How to Adapt Your Program for Multicultural Audiences

Jenny de la Hoz, Monterey Bay Aquarium
Sonya Padrón, Multicultural Education for Resource Issues Threatening Oceans
Overview

• Introduction

• Multiculturalism in the United States
  – Demographics
  – The influence of culture and values on the learning process
  – Culture of environmentalists
  – Vocabulary
Overview

• What are some of your own biases?
• Strategies for working with English-language learners
  – Comprehensible input
  – Multicultural scientific discourse
• Customizing existing curriculum for your audience
• Assessing your audience and adjusting lesson plans
• Reflection
• Evaluation
Demographics
Language in the United States

- 311 Languages spoken in the U.S.
- 162 Indigenous languages
- 149 Immigrant languages

* National Virtual Translation Center
Languages of California

- English: 60.52%
  - 19,014,875 people
- Spanish: 25.80%
  - 8,105,445 people
- Tagalog: 1.99%
  - 626,395 people
- Chinese: 1.67%
  - 527,090 people
- Vietnamese: 1.29%
  - 407,120 people
- Korean: 0.94%
  - 298,075 people
Demographics of California

- The nation’s most racially diverse state
  - Largest Latino population in the U.S.
  - Largest Asian population in the U.S.
  - 2nd highest African-American population in the U.S.
  - 2nd highest Native-American population in the U.S.
## Origin by Type: 2006*

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<thead>
<tr>
<th>Type of origin</th>
<th>Number</th>
<th>Percent</th>
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<tr>
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<td>South American</td>
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<tr>
<td>Other Hispanic</td>
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*Source: U.S. Census Bureau, 2006 American Community Survey
## Education in California

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<th></th>
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</thead>
<tbody>
<tr>
<td>White</td>
<td>56%</td>
<td>32.5%</td>
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<tr>
<td>Latino</td>
<td>26%</td>
<td>46.0%</td>
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<tr>
<td>African-American</td>
<td>10%</td>
<td>8.1% African-American</td>
</tr>
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<td>Asian or Pacific Islander</td>
<td>5%</td>
<td>8.0% Asian</td>
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<tr>
<td>Filipino</td>
<td>2%</td>
<td>2.5%</td>
</tr>
<tr>
<td>American Indian</td>
<td>1%</td>
<td>0.8% American Indian or Alaska Native</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.6%</td>
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## Education in California

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Teachers</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>73.5%</td>
<td>32.5%</td>
</tr>
<tr>
<td>Latino</td>
<td>14.2%</td>
<td>46.0%</td>
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<tr>
<td>African-American</td>
<td>4.7%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Asian</td>
<td>4.5%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Filipino</td>
<td>1.2%</td>
<td>2.5%</td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>0.6%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>0.2%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

How to Adapt Your Program to Meet the Needs of Multicultural Audiences
Educational Attainment by Sex

*Source: U.S. Census Bureau, 2006  American Community Survey

How to Adapt Your Program to Meet the Needs of Multicultural Audiences
Occupation of the Employed Male Civilian Population 16 Years and Older

- Professional: Total 31.0, Hispanic 13.7
- Service: Total 13.4, Hispanic 19.6
- Sales and Office: Total 17.9, Hispanic 14.1
- Farming, Fishing, and Forestry: Total 1.1, Hispanic 3.0
- Construction and Maintenance: Total 26.8, Hispanic 18.0
- Production and Transportation: Total 22.8, Hispanic 18.6

*Source: U.S. Census Bureau, 2006 American Community Survey

How to Adapt Your Program to Meet the Needs of Multicultural Audiences
Occupation of the Employed Female Civilian Population 16 Years and Older

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Total</th>
<th>Hispanic</th>
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<tbody>
<tr>
<td>Professional</td>
<td>37.3</td>
<td>22.5</td>
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<tr>
<td>Service</td>
<td>29.6</td>
<td>20.1</td>
</tr>
<tr>
<td>Sales and Office</td>
<td>33.8</td>
<td>35.1</td>
</tr>
<tr>
<td>Farming, Fishing, and Forestry</td>
<td>1.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Construction and Maintenance</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Production and Transportation</td>
<td>11.9</td>
<td>6.5</td>
</tr>
</tbody>
</table>

*Source: U.S. Census Bureau, 2006 American Community Survey*
The Influence of Culture & Values on the Learning Process
A Self-Test

• What do you grow in a garden?
• What is the color of a lemon?
• What type of food do you eat for dinner?
• What type of food do you eat for breakfast?
• Have you had a shower yet?
• What do you mean by “love is a journey”?
The Culture of “Home”

• Foundation for learning

• Existing patterns of the “home” culture can be both helpful and limiting in learning the second language community’s patterns of interaction
What is Culture?

- Culture includes the ideas, customs, skills, arts, and tools that characterize a given group of people in a given period of time.

- Culture involves both observable behaviors and intangibles such as beliefs and values, rhythms, rules, and roles.
Whose story is it?

- Seaberry Wildflower Nachbar
- Sonya Rosario Padron
- Jenny Fabiola de la Hoz de la Hoz Hernandez Rincon
Story 1

• Both my parents graduated from University of California, Santa Cruz

• I have a bachelor’s and master’s in engineering from an Ivy League institution

• Backpacking is my favorite type of vacation.
Story 2

• I was raised by a single mother in California
• I worked my way through college
• I have lived on both the East Coast and West Coast
• One of my ancestors has walked across the country in search of work
Story 3

• I am a member of the Church of Jesus Christ of Latter-day Saints

• I was married at 20

• I worked full time while finishing my master’s degree

• I didn’t know what a burrito was until I was 18
Values

• Operate at an intuitive level and permeate all interactions

• Are manifest in social customs, rituals, ceremonies, health, religion, law, work and play

• Students whose home culture is consistent with the beliefs and practices of the school are generally more successful in school
Definitions

• Politically correct
  – A term used to describe language or behavior that reflects sensitivity to the diversity of a group

• Cultural proficiency
  – The policies and practices of an organization or the values and behaviors of an individual that enable the organization or person to interact effectively in a culturally diverse environment reflected in the way an organization treats its employees, its clients, and its community
Definitions

• Culturally proficient instruction
  – Instructors engage in practices that provide equitable outcomes for all learners

• Culturally proficient organization
  – Provides and supports conditions that create continuous learning opportunities for its members
Cultural Blindness

• Any policy, practice, or behavior that ignores existing cultural differences or that considers such differences inconsequential
The Culture of American Schools

• Schools ARE a representations of a particular culture
  – Organization, teaching styles, curriculum

• What happens when children from another culture enter an American classroom?
How do you conduct scientific discourse in your group?

- Bay Odans

- Town Hall Meeting
Environmentalism as a Culture?
True or False?

• In order for kids to connect with nature, they must spend time outside.
• If a student loves and has fun in nature, she will probably show conservation behaviors.
• Watching nature shows on television does not show a love of nature.
• It is important to have alone time in nature to understand nature.
• Green is the new black.
http://www.pbs.org/moyers/moyersonamerica/green/watch.htm
Twists

- Humans are the primary consumers and polluters of the earth.
  - Humans are stewards of the earth.
  - The human person is the most valuable resource.
- Humans must understand that as a collective they must make a change.
  - The dignity and ingenuity of the individual human person will provide appropriate solutions to environmental problems.
¡Break!
What are Your Biases?

• How do your biases affect your practice?
• Continuum activity
Writing Objectives

• Content objectives

• Identify the ideas/concepts
  – Watersheds are composed of many habitats.
  – There are many different types of habitats in watersheds.

• Affective objectives
  – Intra-relation (self awareness: how one’s actions impact on the environment)
  – Inter-relations (social awareness: how people interact socially to influence individual choices)
  – Eco-relations (environmental awareness: how society impacts on ecosystems through political choices.)
Language

• Conversational
  – Acquired on everyday basis

• Academic
  – Used in the classroom or acquiring new vocabulary
Imagine

- Olga Polyakov
- 7th grade student
- Newcomer from Russia
- Food chains
Challenges: Reading

- Types of writing systems
- Script: Alphabetic vs. Character
- Orthography: Transparent vs. Opaque
Challenges: Understanding the Words

• Bilingual children must duplicate the concept in both languages

• 10 words (age 6)

• 5 words (thru age 17)
Challenges: Understanding the Words

- Elicit information from students’ experience
- Putting new words in context
- Explanations about language
Challenges: Understanding the Sentences

- Syntax or grammar in Academic Language more complex
- Need up five years Conversational proficiency
- Seven years Academic proficiency
Classifying Vocabulary

• Tier One Words
  – 5,000 – 7,000 most frequent used words in English

• Tier Two Words
  – Words used in academic speak but are not specific to a particular field or discipline

• Tier Three Words
  – Words which relate to a specific discipline or field
Tier Two Words

• Crucial to success in oral and written science

• More complex than Tier Three Words

• Not always clear if Tier Two or Tier Three
Tier One vs. Tier Two

- Different
- Grow
- Example
- Put

- Differentiation
- Growth
- Exemplify
- Position
Pesticides are used by people in their garden and homes to kill insects, spiders, snails and other animals. Pesticides can get into the soil in farms and gardens. They flow into creeks and streams and then into the watershed. Pesticides can harm animals in the creeks, San Francisco Bay and the watershed. They can also be harmful to people eating fish which they catch in these areas.
Activity

• With a partner, write an introductory paragraph for a food chain activity

• 5th grade class, second visit, ELL

• Cannot use the following words
  • Transfer, Energy, Linked, Linking, Travels
  • Herbivore, Carnivore, Omnivore
  • Product, Production, Producer
  • Flow, Interdependence, Dependent
  • Predators, Prey
Strategies for Engaging ELLs

• Learning is a process in which individuals use what they already know to construct new meanings.

• Alternate methodologies of scientific discourse
  – Town Hall meeting
  – Bay odyans
Existing Curricula
Graphic Organizers

This strategy provides the learner with verbal and visual structure for new vocabulary, identifying and classifying major relationships of concepts.

- Picture of a concept
- Way to provide meaning
- Theme with main ideas
- Visual with print
- Way to show relationship
Example

Name/Nombre:

La Cuenca del Río Payaire

agua
huev
ca
tiene
tiene
tiene
planta
pasa por
cañon
montañas

Cuenca del Río Payaire

This page contains a diagram titled "Example," which is related to adapting programs to meet the needs of multicultural audiences. The diagram appears to be a linguistic or cultural representation, possibly illustrating concepts related to a river's ecosystem or community.
Name/Nombre:
Tips

- Give students a starting point like a central idea or theme.
- Model for the students the structure you would like for them follow. You may want to use the “Think Aloud” process.
- Have students use words to connect big ideas or concepts to help show relationship.
- Use for pre and post evaluation to ascertain content acquisition beyond vocabulary usage.
Inferential Strategy

This strategy helps the learner related to the new information by connecting it with their prior knowledge or experience.

• Identify the ideas/concepts
  – Watersheds are composed of many habitats.
  – There are many different types of habitats in watersheds.

• Develop two questions for each idea:
  – Background question: Do you have a habitat around your house? What makes up this habitat?
  – Prediction question: In this next activity, we are going to learn about the different habitats or animal homes in a watershed. What are some habitats do you think we will see that are part of the watershed?
Inferential Strategy

- Discuss the background and/or prediction questions before the activity. Have students write down predictions in journal.

- After the activity, go back to the questions and discuss their predictions. Where they close? Have students write a sentence or two if their predictions were close or why they were not?
Think Aloud

This strategy allows learners to see how experienced thinkers process new information. Use this strategy if you would like your students to do similar follow-up activities.

- Choose and activity that will require you to think through a process and problem solve.
- Have students work on their problems and walk you through their thinking process. Use questions to help redirect misconceptions.
Think Aloud

• Remember the following during “Think Alouds”:
  – Make predictions (developing hypothesis) – “Hmm, I wonder what would happen if I were to put water on this watershed model? I think it will…”
  – Describe the picture forming in your head – “I can imagine water running down a hill without trees.”
  – Relate to prior experience – “When I was little, my brother and I use to make ‘rivers’ in our backyard. I always noticed that if there was nothing blocking the water, it would usually take dirt with it.”
  – Monitor ongoing comprehension – “Maybe the same would happen if it rained on a hill without trees. I wonder if…”
  – Demonstrate “fix-up” strategies – “Wait, nothing happened. I’d better check if I did this right or maybe I guessed wrong?”
Assessing

- The Toucher
- The Watcha-ma-call-it
- I don’t know where it is
- Always late
- Will east always be to my left
- Wait come back here…
- Guys, we studied this in class!
Learning Structures

COGNITIVE STRATEGIES

CONCEPTS  SKILLS  CONTENT

How to Adapt Your Program to Meet the Needs of Multicultural Audiences
Input Strategies

- Use planning behaviors
- Focus perception on specific stimulus
- Control impulsivity
- Explore data systemically
- Use appropriate and accurate labels
- Organize space with stable systems of reference
- Orient data in time
- Gather precise and accurate data
- Consider two pieces of information at once
- Visually transport data
Elaboration Strategies

- Identify and define the problem
- Select relevant clues
- Compare data
- Select appropriate categories of time
- Summarize data
- Project relationships of data
- Use logical data
- Test hypothesis
- Build inferences
- Make a plan using the data
- Use appropriate labels
Output Strategies

- Communicate clearly the labels and process
- Visually transport data correctly
- Use precise and accurate language
- Control impulse behavior
Assessment

• How do you know what your learner understands?
  – (movie)
  – Gotcha game
  – Pre and Post paragraph
Make the Connection!

“Wow, this was a great! I’ve never been to the beach before.”

– 5th grade student, Seaside, CA
Reflection
References

- United States Census Bureau. [www.census.gov](http://www.census.gov)
Contact Information

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  Santa Cruz: (831) 420-3668
  Sonya.Padron@noaa.gov
“Me sirve esta experiencia para ir y decirles a otros de cómo conservar todo esto natural, la tierra, el océano todo lo que nos dio, para dejarles algo a nuestros hijos, nuestro futuro. Nosotros estamos gastando a todo y necesitamos aprender más de gente como ustedes que están enseñando la importancia de toda esta conservación.”
– Juan Reyes (MERITO participant)

“This experience inspires me to go home and teach others how to conserve our natural places, the earth, the ocean, all that we are given, to leave something for our children, our future. We are exhausting everything and we need to learn more from people like you who are teaching the importance of protection”
– Juan Reyes (MERITO participant)
Culture Beyond Holidays

• Culture is often incorporated into the classroom in superficial ways
  – Artifacts, holiday celebrations, laundry lists of traits and facts

• A deeper view of culture can lead teachers beyond the superficial
What Can You Do?

- Be honest about your own biases
- Practice the Skills & Responsibilities of an Intercultural Educator (Díaz-Rico, 2002)
- Perform a cultural self-study to better understand your own culture
Making an Instructional Commitment to Change*

- Select materials for instruction
- Decide on your techniques for presenting materials
- Watch for how learners subtly respond to your choices
- Facilitate healthy conversations among the learners
- Mediate conflicts among learners
- Take advantage of teachable moments

* Robins et al, 2002

How to Adapt Your Program to Meet the Needs of Multicultural Audiences
Reflection*

• Are you aware of educational policies, practices, and procedures that demean individual learners or groups of learners?

• Do you have colleagues who either knowingly or unintentionally engage in practices that demean learners?

* Robins, Lindsey. Lindsey & Terrell, p5
Reflection

• Do you ever call these practices into question?

• Are you willing to confront either systems or individuals that dishonor your craft?

• Would you like to engage with colleagues in a process that will increase your awareness of diversity issues and your skills in addressing them?

* Robins, Lindsey. Lindsey & Terrell, p5