Unpacking Geography Education Standards

Moving Towards 'Powerful Geography'

Discussion Questions

- Should standards focus on skills or content?
- What are the potential complications of having standards be skill based? Content based?

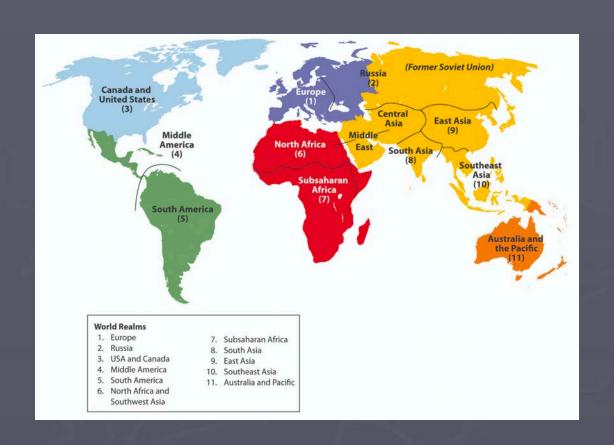
Objective

 Students will be able to apply geography standards to guide the development of meaningful learning experiences to engage students in engagement-based learning. Students will engage in a discussion of the influence of standards, examine sets of national and state standards, and participate in direct learning about the development, purpose, and measurement of learning objectives and standards.

 Summed up – be able to use standards to develop lessons that help meet

Thematic or Regional?

- Short answer both
- Teach themes, models, big geographic ideas
 - Use case studies to highlight examples or applications
- Teach region by region
 - Within framework of big ideas, themes, models, etc...



Physical or Human?

- Again, short answer both
- Geography is very much about looking at relationships
 - Human-Environment Interactions one of the 5 themes





Holistic

Synthesis

Hydrology

Climatology

Biogeography

Geomorphology

Meteorology

Pedology

Social Geography

Cultural Geography

Economic Geography

Behavioral Geography

Political Geography

Urban Geography

Nebraska State Geography Standards

- Present from K-12
 - Concepts become more abstract into later grades
 - Not all are present throughout
- Content organized between 5 themes of geography
 - Location & Place are one strand
 - Regions
 - Human-Environment Interactions
 - Movement
- Content connected to physical and human geography

Movement

SS HS.3.4 Compare and contrast patterns of human populations and culture over space and time on a local, national, and global scale.

SS HS.3.4.a Compare trends in human migration, urbanization, and demographic composition at a local, national, and global scale over time and short-term and long-term causes and effects.

For example: urban models, Demographic Transition Model, rural organization (long lot, metes and bounds, township and range), rural to urban migration, Human Development Index, Borchert's Epochs, trends locally, nationally, and globally over time, migration push and pull factors, effects of migration on both the source regions and destinations, More Developed Countries (MDCs) and Less Developed Countries (LDCs), demography

SS HS.3.4.b Examine the spread of cultural traits and the potential benefits and challenges of cultural diffusion, economic development, and globalization.

For example: cultural convergence and divergence, universalizing and ethnic religions, competition between multinational corporations and local businesses, folk cultures and popular cultures, spread of ideas (such as economic ideals, ideas on government, gender norms), diffusion of medical knowledge and impact on demographics, agricultural and industrial revolutions, models of economic development, the cultural landscape, Third Agricultural Revolution (Green Revolution), internet connectivity and cell phone networks, lingua franca, hypernationalism

Standards grow with students

Human-Environment Interaction

SS 3.3.3 Explain relationships between humans and the physical environment.

SS 3.3.3.a Describe how the environment influences human activities and how humans alter the environment to suit their needs.

For example: climate, water cycle, soil fertility impact agricultural production, usage of land and energy - land formation impacts transportation and communication, agriculture, transportation, industry, use of natural resources, regulations/practices to protect the environment

SS 3.3.3.b Identify ecosystems.

For example: forests, deserts, grasslands

SS 3.3.3.c Explain the importance of Earth's natural resources. For example: minerals, air, water, land

SS 3.3.3.d Describe how humans develop communities in local settings.

For example: roads, landfills, utilities, land use patterns

Human Environment Interaction

SS 8.3.3 Determine how the natural environment is changed by natural and human forces and how humans adapt to their surroundings.

SS 8.3.3.a Interpret the impact of natural processes on human and physical environments.

For example: precipitation, drought, earthquakes, tornadoes, floods, hurricanes, volcanic eruptions, mudslides

SS 8.3.3.b Analyze how humans have utilized and adapted to their physical environment.

For example: rivers, wetlands, forests, treeless plains, precipitation, drought

Inclusion of Skills

Geospatial Skills and Geo-literacy

SS HS.3.5 Evaluate issues and/or events using geographic knowledge and geospatial skills to make informed decisions.

SS HS.3.5.a Apply geographic knowledge and skills to interpret the past and present in order to plan for the future.

For example: developing a geographic question, acquiring and organizing data/information, performing analysis, presenting findings, and developing action plan

SS HS.3.5.b Analyze how geospatial skills and geo-literacy are applied to improve standards of living and solve problems.

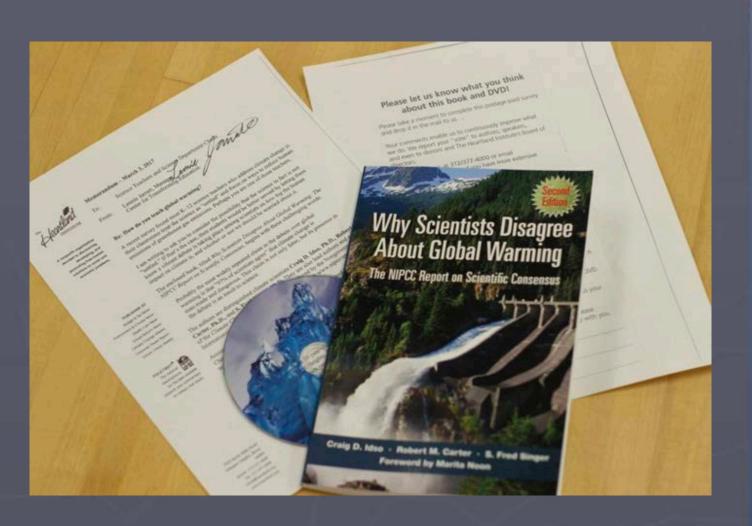
For example: Examine how geospatial technologies (such as GIS [Geographic Information Systems] and remote sensing) and geographic knowledge (such as geopolitics) can be applied to better understand the world, address issues, and make spatial decisions (such as determining market potential, optimum usage of irrigation and fertilizers, or mapping public health outbreaks to determine source).

SS HS.3.5.c Evaluate geographical information sources for applications, credibility, and appropriateness in displaying spatial data.

For example: use maps (paper, digital, and mental), atlases, Global Positioning System (GPS), Geographic Information Systems (GIS), remote sensing, and forms of quantitative/qualitative data, analyze a map to determine appropriate use of scale, evaluate strengths and weaknesses of different map projections

Debated topics within Nebraska Standards

- Climate Change
- Renewable Energy
- Globalization
- American Exceptionalism
- Multicultural Standard



Multiple Perspectives

SS HS.4.2 (US) Analyze the complexity of the interaction of multiple perspectives to investigate causes and effects of significant events in the development of history.

SS HS.4.2.a (US) Identify and evaluate how considering multiple perspectives facilitates an understanding of history.

For example: Nineteenth Amendment, 1924 National Origins Act, Indian Reorganization Act of 1934, Bracero program, Civil Rights Movement

SS HS.4.2.b (US) Evaluate the relevancy, accuracy, and completeness of primary and secondary sources to better understand multiple perspectives of the same event.

For example: Theodore Roosevelt's New Nationalism and Woodrow Wilson's New Freedom, Indian Reorganization Act and responses from tribal leaders, differing strategies in the struggle to gain black equality

SS HS.4.3 (US) Examine historical events from the perspectives of marginalized and underrepresented groups.

SS HS.4.3.a (US) Identify how differing experiences can lead to the development of perspectives.

For example: religious, racial or ethnic groups, immigrants, women, LGBTQ persons, and Native American nations

SS HS.4.3.b (US) Interpret how and why marginalized and underrepresented groups and/or individuals might understand historical events similarly or differently.

For example: Immigration and Naturalization Act of 1965, Stonewall Riots, American Indian Movement, Equal Rights Amendment, Civil Rights Act of 1964, West Virginia v. Barnette, United Farm Workers

Multiple Perspectives

SS HS.4.2 (WLD) Analyze the complexity of the interaction of multiple perspectives to investigate causes and effects of significant events in the development of history.

SS HS.4.2.a (WLD) Identify and evaluate how considering multiple perspectives facilitates an understanding of history.

For example: Scramble for Africa and indigenous response, Arab-Israeli Conflict, French Revolution, Haitian Revolution

SS HS.4.2.b (WLD) Evaluate the relevancy, accuracy, and completeness of primary and secondary sources to better understand multiple perspectives of the same event.

For example: compare accounts from colonizers and colonized, impact of trade on different population groups

SS HS.4.3 (WLD) Examine historical events from the perspectives of diverse groups.

SS HS.4.3.a (WLD) Identify how differing experiences can lead to the development of perspectives.

For example: diverse groups of historical figures and examples from political, religious, and ethnic groups

SS HS.4.3.b (WLD) Interpret how and why diverse groups and/or individuals might understand historical events similarly or differently.

For example: diverse groups of historical actors and examples from national, religious, and ethnic groups

Representing a global education

- Standards identify what to teach, not how to teach it
 - Use variety of "case studies" to represent a variety of cultures, places, experiences, etc...
 - Avoid representations that only portray one narrative

 Chimamanda Ngozi Adichie – Danger of a Single Story (TED)



Nigeria







Also Nigeria

2010 15 Sources: UN

Africa's engine of growth





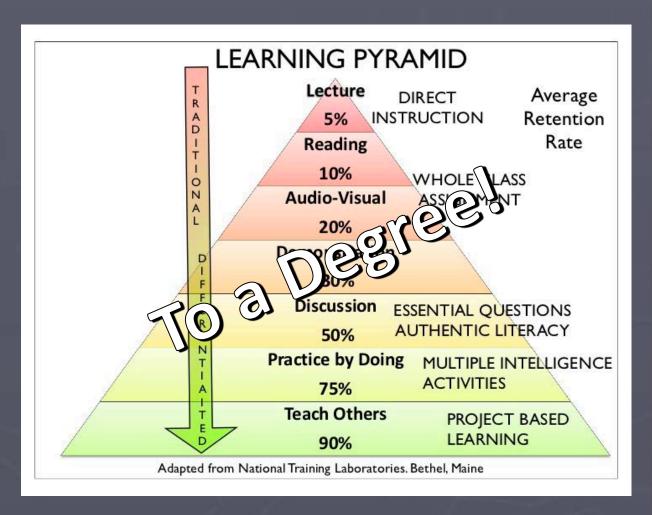


Discussion Question

 What role should an instructor have within a geography classroom? Facilitator or presenter? What are the questions that an instructor should ask themselves whenever they are developing a lesson?

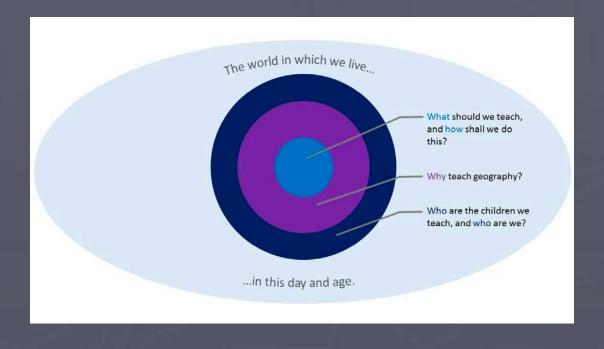
Geocapabilites – 3 Futures

- Adapted of research by Michael Young and Johan Muller
- Geocapabilities as a Collaboration between American (American Association of Geographers - AAG) and European researchers
 - Michael Solem USA
 - Sirpa Tani Finland
 - David Lambert UK



Defining Geocapabilities

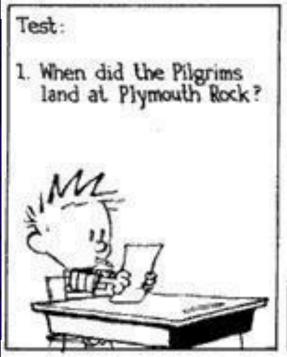
• "A capabilities approach to education considers how the individual can lead a life that she or he has reason to value. A *Geo*Capabilities approach argues that an individual will develop greater potential to do this if they acquire geographical knowledge, enabling them to think geographically." – geocapabilities.org

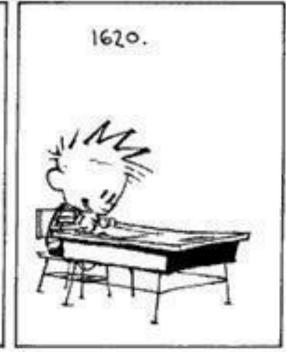


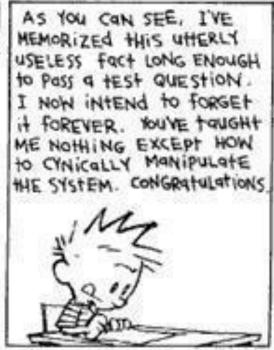
Future 1 (F1) — Fact Based Curriculum

- A mostly fact-based curriculum in which the teacher is seen as imparting knowledge and wisdom to students
- Students are passive learners

GEOGRAPHIC EXTREMES	IDENTIFY THE CAPITAL	LAKES	MOUNTAINS	RIVERS	NATIONAL LANDMARKS
<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>	<u>\$200</u>
<u>\$400</u>	<u>\$400</u>	<u>\$400</u>	<u>\$400</u>	<u>\$400</u>	<u>\$400</u>
<u>\$600</u>	<u>\$600</u>	<u>\$600</u>	<u>\$600</u>	<u>\$600</u>	\$600
<u>\$800</u>	<u>\$800</u>	<u>\$800</u>	\$800	<u>\$800</u>	<u>\$800</u>
\$1000	\$1000	<u>\$1000</u>	\$1000	<u>\$1000</u>	\$1000 Final







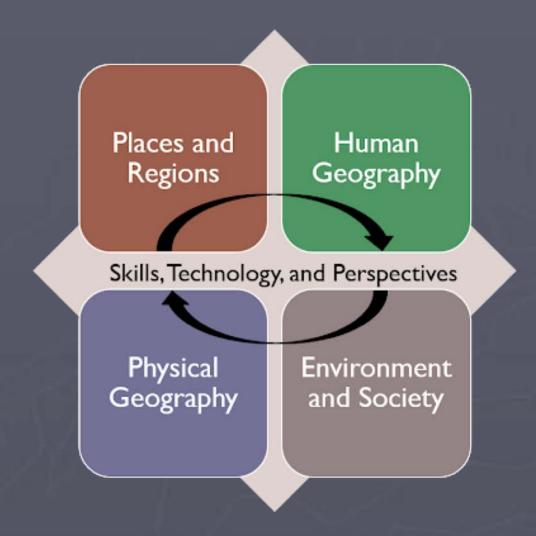
Future 2 (F2) — Skill Based Curriculum

- Curriculum focuses on skills and "competencies"
- Students are active, but learning for the sake of learning
- Focus is not as much on what students are learning, but how they are doing it



Future 3 (F3) - Engagement

- Concerned not only with how students learn, but also what they learn
- Room for creativity to allow for students flexibility to be curious
- Development of "Powerful Geography" increasing students knowledge of the world





Project partners







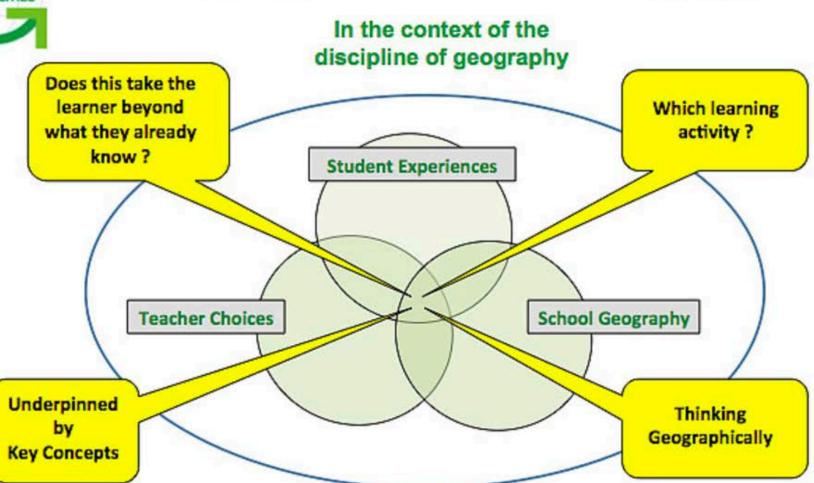


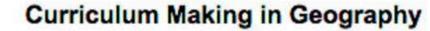














For Further Exploration

Geocapabilities.org





Powerfulgeography.org

State Testing Requirements

High Stakes

- Nebraska Student-Centered Assessment System (NSCAS)
 - English (3rd-8th)
 - Math (3rd-8th)
 - Science (5th-8th)
- NSCAS ACT High School
 - English
 - Math
 - Reading
 - Science
 - Writing Optional

Federal or Optional

- National Assessment of Educational Progress (NAEP)
 - On cycle grades 4, 8, & 12
- AP© Human Geography
 - 1250 Nebraska Students in 2020
 - Primarily offered in public schools in larger cities and suburbs
- AP© Environmental Science
 - Only 40 students in Nebraska in 2020
 - Mean score 3.0

2020 Nebraskan Scores by Race

Score	American Indian/ Alaskan Native	Asian	Black	Hispanic/ Latino	White	Two or More	No Response	Total
5	X	20	5	15	108	4	2	154
4	4	25	4	19	214	16	10	292
3	1	28	9	26	267	20	13	365
2	3	11	6	17	74	4	6	121
1	1	34	14	77	160	20	12	318
Total	9	118	38	154	823	64	43	1250
Mean	2.89	2.88	2.47	2.21	3.04	2.69	2.63	2.87

2020 Nebraskan Scores by Gender

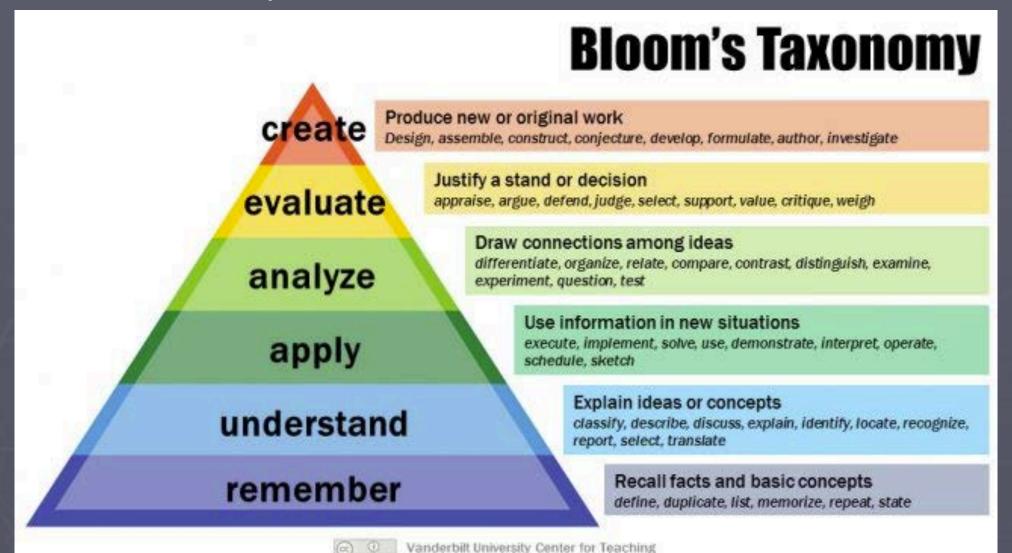
Score	Males	Females		
5	60	94		
4	126	165		
3	143	219		
2	37	84		
1	111	207		
Total	477	769		
Mean	2.97	2.81		

* Scores for students who identify as other or non-binary redacted due to limited numbers

Discussion Question

- What role should standards have in the planning of learning experiences?
- Does having standards restrict the ability for teachers to develop more meaningful lessons?

Education Psych 101



Using Standards to guide your objectives

- Student Learning Goals/Objectives
 - Objective should include what you want students to get from lesson and how you plan to accomplish that
 - Ex. Students will able to explain the human and natural factors that affect the climate of the planet through participating in a simulation and completing an E.S.P.N chart using relevant resources. (3.1.b, 3.2.a, 3.3.a, 3.3.b)

