

Running Head: Technology Applications in the Diverse Classroom

Technology Applications in the Diverse Classroom

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Multicultural Education Overview

Classrooms in America are different than they were 25 years ago. Typical classrooms today are diverse in language and culture. Multicultural Education is needed to ensure that English language learners achieve academic success. Educators are being challenged to meet the needs of all students including ELL. Through the appreciation and caring of diverse learners, understanding language acquisition, implementing effective teaching models and strategies which include technology application, educators are able to create an effective learning community.

Technology and Language Acquisition

There are many theories and methods to consider when teaching ELL learners. Week two lecture discusses that when learning a second language grammar and vocabulary are not the only aspect to consider but that it also involves comprehension and the ability to communicate the new language. Meaningful learning experiences help to motivate my students to learn English and I use the Brain Compatible Learning Approach most often when working with my ELL learners as well as my fluent English speakers. Diaz-Rico explains that students will not always remember what they are told but what they experience (p. 42). Chapter 3 also discusses how humans strive to acquire knowledge, and the knowledge desire creates motivation to learn (p. 50.)

I view language acquisition as communicative or non-communicative. The communicative theories are the cognitive approaches or methods and the non-communicative are the behavioral methods. The behavioral methods can be useful, but when used alone are not as successful as the communicative methods. Table 1 outlines the communicative and non-communicative theories of language acquisition and the methods and approaches including the technological approaches used to help students acquire English. I related with Krashen's theory and the five hypotheses. I have observed my students going through the stages described by the Natural Approach. Being aware of these stages has helped me to better understand my ELL learners.

The text talks about how high self-esteem or low may cause language success or the lack of language success. I try to create a warm environment where my students feel important and welcomed. We do this at the beginning of the year with name activities, a family unit, making a classroom name and address book and continue throughout the year

with self-esteem building activities. I am always amazed at how quickly some of my students learn English. It is very rewarding to help them acquire the English language.

I have found that immersion in English is also a good method for helping the ELL students acquire the language. We sing a lot of songs and I read many stories and poems to the children. Visuals are placed in pocket charts along with text. Technology applications include the listening center, online interactive books for the children to read and phonemic awareness songs on CDs. There are books in English and Spanish for the children to listen to at the listening center. We act out favorite stories, rewrite stories, and make classroom big books using KidPix. Activating prior knowledge is very important before any language activity. I sometimes have a Spanish speaking para translate depending on what stage the child is at as far as comprehending English.

Technology and Equitable Access

Technology must be equally accessible to all students at all grade levels and all ability levels regardless of gender, race, language, culture, or socioeconomic background.

Butler-Pascoe and Wiburg (2003) discuss how studies have shown that the use of technology is not equally shared with certain groups such as minorities, females, low ability, and lower socioeconomic students (p. 6). Educators are responsible for creating equitable technology use in their classrooms by researching educational technology strategies and exploring solutions to equal tech usage and access that will benefit all students.

I incorporate technology when planning for instruction. There are many sites that offer online learning activities, links to lessons plans and thematic units. Students are able to read online and interactive stories at their independent reading levels. Web quests are explored. Picture dictionaries and encyclopedias are used to aid in comprehension and software is also used for writing and creating. The students listen and respond to taped stories. Picture dictionaries and encyclopedias are used to aid in comprehension and writing. The digital camera is used to create big books or as writing prompts.

There are solutions to closing the technology access gap between students. It is important to have a technology committee that examines the best methods to ensure equal technology usage in the school. Jordahl (1997) discusses many strategies for addressing equitable technology access. Below is a list of possible strategies:

- Write grants to receive public and private support
- Conduct special purpose fund-raising events
- Seek hardware and software donations that meet your needs

- Explore new uses for older technology, e.g., older computers can become part of a writing lab
- Hold a lab night where students and parents work together at computers (provide child care)
- Have loaner equipment that can be borrowed for a specific amount of time; this could include computers, instructional videos, and hand-held calculators
- Partner with the public library to make your equipment available to students during the summer
- Have parents and children work together on computer-based learning programs.

Technology to Teach Oral, Reading, and Writing Skills

Standard 1 for students requires students to be proficient in the use of technology by demonstrating an understanding of the basic operations and concepts of technology and demonstrating the operation of technology systems. At the K-2 grade level students should be able to communicate about technology using developmentally appropriate and accurate terminology. They should be able to use the mouse, keyboard, remote control and printer to operate computers, VCRs, audiotapes, and other technologies. They should use multimedia resources such as interactive books, educational software, elementary multimedia encyclopedias that will support learning. They should use a variety of media and technology resources for directed and independent learning activities. (ISTE 2004).

The K-2 grade performance indicators are that students work cooperatively and collaboratively with peers, family members, and others when using technology in the classroom and that they demonstrate positive social and ethical behaviors when using technology. They need to practice responsible use of technology systems and software (ISTE 2004).

This standard is addressed in my classroom from day one. My students are taught to respect all of our classroom materials including technology. They are also taught to respect each other. One of our classroom rules is that we will not hurt each other on the inside or on the outside. We discuss how we need to help each other, share our ideas and our things, follow the school rules, be polite, kind, and truthful. The children are also encouraged to solve conflicts by talking through the problem and coming to an agreement without hurtful remarks. At the beginning of the year we go over the basics of computers;

how the computer works, computer terminology such as mouse and monitor, how to run computer software programs, and taking care of the computers and the software.

Table 2 is a detailed plan of how I will implement technology into my classroom to promote oral, reading, and writing skills. The technology plan is designed to enable the ELL learners as well as the other learners in the classroom.

Technology and Staff Development

As students enter the classrooms with various backgrounds in culture and language, teachers need strategies and ideas to help meet the needs of these students. My CLC group created a staff development plan to give teachers an overview of some current research-based techniques and data that support students in gaining access to the core curriculum. Specifically, teachers will learn ways to use technology to build bridges of understanding for English Language Learners. Our goals for the staff development day are as follows:

1. Teachers will identify three reasons for the importance of multicultural education in the classroom today.
2. Teachers will become aware of the aspects of culture as it is manifested in the classroom today.
3. Teachers will use technology to explore multicultural education.

The day will begin with a speaker and a presentation about the aspects of culture. Teachers will get the opportunity to reflect and dialogue about the material presented in the presentation. During three breakout sessions, teachers will be able to choose from a menu of workshops (Table 3).

In order to help support teachers in implementing what they learned in the workshop, a weblog will be created. This weblog will be a “community blog” where teachers can respond to discussion questions. They can share their struggles as well as their successes. This blog will help foster community among the workshop participants as well as to encourage them to continue to network with one another.

Technology and Community Involvement

Building a community of learners occurs first in the classroom. The classroom community then extends out to the learners' families and to the community at large. Through the use of technology this community of learners can grow to be a global one. My CLC group created a community connection plan. The multicultural fair project and after school club were designed to promote interaction between students, families, community members, and pen pals from other cultures. Through the interaction the students will gain knowledge of different cultures. This cultural knowledge will help them to become more accepting, respectful and tolerant of other cultures. In preparation for the fair, students are able to apply their skills of research and of interacting with others. The cultural fair provides an authentic opportunity for students to use technology to showcase what they have learned about other cultures and how they have personally grown as members of the community.

Conclusion

The NAEYC article focused on ages 3 – 8; the ages of the children I teach. There were several discussions about technology in the paper including the appropriate use of technology, enhancing children's social and cognitive abilities, integrating technology into the learning environment, promoting equal access of technology, and collaborating with parents concerning technology applications.

I have been able to integrate technology into my curriculum and give all students equal time with learning using the computers. I have noticed that my special needs children especially love to use the computers to explore and learn. One area that I will

need to work on is collaborating with parents. One idea would be to have after school hours when the parents and students can use the computers for internet learning use or the software programs available. I feel that involving parents in their child's learning is very beneficial for student success.

There are always new ideas and technology applications that I can use to help my students learn. I have had multicultural classes each year I have taught. I have come to appreciate and understand the Hispanic culture. The respect I show towards my students has been returned with the trust of the parents in me and my teaching.

Appendix

Table 1

Language Acquisition			
Theories		Approaches/Methods	Assessment
Communicative	Students will learn the new language as a result of their motivation and desire to communicate in meaningful ways about meaningful topics (Language Acquisition).	<p>Natural Approach Stages</p> <ul style="list-style-type: none"> • Preproduction • Early production • Speech emergence • Intermediate fluency <p>Technological Approach</p> <p>Audio Visual</p> <ul style="list-style-type: none"> • Videos • Computer games • Internet activities • CD's • Tape recorders <p>Brain-Compatible Learning Approach</p> <p>Visual and kinesthetic</p> <ul style="list-style-type: none"> • Provide visuals such as drawings, chalkboard sketches, photographs, and visual materials to provide clues to meaning. Try mime, gestures or acting out the meaning of your message (Haynes). <p>Verbal/linguistic</p> <ul style="list-style-type: none"> • Provide listening and tape exercises, lectures, vocabulary activities, word games, summarize in your own words, situations and dialogs, oral presentations/reports, group discussions, debates, story telling, reading—literature, newspapers and magazines, writing activities and journal writing (Kennedy). 	<p>Teacher observation</p> <p>Home language survey</p> <p>Language Assessment Scales</p> <p>Checklists</p> <p>Portfolios</p> <p>Test both content knowledge and language proficiency in the native language and in English (Diaz-Rico, p. 87).</p> <p>Give extra time to complete or respond to assessment tasks, making accommodations such as simplifying directions in English and /or paraphrasing in the student's native language, as well as permitting students to use dictionaries or word lists (Diaz-Rico, p. 87).</p>

Theories		Approaches/Methods	Assessment
Non-communicative	Students will learn the new language through the heavy use of mimicry, imitation and drill (Language Acquisition).	Audio-Lingual Method <ul style="list-style-type: none"> • Dictation • Memorization • Drills • Flashcards Grammar Translation Method Memorization of: <ul style="list-style-type: none"> • verb paradigms • grammar rules • vocabulary Reading Method <ul style="list-style-type: none"> • silent reading for comprehension 	Teacher observation Language Assessment Scales Traditional measurement

Table 2

Technology Plan: Oral, Reading, Writing and Comprehension Skills			
Lesson	Description	Technology	Time
Reading	Make a classroom photo album.	Digital Camera	August
Oral	Teach the Basics of Computer Use - small group lesson plan. How to Run Computer Software Programs - small group lesson plan Classroom Respect Lesson - whole group morning meeting	Computers	August
Reading/Oral	Read Interactive Stories from computer software CD's	Arthur's Reading Race Winnie the Pooh Mercer Mayer Bailey's Book House	1 story weekly per student 15 minutes
Reading Comprehension	Create an Important Kid's slideshow. http://www.canby.k12.or.us/technology/Integration/kidpix/4Qkidpixlessons/Importantdesc.html	KidPix Digital Camera	August
Reading/Oral	Read interactive stories from online sites – Starfall.com	Internet	1 story weekly per student 15 minutes
Oral	Listen to phonemic awareness CD's – Dr. Jean	CD Player	3-4 times weekly whole group
Reading Comprehension	Listen and respond to taped story	Cassette player	Choice Time 15 minutes
Reading Comprehension	Play software games to reinforce reading skills	Reader Rabbit Reading Blasters	Computer Time 20 minutes per

			student/1 or 2 times weekly
Reading Comprehension	Create sentences/practice spelling words	Overhead Projector	Choice Time 15 minutes
Writing/Reading	Type letters of the alphabet in order	Word Processor	September
Reading/Writing/Oral	Record high/low temperature Write a sentence and draw a picture about the daily weather	Kid pix/Internet	Partners 4 times during school year
Writing/Reading	Type words in alphabetical order	Word Processor	2 times per quarter
Writing/Reading/Oral	Create an ABC Class Book	Power Point	September 1 letter per child
Reading Comprehension	Take pictures of zoo animals on field trip to zoo. Create a classroom big book of zoo animals.	Digital Camera	October
Reading Writing Oral	Create a picture. Use template: I am Thankful... http://www.canby.k12.or.us/technology/Integration/kidpix/1Qkidpixlessons/thankfullesson.html	KidPix	November
Writing/Reading	Practice weekly spelling words	Word Processor	Choice time 15 minutes
Writing/Reading	Create a 100 word class book	Kid Pix	February – 4 words per child
Writing/Reading	Weekly Journal	Word Processor	One time per week/per child 10 minutes
Reading/Writing	Write letters to Santa Clause http://www.emailsanta.com/ Write a Christmas list to Santa	Internet Kid Works	December
Reading/Writing	Write a get well card to sick teddy bears.	Kid Works	January
Reading/Writing	Research bears using Enchanted Learning.Com. Find resources from library on bears. Bear fact sheets and quizzes will be printed off from site on bears.	Internet Library	January
Reading	View state and country flags online. Make a 50 states fact book. Visit other classrooms around the United States via internet. http://www.kllynch2000.com/USAflagpage.html	Internet	February - May

Reading Oral	<p>Project Groundhog Monitor and record the daily temperature from a weather website.</p> <p>On Fridays the children will work with a partner to calculate the temperature using a calculator.</p> <p>With a partner the children will create a weekly chart using KidPix recording the hi/low and weather conditions for the week. The results will be emailed to Team Groundhog Members.</p>	Internet KidPix	February - March
Reading/Oral	Complete Sentence Scrambles http://www.mrsmcgowan.com/1stgrade/lotsofscrambles.htm	Internet	Choice Time 15 minutes
Lesson	Description	Technology	Time
Reading/Writing/ Oral/ Comprehension	<p>Web Quests Ocean Animals http://webtech.kennesaw.edu/pdaves/wquest.htm</p> <ul style="list-style-type: none"> • Use the computer to research an ocean animal. • Write 3 facts about the animal. • Print a picture of the animal. • Listen or read a story about the ocean animal. Write a response to the story. <p>Winter http://www.gcds.net/judysoto/first/frostywebquest/snowwq.htm</p> <ul style="list-style-type: none"> • Choose a winter website to view. • Choose a winter online activity to complete. • Listen to Mrs. Lynch read snowy day stories. • Write and illustrate a snowy day story. <p>Dinosaurs http://www.klynych2000.com/dinosauroonlinelesson.html</p> <ul style="list-style-type: none"> • Research a dinosaur from Enchanted Learning. Com • Write 5 facts about the dinosaur on note cards. • Write a paragraph about your 	<p>Internet</p> <p>Cassette player</p> <p>Internet</p> <p>Internet</p> <p>Kid pix</p>	<p>October Partners/2-3 days 15-20 minutes</p> <p>December Partners/2-3 days 15-20 minutes</p> <p>March Partners/2-3 days 15-20 minutes</p> <p>May Partners/2-3 days 15-20 minutes</p>

	<p>dinosaur.</p> <p>Butterflies http://projects.edtech.sandi.net/brooklyn/butterflies/</p> <ul style="list-style-type: none"> • Print out a KWL chart. Complete it about what you know and want to know about butterflies. • Read the facts about butterflies. • Print and then read the metamorphosis book. • View the many species of butterflies. • Draw a picture of a symmetrical butterfly. • Write one butterfly fact below your butterfly picture. 	<p>Internet</p> <p>Kid pix</p>	
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Table 3

Multicultural Education Break Out Sessions		
Cultural Diversity in the Classroom Please attend one of the cultural workshops below.		
Workshop Title	Description	Time/Place
Building a Learning Community	Learn how to form a learning community through strategies such as collaborative learning, family involvement, and community support for ELL.	
Online Curriculum Resources for English Language Learners	Go online and explore helpful websites for teaching and learning. Websites include: LessonPlanet.com, Starfall.com, manythings.org, MarcoPolo.org, Read WriteThink.org, ReadPlease.org, and many more.	
Celebrating Diversity: Cultural Awareness Activities	Learn ways to increase cultural awareness through multicultural literature, music, folktales, celebrations, and projects.	
Application of Technology: Teaching Reading, Writing and Oral Skills Please attend two of the technology workshops below.		
Workshop Title	Description	Time/Place
Creating with KidPix Reading/Writing	Explore the many ways KidPix can be integrated into all subject areas through writing and creating. You will leave with many new	

	ideas to use in your classroom.	
What's the Point of PowerPoint? Reading/Oral	PowerPoint can be used for more than just introducing a lesson. Learn to use this powerful tool to set up stations, use as a quiz show, etc.	
Web Quests: What are they? Reading/Oral	Teachers will be introduced to Web Quests. They will be shown where they can locate them and how to create their own.	
Electronic Portfolios Reading/Writing/Oral	We will be brainstorming what should go into an electronic portfolio and how to set up the structure.	
Digital Cameras: Learning through Imagery Reading/Writing/Oral	Digital Scrapbooking. How to use your digital camera as a learning tool.	
Curriculum Software: What is the best software to use in my classroom? Reading/Writing/Oral	Teachers will discuss criteria for selecting curriculum software. They will be introduced to great software programs such as Wynn Wizard, Encarta, Inspiration, Jumpstart, Reader Rabbit, and more. There will also be a time for sharing favorite software and ideas on using the software.	
Explore Multicultural and Technology Websites Reading/Writing/Oral	Teachers will have time to explore and discover what websites can be used as resource to help them meet the needs of students. These websites vary in how they might be implemented. (see Handout in Appendix)	Last session only

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