AN ASSESSMENT OF THE INTEGRATED, THEMATIC APPROACH FOR THE ESL OR SECOND LANGUAGE LEARNER

by

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ABSTRACT

Because of the disparities in how ESL students learn a second language and how they have been taught, the purpose of this study will be to examine and review curricular models and reforms based on research over more than 20 years and evaluate pre and posttest scores in order to determine effective learning practices for the ESL student. Variables surrounding a student's learning success are reviewed and models and methodologies of instruction researched. The preponderance of literature suggests that integrated, thematic instruction is effective in optimizing learning for the ESL student. Data from two elementary schools' student populations whose mode of instruction was integrated, thematic instruction was examined using causal/comparative research. The data sampled 285 students, taken from the IPT Test (IDEA Proficiency Test) and the Arizona CRM (Criterion Referenced Measure) Test administered to students in Desert Sun and Cave Creek Elementary Schools during the school year 1995-96. Gain scores were determined using a T-Test of Means on the difference between the pretest and posttest scores.
The data findings suggest a high correlation with integrated, thematic teaching methodologies and learning success for the ESL and other developmental students.
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CHAPTER 1
THE PROBLEM

Introduction

There are a variety of learning approaches that attempt to address the needs of second language students, also referred to as English as Second Language or ESL students. The Arizona Department of Education refers to these students as LEP (Limited English Proficiency) students.

Over the last twenty years, rapidly increasing language minority demographics of U.S. schools has become more diverse, impacting sharply on instructional methods. School districts are still seeking to identify the most effective methodologies and techniques in addressing the needs of the new second language students (Collier 1995).

In assessing these needs, research leans heavily toward an integrated, thematic approach in optimizing the learning environment for the student, according to Enright and McCloskey (1985), Chomsky (1969), Krashen (1981), Lazear (1991), Chomot (1987), Gardner (1989), and others.
Because of the differences in how ESL students learn a second language and how they have been taught, curricular models and reforms based on research over more than 20 years were reviewed and pretest and posttest scores of ESL students who received instruction in integrated, thematic approach classrooms for the year 1995-1996 in the Cave Creek School District in Cave Creek, Arizona were assessed.

Development of the Problem

The assumption is made by U.S. policymakers and educators that language learning can be isolated from other issues, leading to the belief that minority students must first learn English (Collier 1995). ESL/EFL students were bombarded with English instruction in pull-out programs that caused them to miss out on instruction in their regular content-based classrooms. Vocabulary and English grammar were taught in an isolated environment (McCloskey 1985).

Historically, these students were mainstreamed into regular classes once they had learned English and appeared fluent in oral language skills, receiving no additional support. Immediately they began failing, falling more and more behind. Research shows that it takes two to three years to become orally fluent in a
second language but five to seven years to achieve fluency in academic and abstract language in order to comprehend content without help (Arizona Department of Education 1990).

Growing numbers of language-minority students in American schools led the National Council of Teachers of English (NCTE) Task Force on Racism and Bias in warning against classroom practices that are said to frustrate students' desire to learn. The NCTE issued a pamphlet entitled Expanding Opportunities: Academic Success for Culturally and Linguistically Diverse Students (Arizona English Bulletin 1988) that recommends teaching approaches that have proven effective in helping these students gain a command of written and spoken English. The Task Force chair, Roseann Duenas Gonzalez of the University of Arizona (Arizona English Bulletin 1988, 34), states that "students whose native language is not English need the same wealth of opportunities to practice speaking, writing and reading English that other students in high-quality English programs enjoy" (Arizona English Bulletin 1988, 34).

Instead, they are often given a "structured, atomistic approach to language." Often isolated on a "track", ESL students get a lot of dull work and monotonous exercises. Average and gifted students in good
schools, meanwhile, read real stories and books, write about things that interest them, do group work, and participate in projects, engaging in a content-based curriculum in contrast to the ESL grammar program devoid of content (Arizona English Bulletin 1988, 34).

The first federal bilingual legislation passed by Congress in 1968 and other legislation that followed, such as Lau v. Nichols (1974) addressed the concerns of educators in calling for schools to provide meaningful educational opportunities for language minority students (Collier 1995, 27-36).

Need for the Study

In order to best meet the needs of the ESL students, additional research into effective education practices is essential because of the disparity in assumptions about language acquisition and the preponderance of research that is available regarding language acquisition. The process of acquiring a second language through a school curriculum is very different from foreign learning taught as a subject in school (Cummins 1985).

This study was conducted in response to the lack of previous formal assessment of the effectiveness of the integrated, thematic approach used by many teachers in the Cave Creek School District, in which I teach.
Purpose of the study

The purpose of this study was to determine whether an integrated, thematic teaching approach provides effective learning for ESL students.

Research Question

Is an integrated, thematic approach to learning effective in optimizing the learning environment for the ESL or second language learner?

Definition of Terms

Affective filter - a non-threatening, stress-related environment in which students may feel free to take risks and make mistakes without feeling embarrassed. Accent or grammatical errors are not corrected (Arizona Department of Education, June 1990).

Bilingual education - learning in two languages: the student’s primary language and the second language spoken by the majority of students and teachers.

Bloom’s Taxonomy - levels of learning developed by Benjamin S. Bloom that delineated six different thought process levels: knowledge, comprehension, application, analysis, synthesis and evaluation. Each level has several demonstrable behavioral
indicators which, when demonstrated, indicate student learning level (Bloom and Krathwohl 1977.)

CALLA - Cognitive Language Learning Approach (Chamot and O'Malley 1985.)

Comprehensible input - language is acquired only through comprehensible input. The teacher must do whatever is necessary for ESL students to understand the material: concrete materials, visuals, demonstrations or body language for beginning students to the use of paraphrasing, providing cues or making connections for intermediate students (Arizona Department of Education 1990.)

CRM - Criterion Referenced Measure: a testing instrument to measure performance in a given subject. Results from both summative exams and formative tests are judged in terms of specific learning criteria (Cave Creek School District 1995)

EFL - English as a Foreign Language.

ESL - English as a Second Language.

Formative tests - tests given during the course of instruction for the purpose of feedback to students and teachers to provide very specific information about student progress.

Holistic instruction - a learning environment in which there is conversation, active participation and
interaction with others (Arizona Department of Education 1990).

IDEA - Individualized, Developmental English Activities (Ballard 1982).

IPT-IDEA - Proficiency Test (Ballard 1982).

Language acquisition - a process of gaining fluency in a language by communication and exposure that occurs on a subconscious level (Arizona Department of Education 1990).


Metacognition- reflective ability and self-awareness to observe one's own thinking patterns, i.e. to understand how one learns (Cummins 1990).

Multiple intelligences - sets of problem-solving capabilities; there are many forms of intelligence, many ways by which we know, understand and learn about the world (Lazear 1990).

Thematic unit- a teaching/learning unit of study set up for students within which reading, language arts, math, social studies/science areas are taught/learned and associated skills developed. It is interdisciplinary and multidimensional, so it knows no boundaries (Enright and McCloskey 1985).
Summative tests - major examinations to gather cumulative information on students' learning for grades or competence in a particular skill.
CHAPTER 2

LITERATURE REVIEW

Introduction

The assumption is made by U.S. policymakers and educators that language learning can be isolated from other issues, leading to the belief that minority students must first learn English (Collier 1995). Research has indicated that ESL students develop language acquisition more effectively when it is learned within integrated, thematic content-based classrooms. A variety of methodologies and techniques through the curricular disciplines are employed by teachers using this approach. This chapter explores the variables affecting the ESL learner's success.

Variables in the Success of the ESL Learner.

Identification of the variables that comprise the makeup of the ESL learner was primary to this study. One must understand the framework in which the ESL learner or minority student operates.

Empowerment. One variable is a sense of empowerment. Empowerment or having power results when one is an
integral part of a society and has a positive self-image within that society (Cummins 1979b). Empowerment affects self-esteem which is, in turn, affected by the ability to communicate, to belong, to share in decision-making and feel valued. Cummins refers to students from dominated societal groups (i.e., minority students) as being either empowered or disabled as a direct result of their interactions with educators in the schools (Cummins, 1986, 18-33). Four variable institutional characteristics that play implicit/explicit roles in the extent to which these dominated groups are empowered or disabled, are the extent of: minority students' culture and language incorporation into the school program, the minority community involvement in the children's education, the promotion by teachers of inner motivation to use language actively to generate their own knowledge, and assessment professionals becoming advocates for minority students (Cummins, 1986, 18-33).

At-risk learner. McWhirter (1993) examines the characteristics of the at-risk student and those factors in the school responsible for producing at-risk learners. How do we define the at-risk student? "At-risk" denotes a set of presumed cause/effect dynamics that place the individual child or adolescent in danger of negative future events. The "at risk student is defined as one who
runs the risk of not acquiring the knowledge, skills and attitudes needed to become successful adults” (McWhirter 1993, 6).

There are many categories and components that might account for development of the variables which lead to at-risk students. While family and environmental factors are at the forefront of this scenario, the school and educators within the school environment have control over certain educational practices and behaviors. Educational practices and philosophies that are able to promote student empowerment will heighten the possibility for success in school, and in so doing, diminish the possibility of failure or in the students becoming at-risk (McWhirter 1993). A student who does not share the culture or linguistic characteristics of the majority population of a community may be said to be potentially at-risk of failure.

McWhirter (1993) points to the findings of research on the effectiveness of schools as being consistent regardless of the underlying theories or methodologies used by the researchers.

Leadership behaviors, academic emphasis, teacher and staff fractures, student involvement and community support are the variables used to determine effective schools.
1. Schools are effective that likely have autonomous or site-based management and make many decisions about programs and their implementation without school board approval. Strong instructional leadership is also emphasized.

2. A curriculum that stresses academics and recognizes achievement on a school-wide basis with frequent monitoring of student progress is another variable.

3. "Collegial" or professional relationships among the staff that support collaborative planning, low turnover of faculty members, and availability of staff development on a school-wide basis are the teaching/staff factors in the elements of effective schools.

4. Students at schools that have clear goals, a fair, understandable and consistent student discipline program that is not oppressive or punitive tend to create a sense of community and belonging that is student involvement.

5. The community that has high expectations of the schools and their students, and show district and parental support and involvement, will nurture effective schools (McWhirter 1993 p.66).

Other factors responsible for producing "at-risk" youth are poverty, divorce, abuse, drop-out rate, drugs,
sexually transmitted diseases, teenage pregnancy, crime and minority status (McWhirter 1993).

ESL students, and their families, are in a subordinated position with respect to all of these variables because of the language barrier. It becomes necessary, then, to understand how language is learned in order to assess methodologies that will lead to effective language learning for the ESL student, thus optimizing the chances for success in the classroom.

Language acquisition.

How does language acquisition develop? There is much research on contemporary and traditional methods, strategies and techniques that optimize participation and comprehension in a classroom. The aspects of ESL and other grade level learning are diverse and complex. Language development is the foundation of learning for the young student or the ESL student, and is central to several other components that must be present for maximized participation and comprehension to occur.

Models have been designed by several researchers in the field of Bilingual Education describing how second language learners begin the process of second language acquisition (Collier 1995).

The need to understand these models and then assess methodologies for second language acquisition becomes
apparent, because of the disparity between assumption and factual research about language acquisition. In this section, the research on language acquisition and curricular reforms will be reviewed.

Krashen's "Monitor theory" (cited in Ovando and Collier 1985, 59) addresses his hypothesis about subconscious language acquisition and conscious language learning. Acquisition is the natural way in which young children learn or pick up a language with some or no formal teaching. Meaningful, natural interaction is needed for acquisition to occur. The focus is on understanding the message, not the form.

Slobin (Bialystok 1991) wrote that Stage I language, which is the beginning stage of language development, is very much the same all over the world. Expressions of semantic relationships and eventually word-order are explored and learned. Later stages of speech develop similarly in a variety of languages, with inflections and grammatical morphemes, adding longer sequences.

Slobin has also noted that "semantics is the primordial nucleus which further directs the acquisition of all grammatical means of expression" (Bialystok 1991, 43). There is much Soviet research on language acquisition, yet despite their respect for Pavlov, Soviet psychology never adopted the mechanistic, rather passive
of learning and experience espoused by Pavlov and incorporated into the American school behaviorism. Even Pavlov concluded certain distinctions in later life between species he studied regarding reflex principles of behavior and learning. He realized the presence in humans of a complex and organized system of linguistic signals that lead to a new dimension of behavior. According to the research of Bialystock, Pavlov stated that it is our very capability of speech which has made us human (Bialystok 1991).

Linguistic signals give information about the speaker, not only about what is being described. Instances of tone, voice and dialect convey expectations of the speaker even as do words and their construction.

Metacognition in language development. Research done by Geva and Ryan (Language Learning 1993, 5-11), of an English-Hebrew day school with 73 children in grades 5-7, was based on the frameworks proposed by Cummins, Bialystok and Ryan (cited in LL 1993, 5-11) which provided evidence that children able to use analytic functions in their L1 (primary language) were more likely to do so in their L2 (second language) also. Their research demonstrated that memory played an important role in performance of linguistic tasks in L2, which support Cummins’ interdependence theory (1979b). This
theory states that the acquisition of cognitive and linguistic skills acquired in one language can be transferred to another language through cognitive development and instruction, developing deep underlying conceptual and linguistic proficiency with concepts originally learned through one language.

Cummins's (1979b) research also shows that older immigrant children perform better on cognitively demanding L2 skills than younger immigrant children.

Bialystok's findings (1991) demonstrated that while 9- to 11- year old monolingual children performed better than their bilingual counterparts on linguistic analysis, the bilingual children demonstrated a predicted advantage on tasks necessitating increased cognitive control.

Two skill components make up Geva and Ryan's (1993) metacognitive model: analyzed linguistic knowledge which addresses the learner's growth in analysis and knowledge of the structure of language and cognitive control which addresses the increased executive control over cognitive operations.

If surface level aspects of the reading comprehension process is slow in L2, like decoding an unfamiliar script and syntactic knowledge and the lexicon are slow and incomplete, then "application of top-down
underlying conceptual knowledge may be limited" (Language Learning 1993, 5-11).

**Phonetics in Language acquisition.** In a study by Cichocki, House, Kinloch and Lister (cited in Language Learning 1992, 43(1) 46-65) of language acquisition by Cantonese learners of English, and Cantonese learners of French, basic aspects of language acquisition involved the need to address phonetics.

The importance of contrasting voiced and voiceless sounds in general was demonstrated as to the "scale of difficulty that depends on the position of the phoneme in the mouth: the farther back in the mouth it is, the higher is the difficulty rating of the phoneme." Phonetic aspects of language acquisition are basic to the L2 learner as well as the L1 learner in the ability to apply linguistics principles to higher level transformations. Their Markedness Differential Hypothesis explains many of the patterns of difficulties, although it was limited to consonants. The authors suggested that their study be extended to allow for a greater degree of interlanguage facts (Language Learning 1992, 43(1) 46-65).

**Socio/cultural aspects of language acquisition.** Researchers studying the language development of both young L1 learners and L2 learners began focusing in on the semantic and social/contextual facets (Enright &
McCloskey 1985) with definitive rethinking on the aspects of language acquisition for children and perhaps all language learners.

Language develops by comprehension and linguistic signals, semantic relationships, word-order and morphemes.

Collier's (1995) research has resulted in a conceptual model based on four components that help to explain the interacting factors experienced by the school child when acquiring a second language during the school years. This model discusses sociocultural, linguistic, academic and cognitive processes.

The first component comprises all the surrounding social and cultural processes occurring in the child's everyday life, past, present and future, in all contexts, are central to that student's acquisition of language.

The second component of Collier's model addresses "subconscious aspects of language development (the innate ability that all humans possess to learn oral language), and metalinguistic, conscious, formal teaching of language in school, and oral acquisition of the written system of language". (Collier 1995, 3).

The third component is academic development. Academic knowledge and conceptual development though the curricular disciplines of language arts, mathematics, the sciences and social studies for all grade levels from K-12 and beyond expands the linguistic dimensions of the
learner: vocabulary, sociolinguistic, and discourse to higher cognitive levels. Collier’s findings indicate that academic work is most efficiently developed in the student’s first language while teaching second language during other periods of the day through meaningful academic content. In the past, the teaching of academics was secondary to second language learning. Research has indicated that academic failure, rather than success, is likely to be promoted where there is postponed or interrupted academic development.

Cognitive development is the fourth factor in Collier’s model. During the 1970’s, there was a simplifying, structuring and sequencing of the language curricula. The cognitive aspect had been, for the most part, neglected by second language educators in the United States. Academics was “watered down into cognitively simple tasks” (Collier 1995, 3). It is now known from the extensive research base that cognitive development in first language is crucial to second language acquisition success. All these components are interdependent and necessary for the student’s overall growth and success, and first and second language learning as a lifelong process (Collier 1995).
Models and Methodologies of Interactive Learning in the Classroom

Interactive Learning. Interactive learning (active participation), which is what children bring to the linguistic environment and the communicative encounter, was similar to the "creative construction" theory of Dulay and Burt. The notion of linguistic competence and language proficiency has been replaced by a broader construct of "communicative competence" in both theoretical and popular literature (Enright and McCloskey 1985).

Natural Approach. Savignon and others (as cited in Enright and McCloskey 1985) have demonstrated that one communicates by communicating, or learns the language by the interactive, communicative Natural Approach. The Natural Approach demonstrate the effectiveness of the interactive, communicative classroom.

The key points of this model for elementary classrooms are first, that children learn language as a medium of communication rather than as a curriculum subject with sets of isolated parts. Likewise, language proficiency is defined as speakers' successful accomplishment of their communicative intentions over a wide variety of social settings, referred to as "communicative competence."
Secondly, "successful" communication as defined prior to this, is inclusive of the respondent both as sender and receiver of a message (Wells, as cited in Yes, Talking! 1985). It is therefore essential that the input is real, comprehensible input (Krashen 1982), tied to real objects and situations in the children’s world that take into account children’s previous linguistic experience, and their previous cognitive, cultural, and social experiences.

Language is the means by which we communicate: verbal, written, body, sign, contextual, social and nonverbal. The acquisition of these means opens the door to the learner on many levels. For the L2 learner, language is the key to the difference between success and failure in school and in a broader sense, the way in which the L2 learner views him/herself.

CALLA. Chamot’s research (1985) provides an extensive curricular program approach that emphasizes "congruence with mainstream objectives." CALLA is an acronym for Cognitive Academic Language Learning Approach, a framework continuum model from cognitively undemanding activities to cognitively demanding activities developed by Chamot with O’Malley (1987). This learning approach model demonstrates the great variety of metacognitive and cognitive strategies that
can be organized for optimizing learning in the classroom using Bloom's taxonomy (see Definitions) for instruction to transition from lower to more advanced metacognition and cognition.

The ability to communicate in the educational setting is vital for success. This variable is addressed in much of the research presented herein. A comfortable, non-threatening holistic environment that supports a child's development of communication with multiple opportunities for success if central of the CALLA model (Chamot 1985).

The Communicative Classroom

Enright and McCloskey (1985) describe the communicative classroom model as one that embraces those aspects that enhance successful communication through collaboration by continual, consistent and conscious use of the double learning potential of every event in the daily life of the classroom. Based on prior knowledge of the students, this model is interdisciplinary and multidimensional so it knows no boundaries. It is responsive to the interests, abilities and needs of children and is respectful of their developing aptitudes and attitudes.

Organizing the classroom so that comprehensible input may occur is primary to their study. Facilitating
this communicative model has some difficulties. The teacher must abandon the stereotyped "good classroom" model whereby the students sit quietly at their desks and the teacher lectures the class and adopt the scenario whereby the children are engaged in small groups or with one another in the learning activity with the teacher as facilitator, rather than direct instructor of the learning. "Teachers who use this communicative approach model for their instruction make continual, conscious use of the double learning potential of every event in the daily life of the classroom.

There are several criteria outlined by Enright and McCloskey that demonstrate the communicative model classroom:

**Criterion 1:** Students are organized for working together (collaborating) that is an integral part of successful communication. Illustration of this aspect was made that rather than a full-group lecture by the teacher on mammals and reptiles, the teacher might have groups discussing and categorizing sets of animal photos and explain their groupings to the rest of the class.

**Criterion 2:** The class is organized in a purposeful activity. The activities in the communicative classroom are specific to getting something done. A resulting play performance or a bean harvest or the right-sized gerbil
pen are illustrations of a class engaged in the communicative model classroom.

Criterion 3: Student interests are kept in mind by the teacher in organizing the classroom while maintaining the adult goals and interests of the curriculum for the students. Using Criteria 1 and 2, measuring the heights of various objects by pairs of young students would be better than completing measurement worksheets. Guessing their own and their partner’s height and then measuring to see how close they came would be even better.

Criterion 4 addresses using the students’ previous experience in the learning. Ventriglia (as cited by Enright and McCloskey) speaks of the teacher bridging the two worlds of L1 and L2 learners. Maps of every child’s home country during a unit on maps would be used, not just one or two maps from a textbook. Language, math, science and other curricular opportunities would be plentiful. At an older level, reading sessions and turn-taking patterns and other elements of participation with adjustments for accommodating the ESL children would provide successful and meaningful experiences for learning a new language and new ways of communicating while learning content.

Criterion 5 focuses on organizing for holism. If children are using all their available resources to learn
language, then teachers must integrate rather than segment their curriculum and learning activities. Developing literacy and communicative competence rather than language arts, reading and writing are referred to by teachers using the communicative language teaching model set forth by the authors.

Criterion 6 speaks of organizing for support. Children learn best in a comfortable, non-threatening atmosphere, that will support children's development of communication. Multiple opportunities for success and failure need to be provided by the teacher with prompt feedback as a natural and necessary part of the situation. Teacher discretion for correction of grammatical or other errors is inherent in this setting.

Criterion 7 discusses successful communication as exposure across a wide variety of common social settings. As children are exposed to diverse settings, then the teacher must organize the classroom with a variety of materials, purposes, topics, activities and ways of interacting in mind (Enright and McCloskey 1985, 431-53)

In such a classroom, talking is essential. Rules for classroom structure will be established at the onset, adjusted slightly within the first few weeks, then internalized by the students, to be used as tacit regulators of interaction for both teacher and students.
Another aspect for this mode is: the classroom events for carrying out the daily agendas: grouping, tasks for the learning to be accomplished, how the students are to interact, materials, their physical arrangement and their locale.

Enright and McCloskey (1985) state also that these classrooms be not merely functional but enticing and exciting environments, with many student-created materials and displays. The classroom should be student-owned. They conclude by summarizing those key assumptions of the communicative language model and implications of those assumptions for the teacher and learner.

The Multicultural classroom.

When a culture is valued within an educational environment, it results in a positive and esteem building foundation for minority students (Creative Classroom 1992). ESL students have been identified in the educational community as possible at-risk learners (Arizona Department of Education 1990). Classrooms where multiculturalism is part of the curriculum foster understanding and tolerance for other cultures in the community and provide validation for those of minority cultures. Styles of learning are varied and must be addressed by teachers in the classroom.
Chamot and O’Malley (1987) discuss multiculturalism as an important factor in reducing the affective filter to create a less threatening atmosphere for ESL learners. This particular aspect plays a significant role in lowering the at-risk factor for second language learners as well.

McCarty, Wallace and Lynch (1989) describe the curricular reforms for Navajo schoolchildren by Hilda Tuba nearly two decades ago using an inquiry-based curriculum now being used in the Rough Rock, Arizona community as a demonstration model. The Tuba model uses a bilingual, bicultural approach emphasizing open-ended questioning and inductive inquiry incorporating culturally meaningful experiences and concepts, rather than isolated ones found in texts.

Multiculturalism within a classroom lowers the affective filter (Chamot and O’Malley 1987) for children and, by so doing, creates a less threatening atmosphere for all present. Respect for other cultures can be promoted through literature (Instructor 1994). Exposure to different cultures is a start to coping in a global community (Denise Lewis Patrick as cited in Instructor 1994, 41). Expansion of horizons (Laurence Yep as cited in Instructor 1994, 39), the building of self-esteem, historical perspective, up-to-date imagery, discussions
that promote critical thinking skills, and a celebration of similarities through shared reading experiences promote a climate where children can see tolerance for others and perhaps intrinsically a tolerance for a variety of learning styles within their learning environment (Instructor 1994).

Research suggests that next to parents, teachers are the most significant people in children's lives. Children bring to school with them biases and prejudices about others different from themselves established previously (Creative Classroom 1992). It becomes the task of teachers to help change existing attitudes to counteract negative images and encourage the development of more accurate and positive images of those people. The teacher's role is critical in preventing the propagation of a monocultural view of society that is inconsistent with the past and present realities of life in the United States (Baker 1989). Teacher education and training are vital to the success or failure of desired changes in the curriculum.

Multiethnic education implies use of a multiethnic approach to the curriculum that plans and organizes the learning experiences for children in educational settings that will reflect ethnic and cultural diversity (Baker 1989). In her article, Baker describes her experience in
establishing a multicultural curriculum in her fourth grade. Primary strategies begin with the teacher. Realizing one's responsibility for presenting opportunities for ethnic and cultural diversity to students provided the motivation (Baker 1989). Most teachers receive their entire professional training from institutions devoid of training in this area. Thus, the burden of training falls to in-service or pre-service classes, until the situation changes. Efforts by the NCATE in revising the Standards for Accreditation to include training in multiculturalism should contribute to filling this void. Baker's strategies included studying the ethnic cultures to be introduced to the students through movies, children's literature, periodicals, newspapers, museums, previewing children's filmstrips and movies for classroom use, attending pertinent lectures or events in preparing for a multicultural curriculum.

Baker states that while organizing for teaching multiculturally is a challenge, it is far less difficult if preparation begins with establishing a knowledge base for developing a philosophy which in turn provides supporting rationale for becoming involved in implementing the multicultural curriculum. Ethnic content of the curriculum is far more valuable if integrated throughout the learning. Although Baker's
grade level was fourth grade, these strategies are applicable to teachers of kindergarten. The success in implementation of her curriculum and her experiences confirmed that the success of multicultural education depends on the teacher (Baker 1989).

Researchers like Louise Derman Sparks and the ABC Force (Anti-Bias Curriculum) found that a sense of cultural identity begins to develop as early as age two. Multiculturalism helps children appreciate the diversity that exists in the world today.

Multiculturalism means power, according to Sparks (Arizona English Bulletin 1988). Helping children see the impact of their behavior by exploring their backgrounds and beliefs will gain for them a deeper sense of their place and goals. She further states that seeking truth about others may allow them to discard biases and prejudices in favor of their own perceptions. Helping students clarify their values will empower them with a greater sense of self-worth, which will foster more successful learning.

By learning about and appreciating differences, they also learn empathy. Children begin to see that they have choices—not only in clothes and food, but also in the way they behave toward others, in the friends they make and the kind of people they want to become. Several
characteristics can be seen in the five year old that would provide a rationale to support the multicultural view of teaching.

The research and the positive insights provide some concrete techniques to encourage tolerance and understanding of other cultures.

Behavior that excludes others as group identities are built, exploring and comprehending differences and similarities between racial groups, grasping scientific explanations for differences in skin color, hair texture, and eye shape, beginning to understand concept of family traditions and making connections between their individual and family identity and larger ethnic group, can be positive in the multicultural classroom. Talking about what makes each person unusual and different from all others, how we are alike and different, comparing characteristics, learning to ask questions of others in the class and in our community, what we can do to promote understanding in our class and exploring each child's uniqueness provide some real "hands-on" multicultural experiences for the kindergarten child (Feder-Feitel 1992). Self-collages and family pictures heighten children's uniqueness. Celebrating others' holidays promote self-esteem and demonstrates respect for
everyone's traditions throughout the curriculum (Feder-Feitel 1992).

**Thematic Units.** Thematic units provide an arena for extending and expanding important concepts and issues. They also demonstrate the varied relationships that exist between content and other aspects of the elementary curriculum in a positive, non-threatening format, as advanced by Fredericks, Meinbach and Rothlein (1993). In the communicative classroom, multicultural classroom and other models discussed, interdisciplinary or thematic units would be an integral component.

**The Writing Process.** Language acquisition is further accelerated and enhanced by writing. Studies of literacy development before formal schooling by Goodman (1987) and others have shown that most children have some knowledge of print before attending school. Because children need to communicate and make sense of their environment well before coming to school, they are very much aware of the written language of their environment. The need for children to communicate literally drives them to learn the language, according to Goodman (1987).

Writing progression has been documented by several researchers like Goodman, Graves, Rigg, Edelsky, Jilbert, and many more, according to Hudelson (1984b). Urzua (1980) and others "found that students learning English
as a second language demonstrate an ability to write material that they are not able to control orally, especially when it comes from within themselves" (Urzua 1980, 38-44). One important generalization from the research in this area for classroom application is that even children who speak no English or very little English are reading some of the print in their environment and rare using print to increase their English knowledge (Y. Goodman 1980).

The Writing Process offers young children an opportunity for authentic writing to progress through natural stages of writing development. Journal writing for kindergartners progresses from pictures without labels to pictures with labels to simple and then more complex narrative (Newkirk and Atwell 1988).

Through the writing process, young writers build self-esteem as a natural result of sharing their work with classmates and responding to others. They take seriously their responsibility in questioning, discussing, editing and giving each other ideas, according to Brady and Jacobs (as cited in Newkirk and Atwell, 1988). Young writers become critical readers by being able to question the integrity of the text before them. Students able to locate the main idea, summarize,
Missing
actually slows down second language literacy development in children (Hudelson 1984b, 47).

Teachers must treat children's ability to recognize print in the environment as evidence that the children are interacting with their environment and need encouragement in meaningful writing. Use of print knowledge and interaction with print through writing will ultimately develop competence in English (Hudelson 1984a, 48).

Urzua (1987, 305) concluded "that the writing process helped children develop a surprising amount of cognitive, social and linguistic skills. Furthermore, children exposed to regular, frequent and authentic writing experiences" seemed to develop three aspects of their writing skill: a sense of audience, sense of voice and sense of power in language.

The interaction of writing in a second language with reading competency was also addressed in Perrotta's study (1994) and shown not only to be related but to closely complement each other, according to Edelsky and Jilbert (cited in Perrotta 1994).

There are many practical implications of their findings. Perrotta states that ESL programs should foster children's pride and confidence in their language and their growing literacy, be exposed to a variety of activities that integrate reading and writing such as journals, making signs, writing letters, keeping records and other authentic activities where writing and reading support each other.
Goodman (1979), Hudelson (1984), and others all concur that the supportive classroom environment is vital to student self-confidence and the motivation to read and write. Other findings suggest that children's bilingualism, rather than acting to confuse, instead increase their options for making meaning. Code switching occurred rarely in the children's writing (Hudelson 1984b).

Summary

A preponderance of the research and documentation supports the interdependence of language acquisition and cognition. There are numerous strategies and methodologies for empowering the ESL student and lowering the affective filter (Krashen 1982) to allow for the greatest possible opportunities in learning English as a second language to promote cognition, which in turn affect the learner's educational process. The research and findings cited heretofore emphasize those opportunities for cognitive development through language acquisition, for use in the classroom, vital to the success of the ESL student.

The diversity and nature of these authentic strategies, methods and techniques discussed have been demonstrated to enhance and optimize the learning for
ESL, kindergarten and other developing students, and, in turn, maximize participation and comprehension within the classroom.
CHAPTER 3

METHODOLOGY

Purpose

The purpose of this study was to determine whether an integrated, thematic teaching approach provides effective learning for ESL students. Pretest and posttest scores of ESL students whose teachers used the integrated, thematic approach for 1995-1996 in the Cave Creek School District in Cave Creek, Arizona were assessed.

The research question asks: is an integrated, thematic approach to learning effective in optimizing the learning environment for the ESL or second language learner?

Research Design

This study uses causal/comparative research, a form of the descriptive research design. In the descriptive research design, the researcher describes the facts and characteristics of a given phenomenon, population or area of interest to draw attention to the relationship of two events (Merriam and Simpson 1995, 61-63).
Causal/comparative research is a form of descriptive design by which the researcher examines and attempts to explain phenomena that has already transpired. Causal/comparative research seeks results that may indicated relationships that point to a cause.

In this study, pretest and posttest scores of students exposed to integrated, thematic instruction will be assessed for growth (referred to as gain scores).

Instrumentation

The data examined was taken from the IDEA Proficiency Test (IPT Test) and the Arizona Criterion Referenced Measure Test (CRM) administered to students in Desert Sun and Black Mountain Elementary Schools during the school year 1995-96.

The Individualized Developmental English Activities Program (IDEA) was developed by Wanda S. Ballard, a Speech and Language Development Specialist in California, along with Phyllis L. Tighe, a classroom teacher and reading specialist (Ballard and Tighe 1979), in response to Ballard’s perception of the need for a comprehensive language-based program for teaching English to non-English students as well as low language ability children.

IDEA is a comprehensive oral English language program of activities for use in bilingual and ESL
programs. The IDEA Oral Language Proficiency Test tests four basic areas of English oral language proficiency: Vocabulary, Comprehension, Syntax, and Verbal Expression which includes Articulation. There are six levels of difficulty tested: Levels A, B, C, D, E, and F. All students are tested individually. They either advance or stop at a proficiency level as indicated by information provided at the end of each level. At the completion of the test, the student could place on any of the six levels or could show mastery level at Level F which means mastery (80% or better) of the IDEA Oral Language Proficiency Test (See Figure 1 on page 52 of this paper).

The IDEA Oral Language Proficiency Test grew out of the recognition for a proficiency instrument that could be used as an integral part of a total oral language program. It took several years for refinement, yet the IDEA program was being fully implemented in the classrooms of both Ballard and Tighe. Because the program was effective, successful, comprehensive and organized, it was able to be implemented by a parent volunteer or instructional aide.

The success of the program led the State of California to adopt it and several other states have accepted its use as well: Texas, Colorado, New York, Arizona, Oregon, Washington and Hawaii.
The IPT (IDEA Proficiency Test) correlates with and is based on the IDEA program published by Ballard and Tighe, Inc. The difficulty levels are expressed by Roman numerals. The proficiency levels in this test are denoted by letters. The following is the correlation between the two:

<table>
<thead>
<tr>
<th>IDEA Proficiency Test (IPT)</th>
<th>IDEA Oral Language Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level A</td>
<td>Less than 50% proficiency of Level I</td>
</tr>
<tr>
<td>Level B</td>
<td>Level II</td>
</tr>
<tr>
<td>Level C</td>
<td>Level III</td>
</tr>
<tr>
<td>Level D</td>
<td>Level V</td>
</tr>
<tr>
<td>Level E</td>
<td>Level VII</td>
</tr>
<tr>
<td>Level F</td>
<td>Level VIII</td>
</tr>
</tbody>
</table>

The student looks at pictures, answers oral questions with and without visual cues and proceeds from one level to another, stopping at the level determined by the number of errors for the last section completed.

Recent Federal requirements (Title I, Migrant Education, and Title VIII), and State legislation (AB 1329 and AB 3470), mandate assessment of children tentatively identified as Non-English Speaking/Limited English Proficiency (NEP/LEP).

The CRM Test used by the Cave Creek Unified District was developed as part of a consortium or group effort with three smaller school districts in Arizona. The CRM Test used by the Cave Creek Unified School District was Iowa State University's School Improvement Model Project (SIMS).
According to Nancy Clarke (1996), former curriculum coordinator of Cave Creek Unified School District #93, the goals of the CRM were developed using the district's philosophy on setting high academic standards and for demonstration of teacher accountability for Arizona Essential Skills, national standards and model curriculum from other states.

Subject area strands (Appendices A, B, and C of this paper), program goals, scope and sequence and unit plans for grades K-12 were developed for the CRM model adopted by this consortium. The CRM Test was to be administered two times during the year: as a pretest prior to the learning and then as a testing measure of student achievement at the end of the school year. It is scored by measuring the percentage of total objectives mastered on a pretest and posttest. (See Appendices A, B and C for clarification of objectives.)

The CRM tests used in the assessment of student growth by this researcher were in language, reading and math.

Language skills include questions to test literacy awareness and comprehension, apply correct spelling, knowledge of linguistics, grammar and usage to written communication, and listening and critical viewing skills. Ability to interpret information and utilize thinking
skills are other essential components of the language assessment.

Among the Reading objectives tested were listening and comprehension skills (e.g. for kindergarten: identifying picture/story scenario parts based on listening to a piece of literature); ability to use reading strategies, vocabulary comprehension and communication skills through written expression.

Some Math objectives in the CRM assessment on the kindergarten level included number recognition, shapes identification, larger/smaller number of items, clock and time concepts. Understanding, representation and use of numbers in a variety of equivalent forms, relationships of numbers to each other, conjectures, gathering evidence and building arguments to support ideas, problem solving, geometric concept recognition and application of those concepts and relationships to solve problems are other goals for the math assessment.

Sample and Population

The researcher examined the pretest and posttest scores of 285 students exposed to a thematic, integrated approach to learning from Kindergarten to fifth grades at two elementary schools in Cave Creek Unified School District #93 in Cave Creek, Arizona during the school
years 1995-96 and 1993-94, from the IDEA Proficiency Test (IPT) and the Cave Creek District Criterion Reference Measure Test (CRM). The total elementary school populations were 1,185 students, with approximately 100 students from each grade level. Eighty-six percent of the data was collected from the 1995-96 test results and 14% was collected from the 1993-94 kindergarten population. The data for the 1995-96 kindergarten population was unavailable, resulting in the use of 1993-94 test data.

An assessment for demonstrating gain scores from these pre and posttests of students who have been exposed to thematic, integrated approach to learning at different learning levels was conducted to determine the scope of effective language acquisition and higher levels of metacognition and cognition.

Procedures

The research assessed the pretest and posttest scores of 285 students from integrated, thematic classrooms taking the Cave Creek District CRM Test including 20 ESL students who were also given the IPT. The latter test was designed to measure the language comprehension level for ESL learners and is administered in English and in the students’ primary language; one student at a time with the tester.
The effectiveness of this learning approach for the ESL student was assessed by analyzing gain scores of students who have received instruction from teachers using a thematic, integrated approach.

Assumptions and Limitations

This study is appropriate because of the variety of methodologies used in schools for ESL and non-ESL students, and the need to identify the most effective methods for second language acquisition.

The research assumes that other school group ESL populations would be representative, given instruction by integrated, thematic methods and testing by the IDEA Test, and the Cave Creek Unified School District's CRM Test or other district-mandated proficiency instrument measurement.

The philosophy of the IDEA Test is based on the assumption that language acquisition is developmental, incremental and sequential.

Some limitations are inherent in the test samples being examined. Each classroom teacher administers the CRM test to his/her own class, and the test has no provisions or design with the ESL student in mind. This test is administered in English only. Teachers'
attitudes toward ESL students may affect student performance on the test.

One school uses a pull-out program to administer their ESL program and one school has an inclusionary ESL population. This may be seen as a limitation to the results of the test sample.

Method of Analysis

The researcher did a T-Test of Means measuring the difference between the pretest and posttest scores of the Language, Reading and Mathematical CRM Tests for grades 1-5, and a T-Test of Means of the 1993-94 Language, Reading and Mathematics CRM Tests for the kindergarten (neither 1994-95 nor 1995-96 scores for this grade level were available for use).

The results of the T-Test helps demonstrate the effectiveness of the integrated, thematic teaching approach on student learning.
CHAPTER 4

PRESENTATION AND ANALYSIS OF THE DATA

The purpose of this study was to determine whether an integrated, thematic approach to learning is effective in optimizing the learning environment for the ESL or second language learner.

CRM Testing Results

Tables 1 through 6 are results of the CRM tests demonstrating a positive growth range from 12.3 to 54.1.

IPT Testing Results

Of 20 ESL students taking the IPT, there were 6 students at level A. 3 of the students progressed to level B, 1 to C, 1 to D and 1 to F. Of six students who were at level B, 2 stayed at level B (these were March admission entrants into kindergarten), 3 went to level C, 1 went to level D. 1 student at level D progressed to E. 2 students at level E progressed to level F. See TABLE 7 for specific level designations.
### TABLE 1  
KINDERGARTEN (26-32 students)

For Kindergarten: The Mean Growth in Language Arts was 12.3; Reading was 22.3; and Math was 27.1.

<table>
<thead>
<tr>
<th>Language Arts</th>
<th>Pretest Means (SD)</th>
<th>Posttest Means (SD)</th>
<th>Growth Means (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language Arts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>82.6 (10.6)</td>
<td>94.9 (7.5)</td>
<td>12.3 (11.2)</td>
</tr>
<tr>
<td><strong>Reading</strong></td>
<td>Pretest Means (SD)</td>
<td>Posttest Means (SD)</td>
<td>Growth Means (SD)</td>
</tr>
<tr>
<td></td>
<td>58.7 (15.8)</td>
<td>81.0 (12.5)</td>
<td>22.3 (18.1)</td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td>Pretest Means (SD)</td>
<td>Posttest Means (SD)</td>
<td>Growth Means (SD)</td>
</tr>
<tr>
<td></td>
<td>50.7 (20.5)</td>
<td>77.8 (17.7)</td>
<td>27.1 (16.8)</td>
</tr>
</tbody>
</table>

### TABLE 2  
FIRST GRADE (27-28 students)

For First Grade: The Mean Growth in Language Arts was 54.1; Reading was 55.9; and Math was 54.1.

<table>
<thead>
<tr>
<th>Language Arts</th>
<th>Pretest Means (SD)</th>
<th>Posttest Means (SD)</th>
<th>Growth Means (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language Arts</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>38.4 (18.7)</td>
<td>91.4 (10.3)</td>
<td>54.1 (22.2)</td>
</tr>
<tr>
<td><strong>Reading</strong></td>
<td>Pretest Means (SD)</td>
<td>Posttest Means (SD)</td>
<td>Growth Means (SD)</td>
</tr>
<tr>
<td></td>
<td>32.8 (16.9)</td>
<td>88.9 (5.6)</td>
<td>55.9 (18.1)</td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td>Pretest Means (SD)</td>
<td>Posttest Means (SD)</td>
<td>Growth Means (SD)</td>
</tr>
<tr>
<td></td>
<td>32.4 (16.9)</td>
<td>86.5 (13.2)</td>
<td>54.1(22.2)</td>
</tr>
</tbody>
</table>
TABLE 3
SECOND GRADE (34-37 students)

For Second Grade: The Mean Growth in Language Arts was 31.7; Reading was 29.7; and Math was 39.0.

<table>
<thead>
<tr>
<th>Language Arts</th>
<th>Pretest Means (SD)</th>
<th>Posttest Means (SD)</th>
<th>Growth Means (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40.7 (20.8)</td>
<td>73.6 (17.6)</td>
<td>31.7 (23.1)</td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>57.9 (23.2)</td>
<td>87.7 (13.5)</td>
<td>29.7 (20.5)</td>
</tr>
<tr>
<td>Math</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>39.5 (21.0)</td>
<td>78.5 (15.7)</td>
<td>39.0 (24.6)</td>
</tr>
</tbody>
</table>

TABLE 4
THIRD GRADE (38-40 students)

For Third Grade: The Mean Growth in Language Arts was 23.1; Reading was 15.9; and Math was 15.9.

<table>
<thead>
<tr>
<th>Language Arts</th>
<th>Pretest Means (SD)</th>
<th>Posttest Means (SD)</th>
<th>Growth Means (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>39.5 (18.9)</td>
<td>62.6 (17.9)</td>
<td>23.1 (16.9)</td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>62.0 (24.6)</td>
<td>77.6 (14.6)</td>
<td>15.9 (18.0)</td>
</tr>
<tr>
<td>Math</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>39.6 (18.0)</td>
<td>69.4 (18.9)</td>
<td>15.9 (18.0)</td>
</tr>
</tbody>
</table>
TABLE 5
FOURTH GRADE (17-20 students)

For Fourth Grade: The Mean Growth in Language Arts was 14.0; Reading was 13.2; and Math was 22.0.

<table>
<thead>
<tr>
<th>Language Arts</th>
<th>Pretest Means (SD)</th>
<th>Posttest Means (SD)</th>
<th>Growth Means (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>46.3 (22.0)</td>
<td>60.3 (20.9)</td>
<td>14.0 (17.5)</td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>52.2 (24.2)</td>
<td>65.4 (24.1)</td>
<td>13.2 (15.1)</td>
</tr>
<tr>
<td>Math</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>51.8 (19.0)</td>
<td>73.7 (19.6)</td>
<td>22.0 (11.2)</td>
</tr>
</tbody>
</table>

TABLE 6
FIFTH GRADE (22-24 students)

For Fifth Grade: The Mean Growth in Language Arts was 19.0; Reading was 21.3; and Math was 29.5.

<table>
<thead>
<tr>
<th>Language Arts</th>
<th>Pretest Means (SD)</th>
<th>Posttest Means (SD)</th>
<th>Growth Means (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>57.0 (19.0)</td>
<td>76.0 (17.5)</td>
<td>19.0 (15.9)</td>
</tr>
<tr>
<td>Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>52.1 (25.5)</td>
<td>73.4 (15.9)</td>
<td>21.3 (22.7)</td>
</tr>
<tr>
<td>Math</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0 (0.0)</td>
<td>0.0 (0.0)</td>
<td>29.5 (13.8)</td>
</tr>
</tbody>
</table>
IPT Test Results

**TABLE 7**
IDEA PROFICIENCY TEST (IPT)

<table>
<thead>
<tr>
<th>Levels at Pretest</th>
<th># students at level</th>
<th>% at level</th>
<th>Progress from pre to post</th>
<th>% at level</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6</td>
<td>30</td>
<td>3 to B</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 to C</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 to D</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 to F</td>
<td>17</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
<td>30</td>
<td>2 to B</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 to C</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 to D</td>
<td>17</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>25</td>
<td>1 to D</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 to E</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 to F</td>
<td>40</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>5</td>
<td>1 to E</td>
<td>100</td>
</tr>
<tr>
<td>E</td>
<td>2</td>
<td>10</td>
<td>2 to F</td>
<td>100</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

NA= does not apply
M=mastery level (N/A/ for this test sample)
FIGURE 1

Key for Levels A through F

IDEA Oral Language Proficiency Test Levels

<table>
<thead>
<tr>
<th>Levels</th>
<th>NES</th>
<th>LES</th>
<th>FES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten-Grade 1</td>
<td>A-B</td>
<td>C</td>
<td>D-M*</td>
</tr>
<tr>
<td>Grade 2</td>
<td>A-B</td>
<td>C-D</td>
<td>E-M</td>
</tr>
<tr>
<td>Grades 3-8</td>
<td>A-C</td>
<td>D-E</td>
<td>F-M</td>
</tr>
</tbody>
</table>

*Mastery of Test

CORRELATION BETWEEN IPT TEST LEVELS AND NES/LES/FES DESIGNATIONS

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>M*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NES</td>
<td></td>
<td>NES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LES</td>
<td></td>
<td>LES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FES</td>
<td></td>
<td>FES</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Mastery of Test

NES: Non-English Speaking  LES: Limited English Speaking  FES: Fluent English Speaking

NES:Non-English Speaking LES:Limited English Speaking FES:Fluent English Speaking
SUMMARY

This study was done to answer the question: Is an integrated, thematic approach to learning effective in optimizing the learning environment for the ESL or second language learner?

In Chapter 1 the problem was stated and the need for the study developed. In Chapter 2, the Literature Review presented research on the variables in the success of the ESL learner, how language is acquired, the sociocultural aspects of language acquisition, and classroom models and methodologies used in integrated, thematic classrooms. Chapter 3 dealt with the methodology and research design used by this researcher to assess the data for the study. In Chapter 4 there was a presentation and analysis of the data of the CRM tests and IPT from the two elementary schools in the Cave Creek School District’s population of students in integrated, thematic classrooms.

In assessing academic growth through pre and posttest results via the IPT and CRM testing instruments used by Cave Creek School District, this in-depth study
supports and unifies into one work the present body of findings regarding a integrated, thematic approach to learning and its effectiveness in optimizing the learning environment for ESL and other developing students.

The Cave Creek School District has supported and promoted an integrated, thematic approach to learning for its teachers over the years as demonstrated by the numerous workshops and in-service training made available to them.

The variety of methodologies and techniques involved in integrated, thematic teaching have been presented and reviewed in the Chapter 2 Literature Review with discussion of the variables in the success of the ESL learner in order to better explain the framework in which the ESL student operates.

Theories of Language Acquisition enables one to see the connection between the ways in which language is acquired and the methodologies and strategies that better effectuate acquisition of the language.

Understanding the implications of social and cultural processes in language development have been shown to be central to that student’s acquisition of a language.
In Chapter 3 causal/comparative research was used to measure academic achievement for a portion of the Cave Creek elementary schools' population.

The data sampling examined was taken from the IPT Test (IDEA Proficiency Test) and the Arizona CRM (Criterion Referenced Measure) Test administered to students in Desert Sun and Cave Creek Elementary Schools during the school year 1995-96.

The IDEA Oral Language Proficiency Test (IPT) for ESL students grew out of the recognition for a proficiency instrument that could be used as an integral part of a total oral language program, to which Ms. Wanda Ballard contributed in its development.

The CRM Test used by the Cave Creek Unified District was developed as part of a consortium or group effort with three smaller school districts in Arizona through Iowa State University's School Improvement Model Project (SIMS).

In Chapter 4, the researcher examined the data from the Cave Creek School District IPT for grades k-5 and CRM pre and posttests of 285 students for 1995-96 for grades 1-5 and 1993-94 tests for the kindergartens to assess the gain scores of students who have been exposed to thematic, integrated approach to learning at different
learning levels from K-5 at Desert Sun and Black Mountain elementary schools.

By analyzing gain scores of students who have received instruction from teachers using a thematic, integrated approach, the effectiveness of this learning approach for the ESL student has been assessed and discussed in the Conclusions section of this chapter.

There are inherent assumptions as well as limitations to this research project in both the number of students in the selected group and the selection options.

The research assumes that other school group ESL populations would be representative, given instruction by integrated, thematic methods and testing by the IDEA Proficiency Test, and the Cave Creek Unified School District’s CRM Test or other district-mandated proficiency instrument measurement.

Some limitations are inherent in the test samples being examined. Each classroom teacher administers the CRM test to his/her own class, and the test has no provisions or design with the ESL student in mind. This test is administered in English only. Teachers' attitudes toward ESL students may affect student performance on the test.
One school uses a pull-out program to administer their ESL program and one school has an inclusionary ESL population. This may be seen as another limitation to the results of the test sample.

The researcher did a T-Test of Means on the difference between the pretest and posttest scores of the Language, Reading and Mathematical CRM Tests for grades 1-5, and a T-Test of Means of the 1993-94 Language, Reading and Mathematics CRM Tests for the kindergarten (neither 1994-95 nor 1995-96 CRM scores for this grade level were available for use).

CONCLUSIONS

The results of the T-Test of Means done for the Cave Creek School District CRM Test and the IPT for ESL students has revealed significant growth from the pretest to the posttest scores.

For the CRM test, the Means growth from pre to posttest scores in Kindergarten was 13.0 in Language Arts, 22.6 in Reading, and 27.0 in Math. In First Grade, the growth was 54.1, 55.9 and 54.1. In Second Grade, the growth was 31.7, 29.7 and 39.0. In Third Grade, the growth was 23.1, 15.9, 15.9. In Fourth Grade, the growth was 14.0, 13.2, and 22.0. In Fifth Grade, the growth was 19.0, 21.3, and 29.5 correspondingly.
The CRM Means growth for grades k-5 was exponential with each succeeding grade level. The growth results support the hypothesis that integrated, thematic learning is effective for optimizing the learning for the ESL learner.

The growth for the IDEA Proficiency Test (IPT) was likewise substantial. Of the 20 ESL students tested, all but 2 kindergarten students progressed at least 1 level. The factor accounting for this lack of growth in test results here was due to late school admission in March for these 2 children.

Of six ESL students taking the IPT, there were 6 students at level A. 3 of the students progressed to level B, 1 to C, 1 to D and 1 to F. Of six students who were at level B, 2 stayed at level B (these were March admission entrants into kindergarten), 3 went to level C, 1 went to level D. 1 student at level D progressed to E. 2 students at level E progressed to level F. There were no students at level F at the time of the pre or posttest. These IPT results indicate across the board positive growth for the participating ESL students at all levels.

The research found in Chapter 2 supported evidence of several aspects that optimized student effectiveness in the learning situation.
Enright and McCloskey pointed out interactive learning that encompasses the broader construct of communicative competence in both theoretical and popular literature. Based on prior knowledge of the students, interactive learning is interdisciplinary and multidimensional so it knows no boundaries. It is responsive to the interests, abilities and needs of children and is respectful of their developing aptitudes and attitudes.

Organizing the classroom so that comprehensible input may occur is primary to language acquisition. That classrooms be not merely functional but enticing and exciting environments, with many student-created materials and displays is essential to the communicative classroom model. The classroom should be student-owned.

Krashen and others have demonstrated that one communicates by communicating, or learns the language by the interactive, communicative Natural Approach.

Acquisition of the language implies an intrinsic comprehension, assimilated into one’s daily life, which the integrated, thematic learning approach provides for students, not an artificially contrived arena of isolated subject learning areas.

Chamot’s research provides an extensive curricular program approach that emphasizes congruence with
mainstream objectives to transition from lower to more advanced metacognition and cognition.

Classrooms where multiculturalism is part of the curriculum foster understanding and tolerance for other cultures in the community and provide validation for those of minority cultures. Multiculturalism within a classroom is an important factor in lowering the affective filter to create a less threatening atmosphere for ESL learners.

A vital part of the integrated, thematic approach to learning is the Thematic Unit. This strategy provides an arena for extending and expanding important concepts and issues. It also demonstrates the varied relationships that exist between content and other aspects of the elementary curriculum in a positive, non-threatening format. In the communicative, multicultural classroom, interdisciplinary or thematic units would be an integral component.

Language acquisition and higher cognitive and metacognitive functioning is further accelerated and enhanced by writing, as demonstrated by the research of Goodman and others. The research has shown that most children have some knowledge of print before attending school. Because children need to communicate and make sense of their environment well before coming to school,
they are very much aware of the written language of their
environment. Children's need to communicate literally
drives them to learn language.

These various models and methodologies are the
framework for those educators who use the thematic,
integrated approach in their teaching. Positive growth
was demonstrated in this study in Tables 1-7 for the
students exposed to this learning approach which allows
this researcher to conclude that integrated, thematic
learning is effective for optimizing the learning for ESL
and all students, as all learners need to acquire the
language in which the learning takes place.

All grade levels showed positive gains in all three
curricular areas between pre and posttest scores for the
students of those teachers using an integrated, thematic
approach.

RECOMMENDATIONS

The positive gains seen in Tables 1-7 and
specifically the IPT in Chapter 4 suggests that the data
be studied and reviewed by district educators and
administrators.

The Cave Creek District superintendent and
principals continue to pursue their goal for higher and
more dramatic achievement. The school community and the
school board, who share the common goal of quality education for children, may use the data contained in this research study to review current teaching modalities in our district.

A standard for CRM Mean Growth results might be developed to determine the importance of relative academic growth that will assist the teachers in their evaluation procedures.

The results of the study may be used by principals to review their roles as change agents or facilitators in the vital task of upgrading instruction at their sites. Workshops and in-service training, based on the findings and data of those esteemed researchers contained in this study, could be prioritized and developed within the curriculum structure for improvement of teacher instruction.

Is integrated, thematic learning effective for optimizing the learning for ESL students? For this researcher, the answer is a resounding yes.


Clarke, N., former curriculum coordinator of Cave Creek School District #93, interviewed by Jan Lalan, October 10, 1996. Cave Creek, Arizona, note recorded Jan Lalan.


Cummins, J. (1979a). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters. Working papers on bilingualism, 19, 121-129.


APPENDIX A

LANGUAGE ART STRANDS FOR CRITERION REFERENCED MEASURE (CRM)
APPENDIX A

LANGUAGE ARTS STRANDS
ARIZONA CONSORTIUM

The LITERATURE strand promotes the development of reading as a tool for learning and provides experiences with a variety of literary forms (K-12).

The WRITING strand promotes the development of writing for personal expression and effective communication for a variety of purposes and audiences (K-12).

The ORAL COMMUNICATION strand promotes confidence and flexibility in effective speaking/listening and provides opportunities to view media critically (K-12).

The STUDY SKILLS strand promotes the systematic development of the ability to acquire knowledge, organize information, and utilize thinking skills (K-12).
APPENDIX B

READING STRANDS
FOR
CRITERION REFERENCED MEASURE (CRM)
APPENDIX B

STRANDS FOR READING
ARIZONA CONSORTIUM

The COMPREHENSION strand involves the development of literal, inferential, and evaluative thinking skills as the student relates the printed word to personal experience and understanding.

The WORD ATTACK/DECODING strand develops the ability to recognize words through the appropriate use of sound/symbol relationships, word structure, and context clues.

The LANGUAGE DEVELOPMENT strand includes growth in listening, speaking, reading, writing, and thinking.

The LITERATURE strand provides exposure to a wide variety of literary forms, authors, and cultures.

The READING IN THE CONTENT AREA strand promotes the use of a variety of strategies to gain, apply, and evaluate information from written materials including content areas and technical reading.

The VOCABULARY strand involves the study of word meanings, applications, origins, and context clues.
APPENDIX C

MATHEMATICS STRANDS FOR CRITERION REFERENCED MEASURE (CRM)
The **MATHEMATICAL LITERACY** strand addresses national and state reform efforts by incorporating problem solving, reasoning, connections, communication, and technology into all other strands.

The **NUMERATION** strand involves the study of number systems.

The **OPERATIONS** strand involves the study of addition, subtraction, multiplication, and division.

The **GEOMETRY** strand involves the study of the relationships, properties, and measurements of solids, surfaces, lines, and angles.

The **MEASUREMENT** strand involves the study of the common units of reference by which the extent, dimensions, quantity, degree, capacity, value, or duration of an entity is determined.

The **ALGEBRA** strand involves the study of expressions, equations, and problem solving using symbols for unknown quantities.

The ** PATTERNS** and **RELATIONS** strand involves recognizing, describing, generalizing, and creating the relationships between objects and variables to predict outcomes.

The **DATA ANALYSIS, STATISTICS, and PROBABILITY** strand involves formulating and solving problems through collecting, representing, and processing information, providing concepts and methods for dealing with uncertainty, and interpreting predictions based on uncertainty.
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