

Terralingua's Biocultural Diversity Education Initiative

Integration in Secondary School Curricula



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Presentation Outline

- Purpose of the Initiative
- Goals and Expected Outcomes
- Integration and Implementation of BCD Studies within the Educational Framework
- National Standards Matching BCD Topics
- Conclusions

Purpose of the Initiative

- To highlight the relevance of biocultural diversity in our students' everyday lives, in the larger context of our communities, and in the global community.
- To introduce students to concepts related to the interdependence of humans and nature and the interlinkages between language, culture and the environment to students at a critical stage in their education.
- To encourage schools to include Biocultural Diversity Studies at Junior High and High School levels.

Goals and Expected Outcome

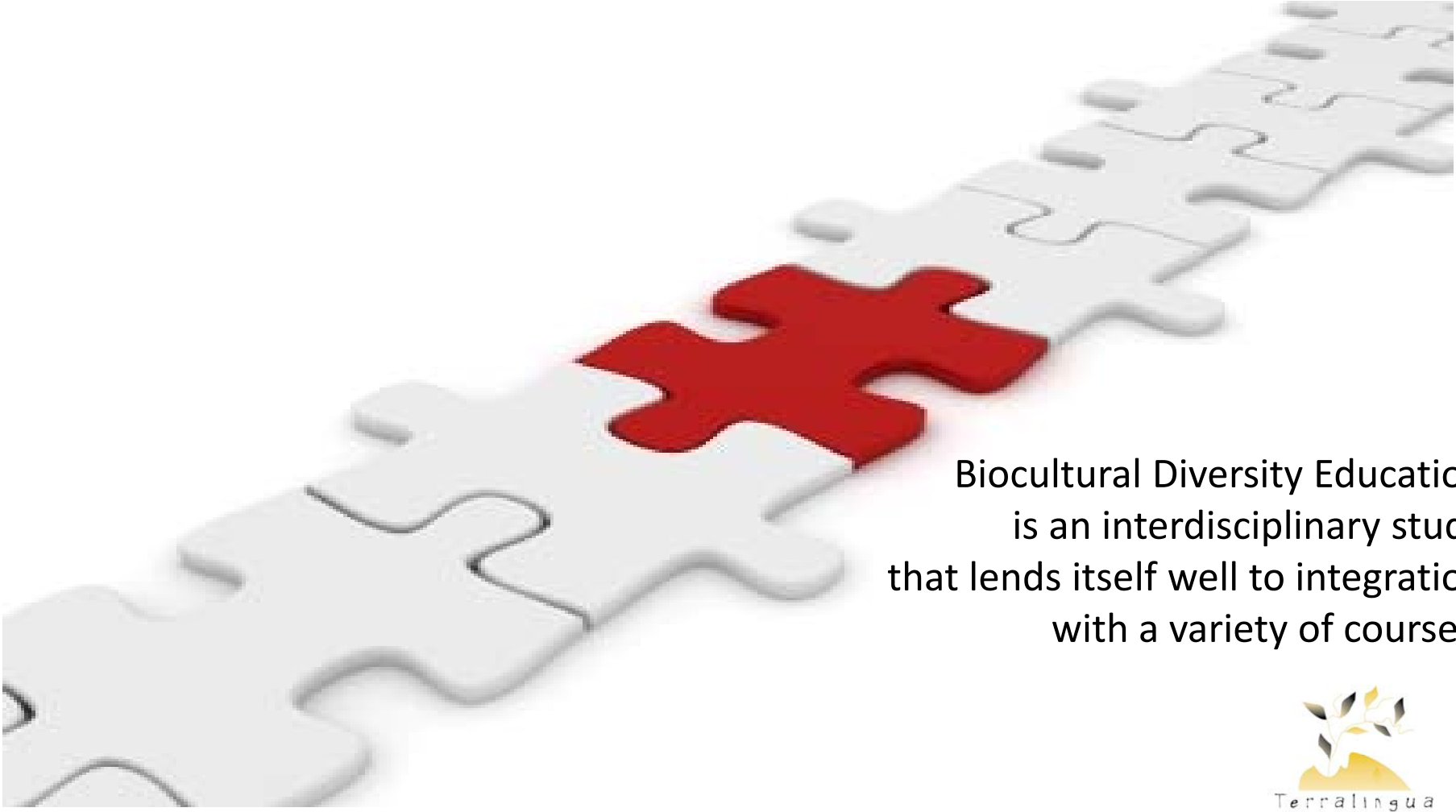
BCD Curriculum Goals:

- Produce a standards-based BCD Topics List for each course of study
- Produce a series of standards-based mini-modules or tack-on lessons on BCD Studies for inclusion in current high school curricula
- Design, for each topic, a Lesson Plan centered on overarching questions that link BCD Studies to the specific course subject

Expected Outcome:

- Furthering students' understanding of course topics through the interdisciplinary nature of BCD Studies, critical thinking activities, and engaging resources and materials.

Integration and Implementation of BCD Studies within the Educational Framework



Biocultural Diversity Education
is an interdisciplinary study
that lends itself well to integration
with a variety of courses.

Curricular Integration of BCD Studies

➤ Sciences

- Life Science
- Biology
- Environmental Studies

➤ Social Sciences

- Social Studies
- Geography
- History

➤ Civics Studies

- Political Studies
- International Relations

Alignment to National Science Standards

- Standard C: Life Science
 - Interdependence of Organisms
 - Interactions among Organisms in the World's Ecosystems
 - Biology and Behavior of Organisms
 - Adaptation and Responses to Environmental Changes
 - Environmental Quality
 - Factors Influencing the Health of Natural Ecosystems
- Standard F: Science in Personal and Social Perspectives
 - Population Growth and Environment
 - Natural Resources and Human Consumption

Examples of BCD Integration in Science and Environmental Studies

- Making the connections to the three manifestations of BCD:
 - Biological Diversity
 - Understand the interactions between living organisms (plants, animals, humans) and their environments.
 - Re-draw the green diagrams, put people back in the cycle, equation, process
 - Cultural Diversity
 - Understand the diversity of life in all its manifestations
 - Include humans in Environmental Studies
 - Linguistic Diversity
 - Understand how languages hold and transmit cultural knowledge about the environment (traditional environmental knowledge, or TEK)



Environmental Studies

Integration of BCD in Environmental Studies is a matter of expanding the scope of the lessons to include the human component in the ecological cycle and culture in environmental conservation efforts.

Alignment to National Social Studies Standards

- Theme 1: Culture
- Theme 3: People, Places, and Environments
- Theme 5: Individuals, Groups, and Institutions
- Theme 7: Production, Distribution and Consumption
- Theme 9: Global Connections

Examples of BCD Integration in Social Studies



Social Studies

Integration of BCD in Social Studies is a matter of expanding the scope of the lessons to include relevant topics that highlight the importance of conserving our world's diversity in all of its manifestations – biological, cultural and linguistic.

- Making the connections to the three manifestations of BCD:
 - Biological Diversity
 - Understand the relationship between human populations and the physical world
 - Insight into the importance of biological diversity to human societies and its effect on the development of human cultures
 - Cultural Diversity
 - Understand how humans create, learn, share, and transmit culture
 - Identify elements of culture, as well as the similarities and differences among cultures
 - Understand the importance of cultural diversity to humanity
 - Linguistic Diversity
 - Understand the relationship between people's languages, cultures, and environments
 - Understand the importance of protecting the world's linguistic diversity

Alignment to National Geography Standards

➤ The World in Spatial Terms

- Standard 3: How to Analyze the Spatial Organization of People, Places, and Environments on Earth's Surface

➤ Places and Regions

- Standard 4: The Physical and Human Characteristics of Places
- Standard 6: How Culture and Experience Influence People's Perceptions of Places and Regions

➤ Human Systems

- Standard 9: The Characteristics, Distribution, and Migration of Human Population on Earth's Surface
- Standard 10: The Characteristics, Distribution, and Complexity of Earth's Cultural Mosaics
- Standard 12: The Processes, Patterns, and Functions of Human Settlement
- Standard 13: Forces of Cooperation and Conflict Among People

➤ Environment and Society

- Standard 14: How Human Actions Modify the Physical Environment
- Standard 15: How Physical Systems Affect Human Systems
- Standard 16: The Changes that Occur in the Meaning, Use, Distribution, and Importance of Resources

Examples of BCD Integration in Geography



Geography

Integration of BCD in Geography relies on the inclusion of lessons on a region's cultures – both past and present. In elaborating upon the human history of and cultural relationships to a place and its natural environment, students will gain a greater, more holistic understanding of Geography.

- Making the connections to the three manifestations of BCD:
 - Biological Diversity
 - Overlapping environmental maps and cultural maps
 - Understanding social and environmental trends through the study and analysis of biocultural maps
 - Understanding how a lack of local environmental knowledge can affect urban and industrial development
 - Unsustainable cities vs. local village planning
 - Tourist resorts vs. low-impact eco-cultural tourism
 - Cultural Diversity
 - Understanding the culture of a place, the values and beliefs behind concepts of place and nature, sacred natural sites, community conserved areas
 - Linguistic Diversity
 - Understanding TEK – traditional environmental knowledge and vocabulary born of a specific environment and place

Alignment to National History Standards

➤ Era 9: The 20th Century Since 1945

- Standard 2: The search for community, stability, and peace in an interdependent world
 - 2a: The student understands how population explosion and environmental change have altered conditions of life around the world.
 - 2c: Assess the progress of human and civil rights around the world since the 1948 U.N. Declaration of Human Rights.
 - 2d: The student understands major sources of tension and conflict in the contemporary world and efforts that have been made to address them.
- Standard 3: Major global trends
 - 3a: The student is able to assess causes of economic imbalances and social inequalities among the world's peoples and assess efforts made to close these gaps.
 - 3b: The student is able to analyze connections between globalizing trends in economy, technology, and culture in the late 20th century and dynamic assertions of traditional cultural identity and distinctiveness.

➤ Era 10: World History Across the Eras

- Standard 1: Analyze ways in which human action has contributed to long-term changes in the natural environment in particular regions or worldwide



History

By integrating BCD Studies into history, the students will gain a better understanding of the environmental and cultural connections in world events; appreciate different perspectives of history; and develop a more holistic view of the past and the present.

Examples of BCD Integration in History

- Making the connections to the three manifestations of BCD:
 - Biological Diversity
 - Overlapping environmental change with historical events timelines and maps
 - The Mayan drought and the collapse of Mayan civilization
 - Lack of environmental knowledge and its effects on historical events/outcomes
 - Travelers' journeys vs. Indigenous Peoples' travels
 - Cultural Diversity
 - Rewriting history from other cultures' perspectives
 - Colonizers vs. Colonized
 - Linguistic Diversity
 - The importance of linguistic diversity throughout history
 - Navajo Code Talkers

Alignment to National Civics Standards

- Standard 1: What are Civic Life, Politics, and Government?
 - 1a: What purposes should governments serve?
- Standard 2: What are the Foundations of the American Political System?
 - 2d: What values and principles are basic to American constitutional democracy?
- Standard 5: What are the Roles of the Citizen?
 - 5a: What is citizenship?
 - 5b: What are the rights of citizens?
 - 5c: What are the responsibilities of citizens?
 - 5e: How can citizens take part in civic life?

Example of BCD Integration in Civics Studies



➤ Making the connections to the three manifestations of BCD:

➤ Biological Diversity

➤ Determining the importance of the local environment to a community

➤ Ecosystem health, community health, individual health

➤ Citizens' roles in preserving a community's environment

➤ Green spaces and government policies

➤ Cultural Diversity

➤ What are the cultural rights and responsibilities of citizens?

➤ Community diversity and human and civic rights

➤ Linguistic Diversity

➤ Linguistic rights and the politics of linguistic diversity

➤ How does political recognition affect the use of a language?

➤ What effect does the civic and political community have on issues such as language rights, loss of mother-tongue, and linguistic diversity?

Civics and Political Studies

Civics and Political Studies provide an excellent platform for the introduction of BCD Studies, as they focus on the rights and responsibilities of citizens – in both the local and global spheres. Civic and Political Studies could also be an ideal jumping point for Service Learning projects.

Conclusions



- BCD studies are well-suited for integration into current high school course curricula.
- Mini-modules provide an excellent way to enhance current studies in multiple subjects.
- BCD topics match many required national and state standards in the sciences, social sciences, and general studies.
- Introducing BCD Studies in secondary education can provide a solid foundation for exploration of other related topics, such as language endangerment, cultural heritage preservation, environment conservation, and sustainable development.
- The interdisciplinary nature of BCD Studies encourages students to think integratively, “out-of-the-box”, and critically about matters of great relevance in today’s world.