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Early Immigration in the United States Multidisciplinary Unit

Purpose

The purpose of this unit is to use the social studies topic of immigration to have students develop oral, written, and visual language arts skills to communicate effectively. The unit will provide knowledge to the students about the history of the origin of the United States of America. Technology will be integrated by requiring students to use personal computers and the Internet to read, write and search for information on this topic. Information and Communication Technologies (ICT) resources will be used by students to prepare presentations to present to their classmates.

Introduction

Teaching social studies gives teachers a unique opportunity to teach children language arts skills, as it requires reading, writing, the authoring of reports and preparation of presentations. The purpose of this unit is three fold. First it will teach children the content area of social studies dealing with immigration. Second it will teach children reading, writing and communication skills required by the language arts curriculum and third it will teach children the skills required to use the ICT tools.

In the content area the students will understand their heritage and develop pride in their cultural diversities and the rules and values of the society they live in while learning valuable language arts and technology skills. Understanding the immigration patterns in the United States will help the students develop a feeling of kinship to human beings in other nations. It will also teach them to be tolerant of other people and to respect the diversity that exists among the different people who make up the United States of America. The students will develop civic competence in the system of government in the United States and the forces that led to its inception. They will learn to respect and value the laws of the country, as they will develop an understanding to why these laws were promulgated. The students will also develop civic competence by understanding the basic elements of the United States Constitution and its origins. From the language arts perspective the children will learn and sharpen reading, writing, and composition skills as they execute different assignments in this unit. From a technology point of view the students will learn how to use the ICT to read, write and put together a presentation. In short, in this unit the students will develop skills in reading, writing, social science inquiry, listening, working cooperatively, comprehension, use of technology, communication, presentation and integration of concepts. Therefore, this unit will introduce students to the concept of globalization, global peace and harmony while at the same time it will build language arts and technology skills.

Rationale for the Multidisciplinary Unit

We are heading towards a post-typographical world where electronic reading and writing are rapidly moving towards the mainstream of literacy education forcing us to re-evaluate our basic assumptions about literacy (Reinking, 1995). Scientific journals, newspapers, books, encyclopedias, library research, and personal letter writing is all electronic. Use of the tools of informational and communication technologies (ICT) is consistent with the theoretical models of language acquisition and comprehension (Pearson & Stephens, 1994). For example, the interactive world of electronic texts is allowing readers to participate in the construction of meaning by manipulating the text (Chomsky, 1957), while the hypertexts features of multimedia are furthering the social, educational and political aspects of literacy (Holliday, 1973). Even though informational and communication technologies (ICT) are regarded as new emergent literacies requiring their own theoretical framework, (Leu and Kinzer, 2003) research has shown that the best way to learn technology skills is to integrate them into curriculums for language arts, science, math etc. (Roblyer & Edwards, 2000). The utilitarians believe that technology can aid in the literacy education (Bruce & Rubin, 1993) while transformists believe that technology will transform or radically replace the basic definition of literacy (Soloway, 1993). Therefore in today's post typographical era (Reinking, 1994) it is very important that teachers are prepared to teach well with technology because they are the gatekeepers to technology for their K-12 students.

Research has shown that children get motivated to read and write when they are allowed to use the computer or the Internet (McKeon, 2001). With traditional writing tools like pencils, the students spend most of the time manipulating the pencil to form letters, but with ICT tools such as the computer or e-mail they are able to focus on the content (Yost, 2000). The International Society of Technology Education (ISTE) has put out standards based on the National Educational Technology Standards (NETS) for P-12 students. ISTE has also joined hands with the National Council for Accreditation of Teacher Education (NCATE) to put out performance assessment standards for initial and advanced educational computing and technology programs for teacher preparation. Therefore, standards are now available to design curriculum to teach these new ICT literacies. These standards are interrelated. More that one standard is satisfied when instruction is designed to fulfill these standards.

In this unit I have integrated information and communication technology to assist students to acquire skills needed to read, write, gather information and make presentations. I have also integrated the use of productivity software such as KidPix multimedia authoring tool that allows students to incorporate text, graphics, sounds, video, hyperlinks and active URLs into a presentation. With KidPix, students have the opportunity to express themselves creatively and artistically. This software program is interactive and helps children create images and make decisions on what to do next. Thus KidPix helps build cognitive intelligence in children as they learn to critique and evaluate their work using this software.

Multidisciplinary Unit

Topic: Immigration

Big Idea Question: Who were the people who came to the United States and what effect did they have on the culture of the United States?

Grade Level: 4th grade

Time To Teach Unit: 2-3 weeks

Main Ideas:

1. Immigrants had different reasons for coming to the United States.
 - Political and religious persecutions were the driving forces for people to seek new homes in the United States.
 - Research and understand the reasons immigrants came to the United States and how those reasons differ today.
2. Challenges and hardships faced by immigrants in the past and present.
 - Tensions between different ethnic groups (religious and language barriers).
 - Research and understand the challenges faced by initial immigrants to fit in and how these are similar or different today.
3. America as a melting pot of diverse cultures and languages.
 - The overwhelming majority of the United States population is derived from waves of immigrants from many lands.
 - Research and understand the contributions that different cultures have made in shaping the present day American society.

Missouri Show-Me Performance Goals:

- 1.1- Develop questions and ideas to initiate and refine research.
- 1.2- Conduct research to answer questions and evaluate information and ideas.
- 1.4- Use technological tools and other resources to locate, select and organize information.
- 1.8- Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation.
- 2.1- Plan and make written, oral and visual presentations for a variety of purposes and audiences.
- 2.3- Exchange information, questions and ideas while recognizing the perspectives of others.
- 2.7- Use technological tools to exchange information and ideas.
- 4.6- Identify tasks that require a coordinated effort and work with others to complete those tasks.

Teacher Preparation

Reserve school computer lab, enlist technology personnel and/or parent volunteers to help students use the computers, search the web for information, create reports using computers, and put together a presentation using PowerPoint.

Technology aids Computers for each student, Internet, clip art, projector and Kidpix program.

Unit Outline and Standards Satisfied

Activity	Missouri Show-Me Standards	English Language Arts Standards NCTE/IRA	ISTE/NETS Standards For Students
<p>Day 1: Make a KWL chart on immigrants coming into the United States. Using a computer and projector the students and I will map out what the students already know and what they want to know. This will help me to tailor my lesson plans to fit their needs. This will also acquaint me with any misconceptions that the students might hold about this topic.</p> <p>Students will get e-mail accounts and e-mail the teacher at least twice a week about what they are learning about Immigration. The students will also e-mail the students in other classes working on the same unit to talk about what they are doing and compare notes.</p>	CA 1, SS 1,2 5,	IRA: 1,4,9,12	1,2,4
<p>Day 2: The teacher will read the book "Ellis Island: New Hope in a New Land" by William Jay Jacobs. After the reading of the book the students will discuss the text and the people mentioned in the text and will write a paragraph using the computer explaining why immigrants came to the United States.</p> <p>The teacher will organize students into collaborative teams for searching the web to collect information on early immigrants.</p> <p>Students will start a word document to organize this information as part of the class journal activities (e-journal).</p>	Show-Me: CA 3, 4,7 SS 2,6,	IRA 1,2,6,7,9	1,2, 3,4
<p>Day 3: The teacher will lead a discussion on how immigration trends have changed over the years. Students will conduct research on the Internet to learn more about this topic.</p> <p>The students will create a diagram using the computer and the software program Kidspiration to depict the changing trends in immigration. Kidspiration provides an easy way to apply the proven principles of visual</p>	CA 1,4,5,7 SS 5, 6,7	IRA 1, 3, 5, 8	1, 3,4

<p>learning. Students build graphic organizers by combining pictures, text and spoken words to represent thoughts and information.</p>			
<p>Day 4: The teacher will read the book "Ellis Island" by Thomas S. Owens and discuss the medical screening procedures performed on immigrants coming into Ellis Island. At the conclusion of the discussion the students will use the computer for Internet research and compile a list of the various diseases for which immigrants were quarantined at Ellis Island. This information will be included in their e-journals.</p> <p>The students will search the Internet for images of immigrants coming to the United States and create an interactive image gallery.</p>	<p>CA 4,5,7 SS 2,7, Sc 7,8</p>	<p>IRA 7,8,9,11</p>	<p>3, 5,6,</p>
<p>Day 5: The teacher will lead a class discussion on the countries the immigrants came from and the states where they settled in the U.S. On a map of the United States the students will color in the states where the early immigrants settled. On a map of the world the students will color in the countries from where the early immigrants came.</p> <p>Students will create a database in Excel to classify and sort information on the following;</p> <ol style="list-style-type: none"> 1. Countries of origin 2. Reason for immigrating 3. Language spoken 4. Foods 5. Religion 6. Culture <p>Students will search the web for information on these topics and make journal entries into their e-journals</p> <p>Students will download from the web images of people from each of these countries and assemble an art gallery of immigrants (e- gallery).</p> <p>Students will write a paragraph on what they learned about early immigrants through their research on the computer.</p>	<p>CA 1,2,5,6 SS 2,5,6,7</p>	<p>IRA 7,8, 12,11</p>	<p>3, 4,5,6</p>

Day 6: Using library resources and the web, the students will conduct research on the difficulties faced by immigrants when they came to the United States. Students will document this in their e-journal. The students will orally present their findings to the class.	CA 4, 6 SS 6,7	IRA 9, 11, 5, 7, 8,12	5
Day 7: The teacher will lead a discussion on the difficulties faced by immigrants as they came to America. Students will get in groups, discuss and role-play the experiences of the initial immigrants as they landed on Ellis Island. Students will create drawings of Ellis Island using the software program KidPix. Students will share their e-gallery of early immigrants with the class.	CA 5, 6, SS 6, 7	IRA 1, 3,4, 5, 8,9, 11,12	3,6
Day 8: Students will explore the Ellis Island web site to learn about Ellis Island's history. Then they will answer the following questions: Why was Ellis Island built? Why did the United States want to bring immigrants into the country? 3. List the steps that each immigrant had to go through at Ellis Island. Students will write the learning from the day in their e-journal	CA 2,3,4,5 SS 6,7	IRA 1, 3, 7, 8,9	1,2,3
Day 9: Imagine that you are an immigrant arriving for the first time on Ellis Island. Using the computer write a page into your e- journal on how you would feel as you stepped onto U.S. soil. What adjectives would you use to describe your feelings? The students will present their e-journals from this day to the rest of the class.	CA 1,2,3,4 SS 3, 6	IRA 5, 6, 11,12,	3,4,5,6
Day 10: The students will work with a partner to play A Day in the Life: History Game (http://www.pbs.org/stantonanthony/sa_kids/index.html?body=irish_girl.html) The students will learn about the life of a young Irish immigrant in the 1800s.	CA 5, 6 SS 2, 6	IRA 3, 7, 8	4,5,6
Day 11: At the end of the game, the students will follow the directions for learning about special holidays celebrated by different ethnic groups in the United States, such as St. Patrick's Day. The students	CA 5, 6,7 SS 3, 6, 7.	IRA 5,8	3,4,6

<p>will begin by making a list and then researching the holidays on the web.</p> <p>Students will spend time processing and organizing information gathered by using webbing or concept-mapping software, such as Inspiration or Kidspiration.</p>			
<p>Day 12: The students will share the research findings they have gathered, and create a classroom calendar on the computer using graphics such as clip art featuring days when ethnic holidays are celebrated.</p>	<p>CA 6</p> <p>SS 6,7</p>	<p>IRA 6,7,8</p>	<p>4,5</p>
<p>Day 13-15: The students will complete a final assessment for the unit by making PowerPoint Presentations on immigration.</p> <p>Students assemble PowerPoint presentations to present to the class on early immigrants. The presentations should include:</p> <ul style="list-style-type: none"> • Countries where the immigrants came from (at least 4) • Reasons the immigrants had for coming to the United States (at least 4) • Diseases they were screened for (at least 2) • Name the states in the United States where immigrants settled (at least 4) • The effects of immigration on the culture of the United States (at least 4). 	<p>CA 4,5,6,7</p> <p>SS 1, 2, 3, 6,7</p>	<p>IRA3,4,5,6, 8,11, 12</p>	<p>1,4,5,6</p>

Instructional Resources

Trade Books

Where Did Your Family Come From? A Book about Immigrants

By: Melvin and Gilda Berger

The authors explain what immigration is and how it began years ago, focusing on the lives of four young immigrants today. The ways to immigrate and the reasons for immigrating to a new land are discussed. The authors also explore how immigrants that are children must adapt to a new home, new schools and new customs.

Reading this book allows children to understand the things people must go through when they immigrate to a new land. The students will learn the basic concept of immigration and the changes that come into their lives with immigration.

Ellis Island: New Hope in a New Land

By: William Jay Jacobs

The author of this book recreates the American immigrant experience. The hardships of immigration, the uncertainties, the hope of immigrants and the anxieties of immigrants are discussed. The author gives readers a sense of what it is like to leave home, travel to a new land and arrive at Ellis Island, which represents freedom and a new life for immigrants.

Reading this book will help students to understand why people immigrated to America and how they came to America. They will also learn about the things the immigrants had to sacrifice for a new life of freedom.

Ellis Island

By: Thomas S. Owens

This author talks about Ellis Island, where most of the immigrants first set foot when they came to the United States. The author explains how Ellis Island was used by the U.S. government to hold immigrants until they were medically cleared to enter the country. The author also talks about the conditions that the U.S. government set for immigration into the United States. For example, all immigrants had to be able to read English. The author goes on to compare the U.S. practices on immigration today to what they were in the past.

Reading this book will help students to understand the process immigrants had to go through before they were accepted into the United States. The students will learn about the process immigrants go through today compared with the process they went through in the past.

The Newcomers: Ten Tales of American Immigrants

By: Joseph and Edith Raskin

The authors tell the stories of immigrants from countries such as England, Scotland, Holland, Germany, Africa, Norway, Sweden and Corsica. They present entertaining glimpses of life that these immigrants experienced on arriving in America. These stories are based on actual historical records.

Reading this book will help students understand why America is called the "melting pot" and how immigration has contributed to the richness of the American culture today. Students will learn about the many cultures that were brought into the United States from many foreign lands.

Bibliography of Additional Resources

1. Video: American History for Children: Immigration to the U.S. (www.facets.org)
This series about issues in American history was developed by children's education experts. The videos incorporate music and dramatization to make history come alive. Each episode of this 12 volume set is 25 minutes long and covers individual immigrant communities in the U.S.
2. Video: Ellis Island (www.facets.org)
This three tape program uses interviews, photographs, films and recreations to tell about the stories of immigration to America.
3. Video: New Immigrants (www.facets.org)
The focus of this program is on who the newest immigrants to America are, and how they joined American society.
4. Video: Journey to Freedom: The Immigrant Experience (www.facets.org)
Newsreel footage, artwork and vintage photos capture how mass immigration has shaped the United States over the last century.
5. Book: Immigrant Kids By: Russell Freedman
This book depicts the experience of a young urban immigrant around the turn of the century. Students will learn about the conditions under which immigrants had to live.
6. Book: Coming to America: The Story of Immigration By: Betsy Maestro
This book depicts the past and present diversity of the American people.
7. Book: The Memory Coat By: Elvira Woodruff
This book is about a young Russian boy named Grisha, who has lost his parents and must immigrate to America.
8. Book: A Picnic in October By: Eve Bunting
This book is about Tony, who thinks it is dumb to have a picnic in October every year on Liberty Island for Lady Liberty's birthday. He thinks it is embarrassing until he meets three recent immigrants who help him understand what the Statue of Liberty really stands for.
9. Book: Annushka's Voyage By: Edith Tarbescu
This picture book is a simple, fictionalized story of the Jewish immigrant journey from Russia to America.
10. Book: Dreaming of America: An Ellis Island Story By: Eve Bunting
Based on the story of Annie Moore, the first Irish immigrant to be processed on Ellis Island, this picture book follows the hardships of immigration.

Related Web Sites

1. Ellis Island www.ellisland.org
This is the official site of Ellis Island. Students can view the immigration museum.
2. Immigration, Ellis Island http://cmp1.ucr.edu/exhibitions/immigration_id.html
This web site has a collection of images from Ellis Island from the early 1900's.
3. Electronic Ellis Island: A Virtual Heritage Museum
<http://www.wald.bham.wednet.edu/museum/museum.htm>.
This web site provides information about Ellis Island and immigration.
4. The American Immigration Homepage
<http://www.bergen.org/AAST/Projects/Immigration/index.html>.
This is an excellent web site that was created as part of a school project for a 10th grade American History class. This web site provides a vast amount of information on all aspects of immigration.
5. The Virtual Ellis Island Tour <http://www.capital.net/~alta/index.html>
This is an exceptional site that gives the history of Ellis Island. Visitors can also take a virtual tour of Ellis Island. Teacher resources are also provided
6. <http://www.reading.org/advocacy/elastandards/standards.html>
7. <http://www.duke.edu/~kap2/nationalstandards.html>
8. <http://www.iste.org/standards>
9. <http://www.cedar-falls.k12.ia.us/Curriculum/standards.htm>
10. <http://www.ccsdschools.com/instructionaltechnology/webpages/iste/iste.htm>
11. [Statement of ISTE Standards](#)
12. <http://www.remc11.k12.mi.us/bcisd/tech4all.html>
13. <http://www.ccsdschools.com/instructionaltechnology/webpages/iste/iste.htm>,
14. www.questia.com
15. <http://www.syc.k12.pa.us/ed598/std.htm>.
16. http://education.smsu.edu/peu/student_portfolios/ISTEstandards.htm
17. <http://www.syc.k12.pa.us/ed598/std.htm>.

18. <http://www.ncte.org/about/over/standards/110846.html>

Scoring Guide for the Immigration PowerPoint Presentation

4= Superior

3= Excellent

2= Good

1= Fair

Criteria: Presentation completed

_____ 4 Presentation was completed.

_____ 1 Presentation was not completed.

Criteria: Names of Countries immigrants came from

_____ 4 Four countries were named.

_____ 3 Three countries were named.

_____ 2 Two countries were named.

_____ 1 One or no countries were named.

Criteria: Name of States in the U.S. where the immigrants settled

_____ 4 Four states were named.

_____ 3 Three states were named.

_____ 2 Two states were named.

_____ 1 One or no countries were named.

Criteria: Reasons immigrants came to the United States

_____ 4 Four reasons were given.

_____ 3 Three reasons were given.

_____ 2 Two reasons were given.

_____ 1 One or no reasons were given.

Criteria: Diseases the immigrants were screened for

_____ 4 Two diseases were named.

_____ 3 One disease was named.

_____ 1 No diseases were named.

Criteria: Effect of immigration of U.S. culture

_____ 4 Four effects were given.

_____ 3 Three effects were given.

_____ 2 Two effects were given.

_____ 1 One or no effects were given.

Criteria: Cooperative Initiative

_____ 4 Worked well with your partner.

_____ 1 Did not work well with your partner.

Criteria: Class Presentation

_____ 4 Variety of graphics, fonts, color is used in the PowerPoint presentation and the content is accurate.

_____ 3 Some graphics, fonts and color is used and the content information is 90% accurate.

_____ 2 No graphics, no different fonts and no color is used in the presentation and content information is less than 80% accurate.

_____ 1 Presentation not presented in class.

ISTE Standards for Students

1. There are 12 ISTE/NETS Technology foundation Standards for Students.

http://cnets.iste.org/students/s_stands.html

The 12 ISTE Standards

1. Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.

2. Students read a wide range of literature from many periods in many genres to build an understanding of the many dimensions (e.g., philosophical, ethical, aesthetic) of human experience.

3. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).

4. Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.

5. Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

6. Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and non-print texts.

7. Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and non-print texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.

8. Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.

9. Students develop an understanding of and respect for diversity in language use,

patterns, and dialects across cultures, ethnic groups, geographic regions, and social roles.

10. Students whose first language is not English make use of their first language to develop competency in the English language arts and to develop understanding of content across the curriculum.

11. Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.

12. Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

IRA/ NCTE Standards for Students

There are 6 IRA/NCTE Standards for Students.

<http://www.reading.org/advocacy/elastandards/standards.html>

1. Basic operations and concepts
 - Students demonstrate a sound understanding of the nature and operation of technology systems.
 - Students are proficient in the use of technology.
2. Social, ethical, and human issues
 - Students understand the ethical, cultural, and societal issues related to technology.
 - Students practice responsible use of technology systems, information, and software.
 - Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
3. Technology productivity tools
 - Students use technology tools to enhance learning, increase productivity, and promote creativity.
 - Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.
4. Technology communications tools
 - Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
 - Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
5. Technology research tools
 - Students use technology to locate, evaluate, and collect information from a variety of sources.
 - Students use technology tools to process data and report results.
 - Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.
6. Technology problem-solving and decision-making tools
 - Students use technology resources for solving problems and making informed decisions.
 - Students employ technology in the development of strategies for solving problems in the real world.

Comparison of IRA and ISTE Standards

Origin and Purpose of the ISTE and IRA Standards

The National Teaching Standards for the English Language Arts (IRA) were established by the NCTE and the International Reading Association (IRA) to ensure quality Language Arts instruction in schools. The standards support the use of a wide-range of texts, both written and non-written, are broad enough to support a multitude of instructional strategies and allow teachers to assess themselves and their progress with their own students. The IRA standards for the English Language Arts are a result of a four-year massive collaborative effort by the International Reading Association and the National Council of Teachers with thousands of educators, researchers, parents, policymakers and others across the country. The primary driving thought was that English Language Arts standards must be grounded in what is known about language and language acquisition. Therefore, the standards grew out of current research and theory about how students learn language. The IRA standards articulate a consensus growing out of actual classroom practices and are not based on a prescriptive framework.

The ISTE standards are based on the National Educational Technology Standards (NETS) for P-12 students and for teachers prepared by the NETS project. The primary goal of the International Society For Technology Education (ISTE) regarding the National Educational Technology Standards (NETS) Project is to enable stakeholders in PreK-12 education to develop national standards for educational uses of technology that facilitate school improvement in the United States. The NETS Project is designed to define standards for students, integrating curriculum technology, technology support, and standards for student assessment and evaluation of technology use. These standards are not distinct and separable, but are interrelated and should be considered as a whole.

Composition of ISTE and IRA Standards

The IRA standards are meant to be suggestive and not exhaustive. They allow plenty of flexibility for instruction. There are twelve IRA standards for students. These twelve standards define the outcome or goals for the English Language Arts. Even though the primary focus of the standards is on the content of English Language Arts learning, publication of these standards represents an end of the process of defining the standards, and the beginning of a new process- that of translating them into practice in the classrooms across the country. What is unique about these standards is that no one standard can be implemented on its own, but that all standards are interrelated. Any instructional activity undertaken to fulfill one standard is likely to address multiple standards simultaneously. The IRA standards can be grouped into clusters. For example, standards 5 and 6 work together to move from reading and comprehending to creating texts, while standards 7 and 8 both deal with research and inquiry. Standard 7 stresses student approaches to inquiry while standard 8 concentrates on the use of research materials with particular attention to new, technology driven modes of research and data

collection. The new technology addressed in standard 8, on research materials, is also the underlying theme of literacy communities in standard 11. Similarly the student directed learning theme is common to standards 7, 10, and 11 while the structures and conventions of language, a central theme in all of the Language Arts, is seen in standards 3, 4, 6 and 9. Similarly the multicultural Language Arts requirement is found in standards 9, 10, 11, and 12. The IRA standards are based on the premise that literacy growth begins before children enter school. This is consistent with the linguistic perspective and the cognitive psychology perspective of language acquisition we read about in module 1 of this class—that children acquire the language of their community before they get to school (Chomsky, 1965) or that comprehension is the process of drawing upon the experiences stored in the schema of children (Anderson & Pearson, 1984).

The Technology Foundation Standards for students are designed to provide teachers, technology planners, teacher preparation institutions, and educational policy makers with tools to guide them in establishing technology rich schools/classroom environments. The technology foundation standards for students are divided into six broad categories. Standards within each category are to be introduced, reinforced, and mastered by students. These categories provide a framework for linking performance indicators within the profiles for technology literate students to the standards. The ISTE standards are based on the National Educational Technology Standards (NETS) for P-12 students and for teachers prepared by the NETS project. The NETS Project is designed to define standards for students, integrating curriculum technology, technology support, and standards for student assessment and evaluation of technology use. Just like the IRA standards the ISTE standards can be grouped into clusters. There are three sets of ISTE standards for teachers: ISTE standards for Technology Facilitation (TF) designed to prepare teacher candidates to function as building/school/campus technology facilitators; Technology Leadership (TL) advanced standards designed to prepare administration candidates to function as technology directors, coordinators or specialists; and Secondary Computer Science Education (CS) standards designed to prepare teacher candidates to function as teachers of computer science in secondary schools. The ISTE standards support the development of technology capable students through the application of the constructivist learning theory (Willis, 1995; Sfard, 1998). These standards include diagrams for moving from traditional learning strategies to strategies aligned with the constructivist learning principles.

Similarities of IRA and ISTE Standards

Both IRA and ISTE standards are not prescriptive for particular curriculum or instruction. Both standards allow instructional flexibility to teachers to implement into the curriculum. Both have clusters of standards that can be grouped together. The flexibility of the two standards allows easy integration of technology into Language Arts instruction. I was amazed at the comprehensive approach to standards taken by ISTE. Even though the standards are for technology education, they are also grounded in application of technology as it supports pedagogical theory and practice. For example, ISTE offers PT3 grants to help educators (College of Education faculty, preservice teachers, and inservice teachers) integrate technology into educational curriculum. Both

the IRA and the ISTE standards assume that literacy growth begins before children enter school as they experience and experiment with literacy activities--reading and writing, and associating spoken words with their graphic representations. Both standards encourage the development of curriculum and instruction that make productive use of the emerging literacy abilities that children bring to school. Both standards provide ample room for the innovation and creativity essential to teaching and learning.