the brain creates, stores, and recalls memory is vital to understanding how we learn. In addition, educators need to remember these facts when working with learners. Assessment especially needs to be brain based, as it is the measuring tool of student growth. Caine (1994) states,

. . . our methods of evaluation govern the way we teach and the freedom to learn. The result is precisely what we have - a majority of teachers teaching to simplistic tests, teaching for memorization, and thereby limiting what else students can learn and the connections they can make.

If our instructional methods are going to be driven with brain based theory, then our assessment should align with it as well.

Our brains use observations and pattern seeking to evaluate information. We first observe to discover the patterns and then generalize a conclusion about that information. We then assess our conclusion based on the observations (Sousa, 1995). This process requires much

reflection, which is the ability to question, analyze, compare, contrast, and organize thoughts (Caine, 1994). The brain handles three types of reflection: reflection on feedback from others, reflection without assistance, and reflection of personal awareness (Caine, 1994).

Knowing this, Caine proposes four brain-based guidelines to use in evaluating learners. One, is to assess the ability to use content area language in complex situations and social interactions. Another is to perform in unanticipated situations. Thirdly, is to assess the ability to solve real problems using skills and concepts. Finally, assess the ability to show, explain, or teach the idea. Therefore, the ideas for assessment here are very different and less formal than traditional assessment, but do coincide with how the brain naturally learns.

### Second Language Proficiency Theory

Second Language Proficiency Theory was created in the early 1970's and has been developed upon since then. In 1973 Labov believed that ability and language proficiency were linked. He also believed that student failure was due to sociocultural factors. In 1975

Bruner introduced his belief that language proficiency was made up of two parts. One part was communicative competence, which referred to utterances made within a context, and the other was analytic competence, which aided thought processes. In 1977, Olson agreed with Bruner that language proficiency had two parts, but that the parts were meaning-based. He stated that meaning was created extrinsically through utterances and intrinsically through text. In 1978, Donaldson stated that children go through two distinct cognitive processes. One process is the embedded process, which includes natural speech. The other process is disembedded processes, which refers to academic contexts where the learner is required to focus on linguistic forms of language. Also in 1978, Oller described his theory as global language proficiency. He stated that a strong relationship existed between language proficiency and academic content areas. He believed in the language across the curriculum approach (Cummins, Swain, 1986).

Many theorists in the field do not support his beliefs (Cummins, Swain, 1986). For example, Cummins and Swain (1986) state,

Researchers have suggested ways of making second language teaching and testing more 'communicative' on the grounds that a communicative approach better reflects the nature of language proficiency than one which emphasizes the acquisition of discrete language skills.

But, this theory is limited in what it can do for second language learners because it does not emphasize any existing relationship between academic performance and the communicative competence (Cummins, Swain, 1986).

However, the theory most discussed is the communicative competence theory, presented by Bruner in 1975. Communicative competence is defined as "the ability to convey and interpret messages and to create meaning" (Diaz-Rico, Weed, 1995). This theory, according to Cummins and Swain (1986), was created mainly from a review of the theoretical literature. The communicative competence theory consists of four main competencies: grammatical, sociolinguistic, discourse, and strategic (Baker, 1993, Diaz-Rico, Weed, 1995, Cummins, Swain 1986, Ramirez, 1985).

Grammatical competence is the mastery of a language code, which include lexical items, rules of word formation, sentence formation, literal meaning,

pronunciation, and spelling. Sociolinguistic competence is mastery of the use of the language in different contexts. It also stresses correct use of meaning and form. Discourse competence is the mastery of how to combine meanings and forms to achieve a unified text in different situations. Finally, strategic competence is the mastery of verbal and non-verbal strategies to make up for breakdown in communication that are due to insufficient competence (Ramirez, 1986).

Second language proficiency requires time, interaction, and teacher/student collaboration to develop (Ramirez, 1995). The development of second language proficiency follows a predictable pattern for each learner. The developmental process always begins with the social context and uses the learning conditions and the learner's characteristics to shape the learning process. After the learning process takes place, the outcomes can be measured on any range from test performance to impressionistic ratings to interlanguage (Ramirez, 1995).

## Sociocultural Theory

Vygotsky's theory includes four main principles. One, he believed that children construct and co-construct knowledge with their teachers and/or more capable others. Vygotsky saw how physical and social interactions were needed for development to take place. Also, he felt that when learners construct knowledge it is important to first identify what the child initially understands and then provide the necessary support for that child's success.

The second principle is that he believed that development and learning couldn't be separated from social context. Vygotsky saw three distinct levels of social influence in learning. One being the immediate level, including the people the learner is currently interacting with. Two being the structural level, including the family and school structures. And three being the general cultural level, including society as a whole. Our culture not only shapes whom we are but also how we learn.

The third principle is that he believed learning could lead development. His theory states how

“. . . not only can development impact learning, but learning can impact development.” Finally, he believed that language plays a central role in mental development. Vygotsky felt how language was not only a part of the cognitive process but that it was also a tool used in the development of cognition (Bodrova & Leong, 1996).

Despite the fact that Vygotsky was never able to mature his theory, there are other theories in existence that compare to his first principle of learning. For example, Jean Piaget said how children are active in acquiring their knowledge. Rather than viewing children as 'a vessel waiting to be filled with knowledge', they are viewed as active participants in their learning. This active effort is what helps them learn. They both also believe that children use experiences and their age to construct meaning for themselves. Experiences are believed to provide and reshape children's knowledge. Their experiences are in respect to their age as well. Generally speaking, Piaget and Vygotsky are in congruence on this first principle of construction and co-construction of knowledge (Bodrova & Leong, 1996).

A more recent theory, namely the Information Processing Theory, also has similarities with Vygotsky's first principle. Like Piaget and Vygotsky, this theory requires more attention and memory from the learner. The learner has to put forth mental effort to develop. Also, the Informational Theory believed in metacognition of the learner's thinking. Skills such as problem solving, critical thinking, self-regulation, self-reflection, evaluation and monitoring are all valued here. Despite these similarities, the information processing theory is not considered an official developmental theory. It simply describes processing at different ages (Bodrova & Leong, 1996).

Vygotsky and the behaviorists differed greatly. One theory encourages passive learning while the other encourages active learning. For Vygotsky, he certainly believed that the learner and teacher must play an active part in constructing knowledge. Also, behaviorists believe that knowledge is cumulative while Vygotsky believed that knowledge is qualitative. The behaviorists feel that a child is always the same child, but becomes more dexterous as a result of learning more

skills. Vygotsky argues that thought can be completely restructured by learning certain things (Bodrova & Leong, 1996).

Despite the counter-arguments from the behaviorists, Vygotsky's first principle generally has sound support from other theorists. According to Vygotsky, before teachers construct or teach knowledge, they need to determine what their students initially understand about something being taught. By the teacher thoughtfully questioning the child, the teacher can see exactly what the student currently knows. Thus, a teacher knows where to begin building or constructing. This is where Vygotsky came up with his idea for the Zone of Proximal Development (Bodrova & Leong, 1996).

The Zone of Proximal Development, or ZPD, is a way of seeing how learning relates to a child's development. The ZPD uses two levels of a child's performance: independent level and assisted level. First the independent working level needs to be determined before the correct assisted level can be determined. The independent level is reached when the child self-regulates his/her own learning. An assisted level is

defined as “. . . any situation in which there are improvements in the child’s mental activities as a result of social interaction.” Once the correct assisted level can be determined, then mediators can be set into place such as scaffolding to aid in the student’s development in the ZPD. The teacher uses the appropriate mediators to assist the child to the end of the zone. Along the way, the child is constructing knowledge with the teacher while the teacher is constructing knowledge with the child. They work together to understand each other. Thus, the notion of co-construction is evident in these shared activities (Bodrova & Leong, 1996).

Another aspect of the ZPD is that the skills in the ZPD are constantly changing from day to day. The ZPD also moves through the zone, as a child is able to think using the newly acquired knowledge. The ZPD will be different for each child, because children move through skills at different times and experiences in different ways. If a child tries to use skills or mediators outside their ZPD, they will either ignore, not use, or

incorrectly use the skills and/or mediators (Bodrova & Leong, 1996).

When the correct ZPD is found and the appropriate mediators are used for a given child, four stages are evident in the process, according to further research done by Tharp and Gallimore (1988). One, there is teacher assistance. This is where the teacher uses modeling, sets a reward pattern, provides feedback, instructs, questions and problem solves. Two, there is self assistance. The child controls his/her own behavior through the task and uses self directed, or private, speech. Three, skills are 'fossilized'. This stage is when the child no longer depends on self directed speech to initiate behaviors. And four, the de-automatization of a skill occurs. Children sometimes will need to re-learn information. Thus, the stages are cyclical in nature (Bodrova & Leong, 1996).

### Socio-Psychological Theory

There are two main theories that contributed to this area. One is called Lambert's Model (Baker, 1993), which was developed in 1974. Lambert's Model is a description of how a learner acquires additive

bilingualism or subtractive bilingualism. There are two identified factors that determine a person's motivation for bilingualism - attitude and aptitude. Aptitude will not only affect a person's motivation, but their proficiency of the second language as well. The motivation feeds the level of proficiency a learner will acquire, which then feeds the self-concept. From the self-concept, a person can decide whether additive or subtractive bilingualism will take place.

The other is called Gardner's Socio-Educational Model. They are based on the notion that language should not be directly taught, because there exists a dynamic between the society and second language acquisition (Ramirez, 1985). Gardner says how language should be used as a tool to teach aspects of life, such as joy, sorrow, relationships, concepts, etc. (Baker, 1993).

There are four stages to his model. The first stage is the cultural beliefs the learner brings to the learning process. The second stage uses the cultural beliefs to influence the individual differences in the learner, which are intelligence, language aptitude,

motivation or attitude, and situational anxiety. In stage three, the individual differences influence the language learning process in both a formal and informal environment. Finally, in the fourth stage, the formal and informal language learning influences the bilingual proficiency as well as the nonlinguistic outcomes, such as attitudes and cultural values of the second language. The fourth stage actually then reshapes the second stage with the new attitudes about motivation, anxiety, language aptitude and intelligence (Baker, 1993).

Lambert's and Gardner's models are similar in that they both address how attitudes and aptitude can affect proficiency in a second language. However, Gardner's Model is more in depth for a variety of reasons. One is because it considers the formal and informal learning environments. It also considers cultural values as a factor in second language learning.

### Cognitive Theory

There are three distinct theories that unravel in the realm of second language acquisition. One is the Balance Theory, or the SUP (Separate Underlying Proficiency) Model as referred to by Cummins (Baker,

1993). This theory supports that there exists a separate compartment for each language learned and the skills from one cannot transfer to another. Cummins views each language compartment like a balloon. Each balloon cannot be inflated with language knowledge at the same time, only one or the other. However, this is not supported by evidence, as research suggests the brain does not have limited space on what it can learn (Baker, 1993, Cummins, Swain, 1986).

The second is the Interdependence Hypothesis. This is also known as the CUP (Common Underlying Proficiency) Model or also as the Iceberg Analogy (Cummins, Swain 1986, Baker, 1993, Cummins, 1989). The CUP Model views each language learned as a channel almost like a television channel. When that language channel wants to be used, it is turned on. When a different one wants to be used, the channel is switched to the appropriate location.

With the Iceberg Analogy, second language proficiency is compared to an iceberg. An iceberg floats partially above water and partially below water. Imagine two icebergs, one representing each language,

that have each merged together below the water's surface. Above the surface level, you can only see the two distinct, individual icebergs, or languages. Below the surface level, you see where the two languages share some features, or have commonalties.

The Interdependence Hypothesis supports several principles. One is that monolinguals use language from one central device. Bilinguals, however, use an integrated source of thought. Second, there is a belief that people can function with two or more languages with ease. Third, learning can take place equally in two language channels, and both of these channels feed the processor. Fourth, a child's language should be well developed first before they are expected to meet the cognitive demands of the classroom. Fifth, the dimensions of listening, speaking, reading and writing need to be fully developed in each language. Finally, when one or both of the languages are not fully functioning, then cognitive and academic performance will be adversely affected (Baker, 1993).

In addition to these principles, Cummins also introduced his idea of BICS (Basic Interpersonal

Communication Skills) and CALP (Cognitive Academic Language Proficiency). He states that both must be developed in order to learn in a second language (Baker, 1993). Ramirez (1985) supports him in saying, "High levels of language proficiency (BICS and CALP) must be met in both English and in the L1 to achieve maximum academic benefits from schooling." Cummins supports this idea further by stating, as quoted by Tikunoff (1985),

. . . a LEP student who truly understands no English and is not familiar with the rules of social or classroom discourse must consistently operate in situation that are both cognitively demanding and contextually complex.

The third theory is the Threshold Theory, which was introduced by Skutnabb-Kangas (1977) and Cummins (1976). This is a belief that a learner's competence in a second language was contingent on them passing over a threshold from one level to another. There exists three levels - the lower floor (limited bilinguals), the middle floor (less balanced bilinguals), and the top floor (balanced bilinguals). The lower floor is equivalent to low levels of competence in both languages. The middle floor is equivalent to competence

in one language, but not the other. The top floor is competency in both languages. There exists a threshold between the lower and middle floor as well as the middle floor and the top floor (Baker, 1993).

Out of the three cognitive theories listed above the Interdependence Hypothesis is far more complete than the Balance Theory or the Threshold Theory. It gives a clear picture of what the cognitive process look like for a second language learner. The Balance Theory has no empirical evidence. The Threshold Theory does not describe the cognitive process at all. It simply states that the learner goes through a series of chronological steps.

#### Curricular Components

Curriculum programs are certainly not simple to create by any means. There are so many different needs that need to be met to make the program profitable for as many people possible. The task to any English language development (ELD) program ". . . is to cherish and preserve the rich cultural and linguistic heritage of the students as they acquire English" (Diaz-Rico,

Weed, 1995). In today's political arena, support for a child's native linguistic heritage is sparse.

Cummins (1989) suggested some ways that these second language learners can still have access to their primary language when being forced to participate in a second language program. Cummins stated that signs could be used in both languages in the classroom. Also, students could be encouraged to use their L1 around the school and in cooperative groups. Books could be provided in both languages. In addition, pictures could be displayed of all represented cultures at the school site. Parents could also be encouraged to help. Finally, speakers could be invited to represent the ethnic groups in attendance at the school.

Curriculum, as viewed by Nunan (1988), Gregory and Parry (1998), is what we do. The main components to curriculum are the objectives, or the standard to be met, the content, or what to teach, and the methodology, or how to teach (Nunan, 1988). In addition, Brinton and Snow (1997) suggest that there also needs to be consideration of student needs and goals, institutional expectations, available resources, teacher abilities,

and expected final performance outcomes. Ramirez (1995) also comments that curriculum planning involves decisions about four aspects: the linguistic content, the learning goals and objectives, the use of specific techniques, strategies and methods, and the evaluation procedures to assess learning.

According to Johnson (1989) there are several stages in developing a curriculum. It begins with policy, and then moves to objectives based on need. Then, methods and resources are decided upon. Further, teacher training is implemented, where the teacher then acts to motivate the learner to act.

However, there are three constraints to this decision making process - the policy, pragmatics, and the participants. A policy shapes the entire curriculum process, and therefore can make or break a curriculum. The pragmatics can be hindering outside as well as inside the curriculum. The outside factors of curriculum are time, money, and cultural values. The factors within the curriculum that constrain are knowledge and the attitudes of the participants. All

three of these pieces can alter the end result of curriculum (Johnson, 1989).

It is important to remember these constraints when developing a balanced curriculum. There are four factors that create a balanced curriculum: knowledge factors, learner factors, instructional factors and management factors. Knowledge factors include the subject area, the knowledge base and structure, relevant materials and knowledge outcomes. Learner factors include the group size, homogeneity, teachability and motivation of the subject, and attainment expectations. Instructional factors include curriculum design, educational plan, instructional media, teacher training, and the competing programs. Finally, the management factors include breadth and depth of the curriculum, development time, resources, the people on the development team, and the agency's reputation and leverage (Johnson, 1989).

When it comes to language curriculum there is not much difference to the above listed components. With any curriculum, it makes sense to marry policy with pragmatics so that what is desired becomes what is

acceptable and possible. However, in order to maintain a cohesive curriculum, each step of the process must be consistently assessed to ensure its effectiveness (Johnson, 1989).

Nieto (1992) states that effective programs have several distinguishing characteristics. One, they facilitate interaction among students of different backgrounds. Two, they lead a sense of equality in cultural status. Three, they avoided artificiality. Finally, they depended on community support. She, as well as Gersten and Jimenez (1998), also note that a focus on cognitive learning lends success to more programs.

Another important aspect about successful programs is an emphasis of process over product (Gregory, Parry, 1998, Nunan, 1988, 2000, Ramirez, 1985, Johnson, 1989). However, Johnson (1989) stresses that although process is valuable, the product should be balanced along with it. He says that without looking at the process we lose the insight and understanding to the assessment of a product. Without looking at the product, we assume that certain procedures will succeed without complications.

Viewing the argument of process versus product concerns teachers at a personal level. It taps into how teachers should see the nature of the learning process, as well as the teaching process. Wink (1997) states, "Critical pedagogy is driven by a powerful spirit of inquiry . . . (it) forces us to inquire into our questions and answers" (p. 120). The beauty of a process oriented approach is that it ". . . encourages us to find the magic of personal discovery based on our own lived experiences" (Wink, 1997, p.16).

In the past, as stated by Baker (1993), the only component that language curriculums focused on is the knowledge factor, or the linguistic component. Today, it is considered more comprehensive to include general language, cultural, and communicative components as well. Stern (1983) adds that programs ". . . should offer opportunities to live the language as a personal experience through direct language use in contact with the target language community."

Based on their study of conservation of language for second language learners, Campbell and Lindholm (1987) found there are five important curricular

principles. One is that language arts components need to be included and integrated with content. This is also consistent with what brain based theorists say (Caine, 1994, Sousa, 1995). Second is that language input must be comprehensible to the second language learner yet challenging for the native speaker. Thirdly, cooperative learning should be used to integrate students from both learner groups in order to provide opportunities for L2 learner to use target language and to create an equal status, socially. Gregory and Parry (1998), Ramirez (1985), and Gersten and Jimenez (1998) also support this principle. Fourth, the teacher and student have equal responsibility to understand and interact with the knowledge. Finally, a home connection piece is necessary to involve parents in their child's education. As Nieto (1992) states, ". . . parents do indeed get more involved when the schools give them some direction."

Brause (1982) did another study on the communicative competence of second language learners. He found that rich environments were conducive to the learning process. Also, he found that by using choral

responses students who were in the process of acquiring their skills were less embarrassed and felt safe to make mistakes. Christison (1999) adds to this notion of relaxed alertness as an essential component for second language learners. Most importantly, he found that second language learners depend on predictable patterns happening in the classroom as a survival strategy.

Christison (1999) also states that there are other factors that ELD teachers need to consider in their curriculum. One is that the learning activities need to be meaningful to the learner, as the meaning carries them through the language acquisition process. Also, there needs to be use of background knowledge or experiences. Finally, she states that content based learning and whole language best facilitate the needs of these second language learners.

The learner brings so many differences to the equation of curriculum development, it makes it difficult to predict what exactly the needs will be for a given group of students. Different needs will call for different measures, as discussed by Ramirez (1985). One of the ways for a program to address this issue is

to take into account the multiple intelligences.

According to Gregory and Parry (1998) there are eight distinct intelligences. All people are believed to have all of them, but one or two that are most prominent.

The intelligences are verbal, logical, musical, visual, intrapersonal, interpersonal, kinesthetic, and naturalist. Gregory and Parry (1998) give a list of projects that are suitable for each of the multiple intelligences (p.217). It is suggested for a student to be able to choose the project they wish to be assessed on. This way, learning experiences are authentic. In addition, using a "one size fits all philosophy" to teaching in any shape or form does not work (Nunan, 2000).

An important part of curriculum is the materials used to teach the knowledge to the learners. Teaching materials differ greatly for a variety of reasons.

Designing appropriate materials is not a science; it is a strange mixture of imagination, insight, and analytical reasoning, and this fact must be recognized when the materials are assessed (Johnson, 1989, p.153).

The key is focusing in on what is most important to include in those materials.

Nunan (1988) quotes Jones and Moar (1985, p.35-43), whom held a professional development workshop for twenty-seven senior teachers and asked them to rank in order of importance a list of criteria for selecting teaching materials for classroom use. The teachers listed seven criteria ascending from the most important to the least important. The criteria were: Materials that link between the classroom and the real world, foster independent learning, focus the learner on the learning process, are readily available, match learners' needs, are useful for many skill levels, and have clear pedagogical objectives. Nunan (1988) also agrees with the above, but adds that teaching materials should be more suggestive, acting as a model for teachers to follow and adapt to their needs. Also, he states that there needs to be a sociocultural context (p.99).

Brinton and Snow (1997) state that a blend of using authentic, adapted and commercial textbooks is needed when teaching curriculum (p.222). Not a single sort of textbook can support all the concepts needed to be

taught. Authentic materials are use of original works in printed, visual, video or audio form (Ramirez, 1995, p.26, Brinton, Snow, 1997). Adapted material accommodates the vast skill levels within a classroom and fills informational gaps. Commercial materials expose students, especially second language learners, to the most common type of textbook in the school setting (Brinton, Snow, 1997).

Johnson (1989) discusses six curriculum components typically included in published ESL materials. One is the subject knowledge, or the content. Two is the view of how knowledge is acquired, which tends to be grammar based. Three, the themes involved in language learning. Four is the student and teacher role in the classroom. Five is the opportunities to problem solve. Finally, the cultural values and attitudes that underlie the program (p.156).

Another component to good teacher materials is one that tells ". . . not only how to deal with the material but also provides information on the theoretical orientation of the course as a whole" (Lamb, Nunan, 1996, p.186). In addition to the rationale, there will

be an explanation of the methodological principles underlying it (p.187).

In 1991, the Office of Bilingual Education and Minority Languages Affairs (OBLEMA) awarded a contract to CAL (Center for Applied Linguistics) to describe the content based ESL programs in grades K-12 nation wide. The study was completed in 1994 with over 2,992 programs viewed in all. One of the questions of the study was trying to answer was how many of the ESL programs reviewed matched up with what the ESL literature has been saying. The study discovered that many programs do match what the literature is saying to do (Brinton, Snow, 1997, p.22-31).

In regards to program materials, they discovered an interesting notion. Ninety percent of the teachers interviewed stated they used some form of commercialized material, but was only used some of the time.

Ninety percent of the teachers said they had created activities or materials for their classes, and they also said that activities were 'determined by textbook or textbook series' only some of the time (Brinton, Snow, 1997, p.31).

Therefore, published material is used, but is teacher adapted to meet the needs of the students.

Another study done by Eltis and Low in 1985, as quoted by Nunan (1988) also found that 73% of teachers regularly used their own materials in the classroom while 50% regularly used commercially-produced materials. Despite this information, materials cannot carry the burden of why particular curricular programs fail. Ortiz (1988) states, ". . . schools become more or less effective as a result of the style or manner in which programs are executed rather than the quality of the raw materials they are given to work with" (p.63). Even further, materials are generally allocated based on the initial design of the program (Ortiz, 1988, p.83). It is the design that becomes the key issue.

Assessment also is an important component to curriculum, to ensure that the learning has taken place. There are a variety of assessment options available. There are comparisons between formative vs. summative, formal vs. informal, and frequent vs. infrequent (Johnson, 1989, p.220). In addition, an assessment piece can be based on proficiency which is generally

used for placement purposes, diagnosis which assesses strengths and weaknesses, and achievement which assesses mastery of knowledge (Ramirez, 1995, p.305).

The complexity with assessing language skills of second language learners due to the nature of language acquisition. There are many criticisms that exist about the testing of second language learners. Not only are they tested with the same instrument as natives in this country, but are assessed only using one measure. For example, verbal and achievement tests are said to underestimate limited English students' potential until they have learned English for at least 4-5 years (Cummins, 1989, p.29).

In other contexts, second language proficiency is determined by administering some sort of test in oral English. However, oral proficiencies are not sufficient because they do not predict how second language learners will perform neither on academic tasks nor on instructional tasks (Tikunoff, 1985, p.5). Using a single assessment tool is therefore not informative, but multiple measures are (Caine, 1994, p.155).

In addition to using multiple measures, there are other suggestions in the literature to effective assessment. For example, one of the key issues in language test development is to create a balance between the language itself and the content. In turn, this balance should reflect the goals and purposes of the curriculum (Brinton, Snow, 1997, p.211).

Also, brain based learning supports the use of assessment that encourages a relaxed alertness, uses a meaningful context, gives adequate time to complete and provides immediate feedback (Gregory, Parry, 1998, p.211-213). In addition it is also useful to provide a variety of assessment choices so that students may use the one that best suits them. Such examples are projects, performances, observations, portfolios, and learning logs and journals (p.209).

In education it is the learner that we as educators are there to help, thus the assessment should be useful to them as well as to us (Nunan, 1988, p.134).

With every year of school, all students go through intense academic, cognitive, linguistic, social, emotional and physical development. We must help students acquire the English language but also help them

accelerate their academic growth (Collier, Thomas, 1999).

## CHAPTER THREE

### METHODOLOGY

This is a qualitative study that focuses on how theoretical implications define teaching of elementary second language learners in this country. The study begins with a complete literature review of the second language learning process, which includes theories, an historical perspective, a cultural perspective, and related curriculum components. The study then proceeds to defining the necessary curricular components for second language learners, and comparing this knowledge to what educators know in the field. Lastly, this study draws some conclusions from the findings and makes recommendations for any future related studies.

The underlying premise in this study is that quality education needs to be defined for second language learners and adhered to. These students have a huge task on their hands and educators need to be clear as to what needs to take place in the classroom for these students. Thus, a demand exists for a thorough description of what that curriculum program looks like.

In this study, the literature review served as a backbone to the onset of creating the ELD Program Checklist. The research revealed nine major components to an English Language Development, or ELD curricular checklist - A theoretical framework, general curriculum components, communicative components, cultural appreciation, primary language support, real world connection, cognitive skill development, and use of multiple intelligences. The original ELD Program Checklist can be found in Appendix A.

This checklist was given to two experts in the field of bilingual education. I chose the experts based on their knowledge background, length of service in the field, and dedication to student learning. One is a Project Administrator in Categorical Programs who serves as the ELD Specialist for the district and the other is a Coordinator for School Accountability who also previously served as an ELD Specialist for the district. I depended on them, as a source of validity to ensure what I had discovered in the research was a comprehensive picture.

I also asked a group of three teachers, based on their teaching context to review the checklist. I felt the teachers from different contexts would provide the most informative data on the coherence of the checklist.

They were asked to review the checklist and provide feedback on its format and content using the Checklist Commentary. The responses to the questions on the commentary can be found in Appendix B the expert participants and Appendix C for the teacher participants. The questions asked were

1. Is the wording clear and easy to understand?
2. Do you feel the nine components listed are all necessary for an ELD program? Are there any components that are missing in your opinion?
3. What are the strengths of the checklist?
4. What are the weaknesses of the checklist?
5. Is this document something you would see as useful to classroom teachers?
6. What would make this checklist more helpful to teachers, if any suggestions?

The limitations of the study were encompassed by three items. One was that the teachers I found to participate in my study were mainly from a Sheltered English Immersion setting, where English is mostly

spoken and the primary language is used for clarification only. Most teachers in California who have second language learners in their classroom fit this context. Thus, it was difficult to find teachers from different contexts. However, each teacher had differentiated levels of language proficiencies in their classrooms, which differentiated their level of primary language support.

Another limitation is simply the knowledge of the teachers and experts interviewed. For this study, they compared the checklist with their own body of knowledge to provide feedback. For those participants who had a broader knowledge base, they were more familiar with the needs of second language learners. For those whose knowledge base was not so wide, their ability to comment was influenced.

Based on the information I received from the experts and the teachers I questioned, I was able to summarize the validity and quality of the ELD checklist. I compared their suggestions from expert to expert, teacher to teacher, and teacher to expert. The findings are described in chapter four.

## CHAPTER FOUR

### FINDINGS

#### Survey Results

In most respects, the findings from the teacher and expert participants were similar. The comments from the teachers were compatible with one another as well as with responses from the experts. The general response was that the checklist was consistent with what the participants knew or felt that they needed to know for a balanced English Language Development Program. In addition, there were also comments of some weaknesses on the checklist. Thus, a few inferences can be drawn from this project.

Each participant was asked to respond to six questions that pertained to the checklist. There were two expert participants and three teacher participants. I depended on the experts to ensure accuracy of the checklist's content while the teachers I wanted to know more specifically how it compared to what they have been seeing in their classroom programs. In the discussion below, each question will be addressed specifically by the findings of the experts and the teachers. Then, the

findings will be compared and contrasted from expert to expert, teacher to teacher, and finally expert to teacher.

#### Question One

In response to the first question about the clarity and comprehensibility of the checklist, both experts stated they believed it was clear and easy to understand. However, there was one comment that mentioned Section I, or the Theoretical Framework, was too difficult for some teachers to use without additional guidance. Two teacher participants, whom also agreed with the experts, stated it was "teacher friendly and easy to follow", as stated by one. Another stated the checklist was only somewhat clear.

#### Question Two

The second question asked whether or not the checklist contained the necessary components to an ELD, or English Language Development, Program. The experts implied that all eight were needed. However one felt the 'home-school' component located in Section IV, or Primary Language Support, needed to be emphasized more. The teachers, like the experts, also felt that

components included were necessary. A teacher also commented on how parental involvement needs to be a larger piece, and asked, "How are parents being utilized to promote language development in their child?"

### Question Three

This question asked for the strengths of the checklist. The experts differed in their opinion of strengths. One stated that Section II, or the General Curricular Components, is relevant to teachers. Another stated that "it is straightforward, easy to understand and to the point".

The teachers differed in their opinions as well. Like the above quoted expert participant, another teacher felt it was concise and that it correlates with CLAD (Cross-cultural Language Acquisition Development) instruction that is being mandated from the state of California from its teachers. Another teacher participant stated the use of multiple intelligences and real world connection was important in order to help facilitate the acculturation process these children go through. Yet another felt the checklist was "well

researched, comprehensive, straightforward, and served as a good framework."

#### Question Four

The next question focused on the weaknesses of the document. The experts had differing opinions. One stated there was a need to develop the assessment piece under Section II, or General Curriculum Components. She recommended adding something like, "How will assessments be used to modify the program/instruction to improve student learning?" Another expert stated there was too much "technical jargon" that would make this checklist too difficult for teachers to use.

The teachers also had differing opinions, not only between each other but with the experts as well. One teacher felt that there were no weaknesses. Two teachers supported what one of the experts stated about the technical terms being incomprehensible. They both explained that especially the theoretical terms in Section I needed to be defined.

#### Question Five

This question pertained to whether the participant felt the document was something useful to classroom

teachers. One expert did not respond. Another stated that it would "be useful to help teachers look at all aspects of their program". Two teachers felt that the checklist is a very useful tool for them. One in particular stated how the checklist could be used as a reminder to experienced teachers and as a resource guide for beginning teachers. One teacher stated that the checklist needed strategies in order to make it practical and useful for teachers. With this response being the only that differed from the rest, it is concluded that most teachers found the checklist useful. It is also believed that the experts and teachers are in congruence.

#### Question Six

The final question dealt with any additional suggestions the participant had toward improving the checklist. The experts differed on their suggestions. One did not give any suggestions. Another suggested that listing some teaching techniques and strategies would help this checklist be more concrete and practical for teachers.

The teachers also differed in their suggestions,

but showed some similarities as well. One stated that the checklist would be more helpful to teachers if it were on a single page. Another stated how more explanations of certain terms would be helpful. One stated that, "It might be helpful to include a short definitions of the theories in Section I". Finally, a third stated there needed to be a list of book references that would help explain definitions and provide strategies. Thus, there are some similarities between the teacher and expert responses.

#### Summary of the Findings

Based on the information received from the participants, the overall response was satisfactory. In general, they felt the wording of the document was clear and concise. They also widely agreed that the eight components on the checklist were necessary and vital for a balanced ELD program. The experts felt that the content was solid and for the most part teachers felt it was useful in defining what a program should look like. The comment was also made that the checklist is consistent with what is being said in teacher training

courses for the CLAD credential (Cross-cultural Language Acquisition Development).

However, there are four areas that need further development and support on the checklist. Many comments were made by teachers and experts about the need for definitions of the theories present in Section I. Many teachers may have been exposed to these theories at some point in their career, but are not completely familiar with them. Due to the abundant comments on the need for theory explanation, I have included a brief summary of each theory present in this project. Information from the literature review was taken and used to make it. This summary can be located in Appendix D.

Another area in need of more sustenance is the home school connection, which is located in Section V, or the Primary Language Support component of the checklist. One expert and one teacher each commented on the critical role parents play in their child's learning. This statement is briefly supported in the literature review through the role of culture in learning, but does not explain the intricacies of how home and school

should be explored to facilitate the learning of second language learners.

A third area in need regards assessment, which is located in Section II, or the General Curriculum Components. Here, it states, "What is assessed and how is it measured?" It was suggested by an expert to not only look at the assessment being used, but also how the information assessed is being used to shape classroom instruction and learning.

Finally, the fourth area of concern is the need for a list of practical strategies and techniques to coincide with the current eight checklist components. One of the experts, as well as one teacher, stated a need for this in order to give teachers a concrete description of teaching behaviors. In addition, two teachers expressed a need to be 'practical'.

Even though this added component of listed strategies would give the checklist the practicalities desired by some, it was not the focus of this project. The focus of this project was to strictly look for curricular components and not instructional components. However, the two are closely related and essentially go

hand in hand for learning. Therefore, pursuing further research on instructional strategies and approaches is highly recommended.

## CHAPTER FIVE

### CONCLUSIONS

The main goal of this project was to determine what the necessary components are for an English Language Development Curricular Program for second language learners in the elementary school setting. It was also of interest to determine how useful theory plays out to be in the classroom. With brain based learning theory becoming so well known, it was also important to see what it contributed to second language learning. From completing this project, not only have these questions been answered but new ones have arisen as well.

Based on the findings, most teachers and experts felt that this checklist helped to articulate to educators what exactly is necessary for these students in a curricular program. From this checklist, there is evidence as to why these second language learning curricular programs are essential for students' success. But, most teachers I come into contact with who have English Language learners in their classrooms often do

not understand why there has to be a set time each day for English Language Development.

Based on my experience, I hear teachers make comments such as, "I do ELD all day. Why do I have to do it just during one block of time?" In response to this, the checklist shows why there is a need for such a curricular program.

One, second language learning theories show that it is a developmental process. Different levels of acquisition require different needs of instruction. These students need specific time devoted to direct input to help increase their ability to correctly use the new language in context.

Two, culture and language are so closely related that it is vital for a curriculum program for second language learners to address the issues present in both the home culture and the new language culture. The other six checklist components are things that can be integrated into a regular grade level curriculum, and should be:

However, the direct input needed for each second language learner at each proficiency level cannot be

ignored and must be addressed by the classroom teacher. Students cannot be expected to become successful in English, or any second language for that matter, without developmentally appropriate instruction nor sensitivity to cultural differences.

Another interesting notion from doing the research for this project is that the literature reviewed included all second language learners. There was some research that strictly lent itself to Spanish speaking students as well as other languages. But researchers, such as Krashen, believe that second languages are acquired in a predictable fashion (Richard-Amato, 1996). Thus, the eight curricular components included on the checklist do address the needs of any second language learner.

This project has also determined that theory can be useful as a framework for curricular programs. It does not suggest that theories drive a program, but that it gently shapes the way learning is approached in the classroom. It is important for educators to not shy away from using theory, yet not depend too heavily on it either. Based on the comments from this study, most

teachers were unaware of the theories listed on the checklist and the experts were uncomfortable with expecting teachers to use them. Theory should not be seen as a taboo topic in education, but as a tool to guide us in providing better learning for our students.

Brain based learning theory is not only something that is good for all second language learners, but for all students involved. The brain learns in predictable ways and these learning patterns do not change whether it is a native speaker or a second language learner. It is important for teachers to capitalize on this knowledge in order to maximize student success.

One major partner with curriculum is the instruction piece. Unfortunately, for purposes of time and space, this project only focused on the curriculum component. The instruction is often what teachers relate to most, because it focuses on how to teach rather than what to teach. For second language learners, the instruction in other content areas, such as English Language Arts, Social Studies, Science, Math, Art, and PE, should be structured to foster their comprehension of academic knowledge.

If teachers are using strategies to support these students' learnings in content areas as well as with use of a balanced English Language Development Program, second language learners will be guaranteed success. With this project only focusing on the curricular aspect, more research needs to be done. Thus, there are three implications that can be drawn from completing this project.

One of those implications is the arising need to delve into the instruction portion of second language learning and answer a few pending questions. What strategies and techniques are most effective with these students? When and how do you use them? What do they look like?

Another implication is a need for further investigation into appropriate assessments for second language learners. Assessment in its own definition is difficult to be accurate, objective and authentic at the same time. Yet, without assessment learning cannot be demonstrated or measured. One of the experts expressed a need for a way to have assessment modify classroom instruction for student learning. So, what does the

most appropriate assessment tool look like for a second language learner?

A third implication is the need for more application of parent involvement in student learning. Often times parents do not realize the power of influence they have on their child's learning. The research from this project showed that parents are very interested in helping, but often do not know what to do. If the school defines that for them, parents know how to help their child be successful (Nieto, 1992, p.82). So the underlying question becomes what specifically is it that parents need to do? What can the teachers and other educators do to motivate parents to get involved?

Generally speaking, children desire to perform and succeed. Often times, there are forces beyond the child's control that hinder them from reaching their highest potential. This burden should not be placed on children, especially second language learners. In this state, they have a huge task at hand - to learn a new language and to master academic content in that new language, all at the same time.

It is imperative that their native roots are cherished and allowed to coexist with the new language culture. Some sort of support needs to be provided as well to demonstrate acceptance of the native language. Teachers can take that first step and ensure that their ELD curriculum programs have the necessary components to foster proficient growth in second language learners.

APPENDIX A  
ENGLISH LANGUAGE DEVELOPMENT  
PROGRAM CHECKLIST

# English Language Development Program Checklist

*This checklist is useful for teachers who work with any second language learner. This checklist will outline, based on my review of the literature, the curricular components necessary for a balanced English Language Development Program. It can be used alongside an existing program to determine whether that program is complete or can be used as a general reference.*

## **I. Theoretical Framework**

*What theoretical framework underlies the program?*

Theory drives what teachers do in the classroom and brings purpose to why certain things take place. Second language learners have unique needs that shape the way instruction looks like in the classroom. Second language learning theory gives teachers a general guideline to follow. Since there are many different theories that exist about how second language learning occurs, it is also important to determine which one(s) is(are) present in the program, if any.

- Universal Grammar
- Accommodation Theory
- Acculturation Theory
- Sociopsychology Theory
- Neurofunctional Theory
- Variable Competence Model
- Discourse Theory
- The Monitor Model
- Second Language Proficiency Theory
- Cognitive Theory

Other related learning theories:

- Brain Based Learning Theory
- Sociocultural Theory

## **II. General Curriculum Components**

*Are general curriculum components in place?*

- What are the goals and objectives of the program, the units it entails and the activities? How closely linked are they to the district and state standards?
- Is the content grade-level specific?
- What methodologies are suggested to implement the curriculum?
- What is assessed and how is it measured?

### **III. Communicative Components**

*What defines each language proficiency level in the program? At each level, what is expected to be mastered?*

- What are the grammatical components?  
*These skills include lexical items, rules of word formation, sentence formation, literal meaning, spelling, and pronunciation*
- What are the sociolinguistic components?  
*This includes the skills necessary to correctly use meaning and form in context.*
- What are the discourse components?  
*This includes the skills necessary to combine meaning and form in different contexts.*
- What are the strategies components?  
*This includes mastery of verbal and non-verbal communication skills.*

### **IV. Cultural Appreciation**

*Are there aspects of culture evident and interwoven in the program?*

Language cannot exist without culture. Culture is the single defining factor in our behaviors, actions, beliefs, and daily lives. Culture needs to be respected and valued, especially the ones represented in the particular classroom setting. Thus, a program needs to not only have target culture activities represented but the native cultures as well.

- United States culture
- Child's native culture(s)

## V. Primary Language Support

*What amount of support is provided for the students' native languages?*

In order for all cultures that are present in the learning environment to be valued, their native languages must also be valued. In addition, the primary language is important for communication purposes, especially in the early stages of fluency. In most cases the primary language is still being used in the home. Therefore, programs need to have translated materials in a variety of languages so that the teacher may support the primary language in the classroom as well as in the home.

- Translated materials in a variety of languages
  - \*Home/school communication
  - \*Classroom materials

## VI. Real World Connection

*Does the curriculum integrate real world experiences?*

Real world connections can be defined as using authentic materials, such as original documents, videos, and realia. Also, it can be defined by using activities that connect with the community such as field trips, speakers, interviews, tours, etc. These experiences help students, primarily second language learners, see and interact with the target language while it is being used in a meaningful and enriching context.

- Use of authentic materials
- Use of community resources

## VII. Cognitive Skill Development

*Are cognitive skills integrated in activities and expected from all proficiency levels?*

Cognitive skills such as thinking, reasoning and problem solving are necessary skills for successful

living. Programs need to provide an opportunity for students to use and build upon these skills.

- Thinking Skills
- Reasoning Skills
- Problem Solving Skills

### **VIII. Use of Multiple Intelligences**

*Do activities in the program facilitate the needs of the multiple intelligences?*

All students have strengths and weaknesses, including second language learners. Their strengths need to be capitalized on, especially when they are learning content in a language they are trying to concurrently master. Programs need to provide activities that facilitate the learning for any one of the following intelligences:

- verbal
- logical
- musical
- linguistic
- visual
- intrapersonal
- interpersonal
- naturalist
- kinesthetic

APPENDIX B  
EXPERT SURVEYS

## Checklist Commentary Administrator 12 years

Attached is a checklist I have created based on information obtained in my literature review. Please review the ELD Program Checklist and respond to the following questions so that I may have some feedback. Thanks in advance for your time and input!

1. Is the wording clear and easy to understand?

Very clear and easy to understand.  
*(in first paragraph, I'd remove the word "like" where called.)*

2. Do you feel the 9 components listed are all necessary for an ELD program? Are there any components that are missing in your opinion?

I do feel all components are necessary. I don't think of any missing components except for maybe the "Home-School Connection" needing more emphasis. I say this because the State Program for English Learners places such a strong emphasis on parental involvement.

3. What are the strengths of the checklist?

It is straightforward, easy to understand and to the point.

4. What are the weaknesses of the checklist?

It's not really a weakness, but rather a consideration. Under "General Curriculum Components" you might consider adding something like "How will assessments be used to modify the program/instruction to improve student learning." This is a big push by the state in our CCP and State Program for English Learners.

5. Is this document something you would see as useful to classroom teachers?

I think it would be useful to help teachers look at all aspects of their program.

6. What would make this checklist more helpful to teachers, if any suggestions?

you did a great job, Carrie!!

**Checklist Commentary** Administrator  
30 years

Attached is a checklist I have created based on information obtained in my literature review. Please review the ELD Program Checklist and respond to the following questions so that I may have some feedback. Thanks in advance for your time and input!

1 Is the wording clear and easy to understand?

Under "Theoretical Framework" if this is for teachers, you may need to clarify the terms you are using to describe the program. Many teachers would find it difficult to complete part I w/o additional guidance

2 Do you feel the 9 components listed are all necessary for an ELD program? Are there any components that are missing in your opinion?

The checklist only referenced 8 components. Is one missing?

3 What are the strengths of the checklist?

Section II is very relevant to teachers.

4 What are the weaknesses of the checklist?

Technical jargon may make it difficult for teachers to use checklist.

5 Is this document something you would see as useful to classroom teachers?

6 What would make this checklist more helpful to teachers, if any suggestions?

Examples - concrete descriptors of techniques being reviewed (i.e. list of TOTH, Physical Response techniques, or Calla strategies (with definition))

APPENDIX C  
TEACHER SURVEYS

## Checklist Commentary 3/4 teacher

29 years

Attached is a checklist I have created based on information obtained in my literature review. Please review the ELD Program Checklist and respond to the following questions so that I may have some feedback. Thanks in advance for your time and input!

1. Is the wording clear and easy to understand?

The wording is very clear - especially for teachers who have completed the CLAD requirements for CA.

2. Do you feel the 9 components listed are all necessary for an ELD program? Are there any components that are missing in your opinion?

The 9 components should all be included in an effective ELD program. The extent they are used is determined by the needs of the ELL students.

3. What are the strengths of the checklist?

Strengths = short & concise; good summary; goes along with CLAD instruction.

4. What are the weaknesses of the checklist?

Weaknesses = a few terms need to be defined.

5. Is this document something you would see as useful to classroom teachers?

This document presents a concise overview of the states' CLAD curriculum requirements which could be useful as a reminder to experienced teachers and as a guide for beginning teachers.

6. What would make this checklist more helpful to teachers, if any suggestions?

It might be helpful to include short definitions of the theories in Section I.

## Checklist Commentary

SEI kinder teacher  
12 years

Attached is a checklist I have created based on information obtained in my literature review. Please review the ELD Program Checklist and respond to the following questions so that I may have some feedback. Thanks in advance for your time and input!

1. Is the wording clear and easy to understand?

Somewhat

2. Do you feel the 9 components listed are all necessary for an ELD program? Are there any components that are missing in your opinion?

Yes, all components should be considered.

3. What are the strengths of the checklist?

It seems well researched and comprehensive - it seems like it would be the start of a good framework.

4. What are the weaknesses of the checklist?

I think one weakness is the definition of the theoretical framework - I wasn't sure what they all meant.

I think it was clear what you were getting at but I think some teachers need an explanation of why it's important (certain elements).

5. Is this document something you would see as useful to classroom teachers?

To be useful in the classroom, especially for teachers, it would need to have specific strategies.

6. What would make this checklist more helpful to teachers, if any suggestions?

Book references to explain definitions. Specific examples.

## Checklist Commentary

Attached is a checklist I have created based on information obtained in my literature review. Please review the ELD Program Checklist and respond to the following questions so that I may have some feedback. Thanks in advance for your time and input!

1. Is the wording clear and easy to understand?

The wording is very clear and teacher friendly. The organization of each point is well thought through and easy to follow.

2. Do you feel the 9 components listed are all necessary for an ELD program? Are there any components that are missing in your opinion?

The nine components listed are all necessary for an effective ELD program. One component that is missing is Parental involvement. How are parents being utilized to promote language development in their child?

3. What are the strengths of the checklist?

The strengths of this checklist are components six and eight. I liked how you incorporated real world connections and the multiple intelligences.

4. What are the weaknesses of the checklist?

None

5. Is this document something you would see as useful to classroom teachers?

yes!

6. What would make this checklist more helpful to teachers, if any suggestions?

I would like to see this checklist on one page for easy reference.

APPENDIX D  
THEORETICAL FRAMEWORK SUMMARY

# Theoretical Framework Summary

## Universal Grammar

- Linguistic based
- Notion that language has universal rules that transfer to any language.
- Universal Grammar is determined when the primary language is acquired. When the second language is acquired then the Universal Grammar constrains the acquisition process.

## Neurofunctional Theory

- Two types of language acquisition
  1. Primary - natural setting
    - Child acquires one or more languages between 2-5 years of age.
  2. Secondary - more formal setting
    - Natural learning environment (after age 5)
    - Foreign language learning
- There are different neurofunctional systems that control language acquisition in the brain.
  1. Communication hierarchy - communication
  2. Cognitive hierarchy - processing

## Variable Competence

- Language acquisition has two parts
  1. Process of language use, procedures and rules
  2. Product - planned or unplanned
    - Variable competence - knowledge of the rule system of the language
    - Variable application - use of language rule systems in context
- Second language acquisition has a general sequence
  1. Knowledge store of interlanguage rules are in the brain.
  2. Learner has capacity for language use, including primary and secondary discourse and cognitive processes.

## Discourse Theory

The more a learner speaks, the better their second language becomes.

- Based on 4 kinds of knowledge:
  1. Knowledge of second language
  2. Competence in first language
  3. Ability to use functions of language
  4. General world knowledge
- Based on 4 principles:
  1. Second language acquisition follows a natural syntactical order.
  2. Natives alter their speech when speaking with second language learners.
  3. The rate of second language acquisition is influenced by three conversational strategies.
    - a. Grammar of the second language is learned according to the frequency of the different features of the input.
    - b. The learner first generalizes rules, then critiques them into smaller parts.
    - c. The learner first uses basic sentences, then moves to more elaborate ones.
  4. The learner begins to use the second language in conversation.

## Acculturation Theory

- States that second language acquisition is just one aspect of acculturation and the degree to which a learner acculturates to the target language group will control the degree to which he/she acquires the second language.
- Social and psychological factors encourage second language acquisition.
- If social and psychological distance is too vast between the target language group and the second language learner, then language growth will be stunted.

## Accommodation Theory

- Similar to acculturation theory
  1. However, the social and psychological distance is a perceived distance, not a real distance.

## The Monitor Model

There are 5 central hypotheses:

1. Acquisition-learning hypothesis
  - Learning - knowing about a language
  - Acquisition - the unconscious process used in real communication
2. Natural Order Hypothesis
  - The first and second language grammatical structures are acquired in a predictable order.
  - When the learner engages in natural communication, then this predictable order will occur.
3. Monitor Hypothesis
  - A monitor is used when:
    1. There is time permitted during language use
    2. Pressure is evident to communicate effectively
    3. Correct rules of speech are known
4. Input Hypothesis
  - Input must be comprehensible
  - $i+1$  = input plus a level slightly higher to offer challenge.
5. Affective Filter Hypothesis
  - Environmental factors such as age, personality, past language experiences, attitude, motivation, self confidence, and anxiety all pass through the filter and affect language acquisition.

## Second Language Proficiency Theory

1. Language proficiency is made up of 2 parts:
  - Communicative competence, or the contextual utterances
  - Analytic competence, or the language processes
2. Second language proficiency is readily facilitated in communicative approaches versus the one that emphasizes discrete skills.

## Sociocultural Theory

- There are 4 main principles:
  1. Children construct and co-construct knowledge
  2. Development and learning could not be separated from social context.
  3. Learning can lead development
  4. Language plays a central role in mental development

## Socio-Psychological Theory

### 1. Lambert's Model

- Two identifying factors that determine a person's motivation for bilingualism:
  1. attitude
  2. aptitude

### 2. Gardner's Socio-Educational Model

- Language should be used as a tool to teach aspects of life and not directly taught.
  - Stage 1: Cultural beliefs of learner
  - Stage 2: Use of cultural beliefs in learning a second language to influence individual differences.
  - Stage 3: Individual differences influence language learning.
  - Stage 4: New learning reshapes Stage 2

## Cognitive Theory

### 1. Balance Theory

- Also known as SUP and Balloon Theory
- Belief that there is a separate compartment in the brain for each language learned and the skills from one language cannot transfer to the other.

### 2. Interdependence Hypothesis

- Also known as CUP and Iceberg Analogy
- Each language learned is like a television channel
  1. Monolinguals use language from one central device.
  2. Belief that people can function easily with two or more languages.
  3. Learning takes place equally for each language.
  4. Child's language should be well developed first before being expected to meet cognitive demands in the classroom.
  5. The language skills of listening, speaking, reading and writing need to be fully developed in each language.
  6. When one or both languages are not fully functioning, then cognitive and academic performance will be adversely affected.
- BICS (Basic Interpersonal Communication Skills) and CALP (Cognitive Academic Language Proficiency)

both must be developed in order to learn a language

### 3. Threshold Theory

- Language competence is determined by passing over a threshold.
- Three levels of language proficiency:
  1. Lower floor (limited bilinguals) - proficiency in no language.
  2. Middle floor (less balanced bilinguals) - proficiency in one language.
  3. Top floor (balanced bilinguals) - proficiency in both languages.

### Brain Based Learning Theory

There are twelve main principles:

1. The brain is a complex adaptive system.
2. The brain is a social brain.
3. The search for meaning is innate.
4. The search for meaning occurs through patterning.
5. Emotions are critical to patterning.
6. Every brain simultaneously perceives and creates parts and wholes.
7. Learning involves both focused attention and peripheral perception.
8. Learning always involves conscious and unconscious processes.
9. We have at least two ways of organizing memory.
10. Learning is developmental.
11. Complex learning is enhanced by challenge and inhibited by threat.
12. Every brain is uniquely organized.

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