



# The Journey of Content-Specific Global Learning

*Guidance for Embedding Global Learning into all Content Areas*

**The Purpose of the Journey** Every educator should consider how much the world beyond the classroom, neighborhood, state and country will impact each student. Each of their future endeavors will involve a touch with a perspective different than his or her own and educators can help prepare students to be successful with those experiences. Fostering lifelong learning and globally-conscious students can happen when the educators infuse global ideas into their classroom. From decorating with travel mementos to inviting in guest speakers with diverse backgrounds to utilizing internationalized content, every teacher can have an impact.

## ***Five Reasons Why Global Learning is Important in all Content Areas:***

1. In a globally-focused curriculum, students learn that the world needs them to act, and that they can make a difference.
2. A new generation of students requires different skills from the generation that came before. The ability to thrive in this new and rapidly changing environment is grounded in a globally-focused curriculum.
3. A changing world and global workforce; a company in one country may employ, export or import with a company in another country.
4. The culture that once lived halfway around the world now lives just down the street. Changing demographics in classrooms and neighborhoods
5. A globally-focused curriculum engages students in their own learning and motivates them to strive for knowledge and understanding. It creates lifelong learners. Global Learning challenges students to investigate the world, consider a variety of perspectives, communicate ideas, and take meaningful action.

In order to develop high-quality global learning opportunities, educators need to know what global competence entails. Every young person should be able to:

- Investigate their world, including their immediate environment and beyond.
- Recognize their own and others' perspectives.
- Communicate and collaborate with diverse audiences.
- Translate their ideas and findings into appropriate actions to improve conditions.

**Behind the Wheel and Helping to Plan the Journey:** Every teacher of every content can help any and all students become more globally competent. Enabling students to become more globally minded is not reinventing the curriculum or adding additional standards to instruction. Infusing global learning into student learning is simply reframing how one teaches by using a different lens. Below are content-specific resources to help teachers start.

<a href="#">Elementary Level</a>	<a href="#">6-12 Science</a>	<a href="#">6-12 Social Studies</a>	<a href="#">6-12 Math</a>
<a href="#">6-12 English/Language Arts</a>	<a href="#">Agriculture Education</a>	<a href="#">Business, Marketing, Information Technology and Entrepreneurship</a>	<a href="#">Engineering and Technology</a>
<a href="#">Family and Consumer Sciences</a>	<a href="#">Health Science</a>		

**Packing Your Bags for the Journey:** Use these two Symbaloo webmixes to get started with a bundle of resources curated with a lot of resources. The first is designed to give you a series of resources specific to global learning. The second is focused on teacher and student exchange where you'll find links to scholarships, fellowships and opportunities for students and teachers to travel. You can sign up for a free account to have the links with you wherever there is internet, you can find them on our website or by clicking below.



[Global Learning Webmix](#)

[Teacher & Student Exchange Webmix](#)

## Moving along the Journey: K-6 All Subjects

“Childhood is the right time to prepare our next generation for a global future. How they investigate the world, communicate ideas, and act on their beliefs can all start in the elementary years. Today, the school experience must prepare students effectively with the knowledge, dispositions and skills they’ll need to connect, collaborate and compete in a highly interdependent world. Global competence is a crucial foundational element, alongside other social skills, and thus should be encouraged at an early stage of development. There are unique opportunities in elementary education to cross over content and curriculum boundaries, mirroring the way learning occurs outside the classroom.” [Asiasociety.org](http://Asiasociety.org)



**Internationalized Standards:** A resource for the Indiana Academic Standards including a series of suggestions for infusing global content into the disciplines.

English/Language Arts	Mathematics	Science	Social Studies
<a href="#">Grade K</a> <a href="#">Grade 3</a> <a href="#">Grade 5</a> <a href="#">Grade 1</a> <a href="#">Grade 4</a> <a href="#">Grade 6</a> <a href="#">Grade 2</a>	<a href="#">Grade K</a> <a href="#">Grade 3</a> <a href="#">Grade 5</a> <a href="#">Grade 1</a> <a href="#">Grade 4</a> <a href="#">Grade 6</a> <a href="#">Grade 2</a>	<a href="#">Grade K</a> <a href="#">Grade 3</a> <a href="#">Grade 5</a> <a href="#">Grade 1</a> <a href="#">Grade 4</a> <a href="#">Grade 6</a> <a href="#">Grade 2</a> Updated Science IASI Coming Spring 2017	<a href="#">Grade K</a> <a href="#">Grade 3</a> <a href="#">Grade 5</a> <a href="#">Grade 1</a> <a href="#">Grade 4</a> <a href="#">Grade 6</a> <a href="#">Grade 2</a>

### How to Get Started: Big Picture

- Students investigate the world beyond their immediate environment.
- Students recognize their own and others’ perspectives.
- Students communicate their ideas effectively with diverse audiences.
- Students translate their ideas and findings into appropriate actions to improve local and/or global conditions.

### Examples:

#### Math:

**2<sup>nd</sup> Grade Measurement Standard 2.M.5** - Hang two clocks in your room one to represent your local time zone and another to show the time zone of a country you’d like to visit. Label them based on country. When practicing telling time, you can ask students the time in both time zones so there will be two correct answers to every question eliciting more student participation. Consider changing your country of choice and time zone each quarter or semester.

**4<sup>th</sup> Grade Measurement Standard 4.M.5** – Use Google images to find photos of individuals holding chopsticks. Use the varying angles of the chopsticks to serve as the samples for students to practice their measurement skills with the various angles.

#### English Language Arts:

**1<sup>st</sup> Grade Writing Standard 1.W.3.3** - Have students use varied words to describe international events, people, and places. Examples: A sunny day at a soccer match in Cape Town, South Africa; a rainy day at Trafalgar Square in London, England.

**3<sup>rd</sup> Grade Reading Literature Standard 3.RL. 2.2** - Have students read various fables from around the world. Examples: “The Crow and the Peacock” (China), “The Golden Fish” (Russia), or “How the Princess Learned to Laugh” (Poland). Extensions: Use these fables as the basis for comprehension questions, phonics skills, homophones, similes/metaphors, and other language arts exercises.

#### Science:

**Kindergarten Earth & Space Science K.ESS.3** - Investigate the local weather conditions to describe patterns over time. Select two countries around the world to display around the classroom throughout the year. Each day when you have students describe the weather outside their classroom, use the internet to show students what the weather is like in your two selected countries. You could also purchase a beach ball that reflects a globe and toss it around each morning that the class studies the weather and look up the weather for the country that is under the thumb of the student that catches the ball.

#### Social Studies:

**5<sup>th</sup> Grade Civics and Government Standard 5.25** - Have students compare and contrast the rights given to Americans in the Bill of Rights with the rights established by other countries around the world. Discuss how, in some countries, the people have very little freedom or few individual rights. Have students reflect on why civil rights and liberties vary in each culture.

### Resources:

- [Ready for the World: Preparing Elementary Students for the Global Age](#) (Source: [asiasociety.org](http://asiasociety.org))
- [Children Around the World: Theme and Activities](#)
- [Kid World Citizen](#)
- [Kids Global Issue Resources](#)

## Moving along the Journey: 6-12 Mathematics

“Mathematics is a highly international discipline: people have studied and applied mathematics on every continent and in every civilization. The language of mathematics is truly universal: a math teacher in Arizona can pick up a textbook from Thailand and understand the section on logarithms. Students who can employ math skills such as data analysis, algebraic problem solving, and probability develop a deeper understanding of the complexity of world issues and can propose solutions that are informed by real data.” [Asiasociety.org](http://Asiasociety.org)

**Mathematics with Internationalized Standards:** A resource for the Indiana Academic Standards including a series of suggestions for infusing global content into the disciplines.

<a href="#">Grade 6</a>	<a href="#">Algebra I</a>	<a href="#">Pre-Calculus</a>
<a href="#">Grade 7</a>	<a href="#">Algebra II</a>	<a href="#">Calculus AB, Advanced Placement</a>
<a href="#">Grade 8</a>	<a href="#">Geometry</a>	<a href="#">Probability and Statistics</a>
		<a href="#">Discrete Mathematics</a>



### Key Concepts and Examples

Using the world to understand mathematics and using mathematics to understand the world are paired goals that support the development of global competence. The interconnectedness of these aims is illustrated by several key concepts.

#### How to Get Started: Big Picture

- Compare data from different parts of the world (disease, relative wealth, cost of milk vs. cost of gas, water, etc.); graph and interpret.
- Learn about Japanese “lesson study” and form a group that designs, teaches, and reflects on a math lesson using this approach.

#### Examples:

**7<sup>th</sup> Grade Computation Standard 7.C.6** – Use an image like the one found to the right to use the markdown practices of other countries. Students can engage in a discussion about how culture affects these practices. For example, in China the market using the price individuals pay such as 88% off rather than in the U.S. where we would see signs for 15% off. Also, rather than multiples of 5 which are typical in American culture, 8 is a lucky number in China and is used frequently.



**Algebra I Linear Equations A1.L.7** – Have students use trend data related to population growth in various countries to create linear equations to predict future population levels. Then have them create graphs of these equations and use the graphs to determine if and when various countries would have equal populations.

**Trigonometry Polar Coordinates TR.PC.1** – Consider using a map of another continent and using varying cities to serve as the basis for the Polar and Cartesian coordinate comparison of this standard rather than using a map of the U.S.

**Probability and Statistics PS.3.4** - Have students draw a scatterplot and calculate the correlation coefficient for data sets by continent. You could use carbon dioxide production vs. the number of species’ extinctions over time; the cost of health care vs. life expectancy; or the percent of desert vs. the percent of malnourished population. Then have students interpret the coefficient of determination( $r$ -squared) in the context of the data set.

#### Resources:

- <http://asiasociety.org/education/understanding-world-through-math>
- <http://asiasociety.org/education/mathematics-are-global-competencies>
- <https://medium.com/global-perspectives/8-connected-concepts-of-global-learning-c9a89e828408#.1xil1ou5p>
- <https://think-global.org.uk/our-work/past-projects/nuffield/>
- [http://clients.squareeye.net/uploads/global/resources/GD\\_in\\_my\\_classroom\\_003\\_Secondary\\_Maths\\_and\\_Global\\_Learnin\\_g.pdf](http://clients.squareeye.net/uploads/global/resources/GD_in_my_classroom_003_Secondary_Maths_and_Global_Learnin_g.pdf)
- <http://www.globallearningcenterllc.com/math.html>

## Moving along the Journey: 6-12 Science

"They (students) observe natural phenomena that cause them to wonder, ask their own questions and test their ideas. When they interpret their data, new questions arise, leading them into focused, purposeful research of the literature and further inquiry. The result is students who can understand, analyze, apply, and evaluate existing scientific knowledge in the context of global cultural perspectives, politics, economics and history." [Asiasociety.org](http://Asiasociety.org)

**Internationalized Standards:** A resource for the Indiana Academic Standards for Science 2016 that includes a series of suggestions for infusing global content/perspectives into science. (Update to align with the Indiana Academic Standards for Science 2016 coming spring 2017) [Global Learning Resources](#)

### Beginner Steps:

- Identify topics that you already implement that provide a natural opportunity to introduce a global prospective
- Provide an opportunity for students to work on researching a global issue/problem
- Pull in news and research from around the globe and various cultures
- Participate in global challenges or challenges focused on global issues
- Collaborate/Communicate/Perform research with schools in other parts of the world

#### Biology:

1. Interdependence: Describing how the human impact in various global societies impacts various ecosystems. Have students each choose a country and look at their ecosystem. Students can share in a small group format before choosing a potential solution to problem-solve one of the human behaviors to reduce that impact.
2. Inheritance and Variation in Traits: Consider having students evaluate and predict the characteristics of individuals from a variety of cultures. Provide students with two sets of DNA without the cultural background noted and having students determine the physical features of the offspring to determine cultural ancestry. [Ancestry Video](#)

#### Earth & Space Science:

1. Earth Cycles and Systems: Have students research how the nitrogen cycle varies globally. What causes this variation? What effects are seen? Do the same for phosphorus. [In the Netherlands](#), for example, extreme reactive nitrogen levels have changed the Dutch countryside's characteristic heathlands to grasslands.

### Resources/Topics:

[Science is Global](#): Article about how students learn to think more like scientists when global elements are infused.

[IOP](#) (Institute of Physics) – Energy, sound, sports

[iEARN](#) (International Education and Resource Network) – Collaboration

[GLOBE](#) (Global Learning and Observations to Benefit the Environment) – Data, Collaboration

[ICCA](#) (International Council of Chemical Associations) – Sustainability, Climate Change, Impact, Policy

[AAAS](#) (American Association for the Advancement of Science) global outreach, science diplomacy

[SEDAC](#) (Socioeconomic Data and Applications Center) Biomes, Population, Landscape, Climate Change

[WHO](#) (World Health Organization) – Outbreaks (Zika), Immunizations, Policy

[Olympics](#) – Sports and locations around the globe, statistics, rates

#### Chemistry:

1. Properties and States of Matter: Have students examine samples of pure substances and mixtures and then ask them to research where and how those substances and mixtures are found or made. See [this video](#) about origins of four recent elements.
2. Atomic Structure and the Periodic Table: Have students research a variety of global policies on the utilization of nuclear energy and compare how nuclear energy is perceived around the world.

#### Physics:

1. Constant Acceleration: Using sports around the world as examples to have students discuss and create graphical problems using objects such as those used in international sports like: jai alai, soccer, rugby, badminton, and cricket.
2. Simple Circuit Analysis: While discussing voltage, have students look at international voltage converters and create a document to show consumers how to select a device before an international trip that won't damage their devices due to foreign voltage. Consider asking students why each country developed that type of voltage and outlet. [Video](#)

#### Environmental Science:

1. Population: Have students compare and contrast the factors that contribute to birth and death rates from the United States and another country. Students should share their findings in the form of an opinion speech to move toward the country with the best growth rate.

## Moving along the Journey: 6-12 Social Studies

*“A global approach to history and social studies does not offer a new set of content standards regarding the things students must know about the world. Instead, we began by indexing the ways in which students approach the world, socially and collaboratively, and asked how this approach develops as the student’s sense of that world becomes broader. As a result, the framework allows us to chart the unique ways in which individual students develop a more global perspective, and the particular strengths students acquire.”*  
[Asiasociety.org](http://Asiasociety.org)

**Internationalized Standards:** A resource for the Indiana Academic Standards including a series of suggestions for infusing global content into the disciplines.

- [Grade 6](#)
- [Grade 7](#)
- [Grade 8](#)
- [Economics](#)
- [Geography & History of the World](#)
- [Psychology](#)
- [Sociology](#)
- [United States Government](#)
- [United States History](#)
- [World Geography](#)
- [World History & Civilization](#)

Four main subjects in social studies — geography, history, economics, and government/civics — offer superb opportunities for students to deepen their understanding of the world

### Geography: How to Get Started

Many excellent resources are available to schools to support an increased focus on world geography. Among them:

- Geography Alliances exist in every state to provide professional development opportunities for teachers. Investigate what these groups have to offer and make use of the materials and training. ([Geography Educators Network of IN](#))
- Web sites like those run by [National Geographic](#) and the [Asia Society](#) have innumerable interactive maps, lesson plans, videos, and other materials focused on the geography of different parts of the world and on contemporary issues from the depletion of rain forests to industrial pollution to global climate change.
- Use technology tools such as [Google Earth](#) to engage students in creating their own illustrated maps of issues that interest them.

### U.S. and World History: How to Get Started

- [The National Center for History in the Schools at University of California, Los Angeles](#), provides curriculum materials, resources, and seminars on world and U.S. history.
- Each week, examine a current event from multiple perspectives by having students read English language press coverage from a world region whose history you are currently studying. Is there evidence of the past influencing the present? Discussing current events in the context of history strengthens skills such as chronological thinking and historical analysis.
- [College Board](#) offers professional development for the AP history courses.

### Economics: How to Get Started

- The [National Council on Economic Education](#). ([ICEE](#)) works with state affiliates and local university centers to provide professional development workshops as well as travel opportunities and conferences on curriculum creation.
- Assign students to different countries and simulate the differences in relative buying power from a common “store,” given differences in average daily wages and current exchange rates.
- Have students consider the effect that significant changes in individual nation’s economic and trade strategies might have on other nations’ economies, and the potential long range impact worldwide.

### Civics/U.S. Government: How to Get Started

- Access teaching materials from scholars on international relations and the U.S. role in contemporary world issues. [Brown University’s CHOICES](#) program offers curriculum materials on topics such as genocide, nuclear weapons, dilemmas of foreign aid, and U.S. interests in the Middle East.
- [The Center for Civic Education](#) offers professional development around the country and international educational exchange programs for developing democracies.
- Research [College Board’s](#) Advanced Placement course entitled “[Comparative Government and Politics](#)” as a companion course to a traditional U.S. government course.



## Moving along the Journey: 6-12 English/Language Arts

“A globally-focused English language arts classroom shows students who they are, and how they can have an impact on the world and influence the power structure. They become more powerful communicators, learning to sort through text with a critical eye, discerning what’s credible and understanding what drives someone to a particular speech. They find their voice as writers, learning the means to use words—in a story, letter, blog or video—that convince other to take action on a local, regional or global issue.” [Asiasociety.org](http://Asiasociety.org)

**Internationalized Standards:** A resource for the Indiana Academic Standards including a series of suggestions for infusing global content into the disciplines.

[Grade 6](#)

[Grade 7](#)

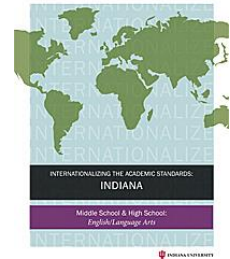
[Grade 8](#)

[Grade 9](#)

[Grade 10](#)

[Grade 11](#)

[Grade 12](#)



**Beginner Steps** Reframe literature: rethink the canon of literature and use global themes to change the way it is taught.

- Incorporate non-traditional texts to show students global issues from multiple perspectives
- Take a global issue and look at how it’s represented in a variety of texts
  - *Example: IAS 6.RN.4.2/IAS 7.RN.4.2* Assign students different countries’ newspapers, news outlets, social media accounts and have them seek articles and information that report on several categories: top three national stories, top three international stories, and top two business stories. Then have them discuss, compare, and contrast the stories.
- Students need to see themes at work outside the classroom and in the world
  - *Example: IAS 11-12.RL.2.2* Have students compare and contrast a central theme of parenting in *To Kill a Mockingbird* and *Purple Hibiscus* (a Nigerian novel by Chimamanda Ngozi Adichie)
- Teach students how to use persuasive strategies for specific purposes and audiences
  - *Example: IAS 8.W.3.1* Have students selected chapters from the non-fiction book, *The World Is Flat: A Brief History of the Twenty-first Century* by Thomas L. Friedman, about globalization. Then have them write short persuasive compositions in response, stating whether or not they think the “flattening” of the world is positive or negative. Students should use quotes from the text to support their answers.
  - *Example: IAS 7.SL.4.1* Have students represent an international charity. After researching a service organization, have students write and present a mock three-minute infomercial that appeals for funds.
- Help students recognize that choices are related to cultural, societal, and personal values and contexts

### Resources/Examples:

- Create Advocacy Projects: taking an issue and using language to create something
  - i.e. Letter to the editor or a public service announcement on YouTube; do this for not one, but multiple audiences tailoring the medium to how to would best reach each one; i.e. a 60 year old VS a 15 year old, a person in Brazil VS a person in West Virginia
- For international literature:
  - [Words Without Borders](#) is an online magazine dedicated to global literature in translation, and includes lesson plans, book reviews, and author interviews.
  - [Worlds of Words](#) (WOW) is an online database of international books with strategies for locating and evaluation culturally authentic international literature. Publications include contributions written by educators and critical reviews.
  - [United States Board on Books for Young People](#) publishes bibliographies of international books and selects an annual list of Outstanding International Books.
- For foreign news sources:
  - News organizations from [CNN](#) to [PBS](#) and [BBC](#) offer round-the-clock news updates from around the world.
  - [Time for Kids](#), CNN’s StudentNews, and NewsHour Extra, regularly cover international news and topics in a youth-friendly format.
  - NewsHour’s [the.News](#) for teens has a special feature called “the.Globe” with video features covering international studies from around the world.

## Moving along the Journey: Business, Marketing, Information Technology and Entrepreneurship

*“The mission of Business, Marketing, Information Technology, & Entrepreneurship (BMIT&E) Education in Indiana is to work cooperatively with the business community to prepare all individuals to live and work as productive citizens in a changing global society by providing essential business education, training, and experiences. These experiences should actively engage students using instructional strategies that rely on use of technology and current and emerging business practices and procedures.”* Source:

<http://www.doe.in.gov/cte/business-education>

**Getting Started:** Incorporate global perspectives into lessons related to business, marketing, IT, and entrepreneurship courses/standards.

### PREPARING FOR COLLEGE AND CAREERS

- Employability Skills: PCC-7.1 *Demonstrate knowledge, skills, and attitudes needed for seeking employment (career opportunity research, personal/career portfolio, interviewing, networking)*
  - A curriculum vitae (CV) is usually used in many counties instead of a resume. Explain the [difference](#). Share [samples](#).
- Personal Skills: PCC-6.3 *Social and Cross-Cultural Skills (interact effectively with others in a respectable, professional manner, respect cultural differences and work effectively with people from a range of social and cultural backgrounds, respond openly to different ideas and values, leverage social and cultural differences to create new ideas and increase both innovation and quality of work)*
  - An idea for a lesson plan with a global approach could be to have students pick a country to visit as a [US representative](#). They must study the State Department’s [Protocol for the Modern Diplomat](#) document to learn how they would address their counterparts for that country, what gifts would be appropriate including the type, color, and number of flowers in a bouquet, how they should hold a knife and fork while eating dinner, and other details related to that country’s culture and norms.
- Exploring Careers: PCC-2.1 *Determine roles, functions, education, and training requirements of various career options within one or more career clusters and pathways*
  - Most of us have seen the Disney movie “[Mary Poppins](#)” and remember Bert the Chimney Sweep. Did you know that the only chimney sweep school in the entire U.S. is located in [Indiana](#)? Did you know sweeps can make upwards of \$130,000 a year? Did you know sweeps started in [England](#)? Did you know they used children to clean chimneys? That could tie into [child labor laws](#) being invoked to protect children from such working conditions.

### PERSONAL FINANCIAL RESPONSIBILITY

- Financial Responsibility and Decision Making: PFR-1.1 *Demonstrate taking responsibility for personal financial decisions*
  - How do people in Asia, Europe, Middle East/Africa, Latin America, and North America [spend and save their money](#) and what strategies do they use for saving?
- Relating Income and Careers: PFR-2.1(a) *Describe how personal factors, career choices, and economic conditions affect income a.) analyze ways economic, social, cultural, education and political conditions can affect income and career potential*
  - An idea for a lesson plan with a global approach could be to have students explore [pay gaps between men and women](#) from around the world. What are the causes for such a difference in pay between men and women around the world? What occupations are typically male dominated? Female dominated? Are women mostly employed [in lower-paying industries and occupations](#)?
- Planning and Managing Money: PFR-3.5 *Connect the role of charitable giving, volunteer service, and philanthropy to community development and quality of life*
  - We have all heard the [Salvation Army](#) bell ringers outside businesses around Christmas or perhaps donated to [Toys for Tots](#). How does one determine which organization should receive our donations? Did you know the Salvation Army’s headquarters is in London? Both of these charities are quality programs, but [not all charities are on the up-and-up](#). Have students investigate, select, and defend an [international charity](#) of their choice. Let their interests guide their choice from animals, art, education, environment, health, religion, public policy, and more.

### Resources/Examples:

- Career Readiness to Global Career Readiness: Utilize the globalization of the Advance CTE career readiness practices as a resource in the classroom. [Asiasociety.org](#)

## Moving along the Journey: Family and Consumer Sciences

**Family and Consumer Sciences** is a critical component of Career and Technical Education. Family and Consumer Sciences mission is to create healthy and sustainable families. Through global learning in Family and Consumer Sciences, students can be prepared for all aspects of life (family, community, and career) in a global economy.

### **Beginner Steps:**

- Reframe Thematic Units: rethink the approach to critical content and skills and use global themes to change the way it is taught.
  - Incorporate global perspectives into lessons related to employability skills
    - Example: Manages time is a resource management employability skill. Have students compare the time and schedule of work days for different cultures.
  - Take an issue such as prenatal development or safe sleep practices and look at it with a global lens
    - Example: [Finnish Baby Box](#) highlights the Finnish safe sleep practice. Review the 75 year history of the Finnish Baby Box and its impact on infant mortality rates [BBC](#)
  - Utilize global examples in all content: design, housing, fashion, nutrition, culinary, education, etc.
    - Check out the IKEA Emergency shelter that was named best design of the Year. [Video](#) Discuss ways this could be used to meet various global housing needs
  - Students need to see themes at work outside the classroom and in the world
    - Have students compare and contrast recipes based on the US system and the Metric system
- Recognize Perspectives:
  - In career pathway courses, help students create multiple messages for multiple audiences considering the diversity of cultures in the local population. Have students share their work
  - Discuss cultural norms about social interactions that they may encounter working in a global economy
    - Example: Ask students to investigate the initial physical greeting (handshake, bow, kisses, etc...) in business interactions in at least 4 countries on different continents. Try [this video](#) or [this one](#).
  - Help students recognize that choices are related to cultural, societal, and personal values and contexts
    - Example: Discuss and research what influences clothing choices
- Take Action: Translate ideas, concerns, and findings into appropriate and responsible individual or collaborative actions to improve conditions [Asiasociety.org](#)
  - Create Advocacy projects that address global issues or concerns. [FCCLA](#)
    - Example: Have students investigate different systems of “recycling” in two other countries and determine if that systems would be more/less efficient than the system in place in their local community. Encourage them to increase the efficiency or utilization of the current recycling system in place in their local community.
  - Utilize Leadership in Action standards to guide global action [Leadership in Action](#)
    - Maybe ask students to investigate the concept of “community service” or “service learning” in the US and two other countries. Discuss and share with the rest of the class. (just an example)

### **Resources/Examples:**

- Career Readiness to Global Career Readiness: Utilize the globalization of the Advance CTE career readiness practices as a resource in the classroom. [Asiasociety.org](#)
- For Global Opportunities: FCCLA Japanese Exchange-Japanese Exchange is a scholarship opportunity for FCCLA members to travel to Japan for four-to-six weeks as an exchange student. [FCCLA](#)
- This ASCD article called the “[Curriculum Handbook](#)” for FACS, gives a good explanation about the need to include context into the problem-solving process for students. In our ever-changing, multicultural society, infusing cultural competence into regular lessons becomes quite important to providing accurate contexts.



## Moving along the Journey: Health Science

**Health Science Education** is a rich content area that prepares students for employment and/or continuing education opportunities in the field of healthcare through technical instruction in the classroom, experiential education in the laboratory setting, work-based learning opportunities in clinical settings, and leadership skills through the student based organization, HOSA: Future Health Professionals. Work-based learning may include job shadowing, internships, and other clinical experiences that allow students the opportunity to observe and learn from healthcare professionals. ([Indiana Department of Education: Health Science](#))

**Integrating global thinking and perspectives into the classroom to address the predicted needs in healthcare is an important step toward preparing a globally competent workforce.** One way to begin to integrate international content is to seek courses where internationally focused offerings already in place, or to seek those programs where an international element could be easily infused.

**Investigate the World:** Students investigate the world beyond their immediate environment; incorporate global perspectives into lessons related to the transmission of diseases from country to country:

- **Indiana Standards:** *HSEI-1.5 Recognize emerging diseases and disorders*
- During instruction of public health/epidemiology topics, discuss how diseases are transmitted and the concept that the next epidemic is “only an airplane ride away.” Discuss the importance of receiving the appropriate vaccinations before international travel and the consequences of disease transmission if that recommendation is not followed. Access the [CDC Traveler’s Health website](#), watch the [“CDC Interim Guidance: Polio Vaccine Requirements for Travelers Abroad”](#) and discuss. Have the students research immunization requirements for the US and a selected country.

**Recognize Perspectives:** Students recognize their own and others’ perspectives; explore the implications of effective/non-effective communication with patients/clients from different cultures and nationalities:

- **Indiana Standards:** *HSEI-2.1 Interpret verbal and nonverbal communication; HSEI-2.2 Recognize barriers to communication; HSEI-6.4 Discuss religious and cultural values as they impact healthcare; PT-6.1 Provide medication and supplemental information to patient/patient’s representative*
- Have students research a selected culture and any differences that may create a barrier to providing appropriate care, such as when explaining procedures and health goals and when providing medication related information. Students will identify the interventions needed to provide effective care, such as the respectful behaviors that may need to be incorporated into the care being provided to address any specific taboos for the culture or accommodations for language barriers. Resources: [Medscape Nurses: Patient Education: Addressing Cultural Diversity and Health Literacy Issues](#) , [Missouri Career Education: Cultural Care Fact Sheet Lesson](#) , [American Nurses Association: Many Faces: Addressing Diversity in Health Care](#)

**Take Action:** Students translate their ideas into appropriate actions to improve conditions; help students make connections between local issues within a community and broader global issues and themes. Ask the question: How is our community connected to global trends?

- **Indiana Standards:** *HSEI-7.1 Explain principles of infection control; HSEI-1.4 Describe common diseases and disorders of each body system; HSEI-3.1 Describe the healthcare delivery system; HSEI-3.4 Explain the impact of emerging issues such as technology, epidemiology, bioethics, and socioeconomics on healthcare delivery systems*
- Students research the diseases (e.g. Typhoid, Cryptosporidium, Giardia, etc.) or medical conditions (e.g. Lead Poisoning) that can be transmitted through unsafe water sources, and the causes and proposed solutions to this public health hazard. Compare those findings to another community across the globe that is facing the same or similar issue and determine solutions and interventions that would need to be taken to correct the problems. Resources: Water Quality and Health: [Recent Trends in Waterborne Disease Outbreaks in the US](#), [Indiana State Department of Health, ISDH: Lead and Healthy Homes Program](#), [CDC: Parasites in Water](#)

### Resources/Examples:

- [Asia Society Center for Global Education: Career Ready Practices: Reflecting Global Readiness](#)
- [Centers for Disease Control and Prevention \(CDC\)](#)
- [World Health Organization \(WHO\)](#)
- [Asia Society Global CTE Toolkit](#)

## Moving along the Journey:

### Agriculture Education

“Agriculture is the most fundamental and essential industry in the world, an industry that provides our entire society with food, clothing and shelter. This makes agricultural education an important component of a child's education.”

<http://www.doe.in.gov/cte/agricultural-education>

#### **Globalizing Indiana Standards:**

- **Intro to AFNR** is to provide students with an introduction to fundamentals of agricultural science and business. Let students explore how agriculture is connected to the rest of the world. Here's just one example:
  - Standard:** Define and explore agriculture and agribusiness and their role in the economy
  - Suggestion for Integrating International Content:** Have students select a country and create an infographic about its agricultural products including exports and imports and how they impact students' home state.
  - Resources:** To access some import/export data, visit the USDA website at <https://www.ers.usda.gov/>.
- **Food Science** is provide students with an overview of food science and its importance. Let students explore how agriculture is connected to the rest of the world. Here's just one example:
  - Standard Description:** Discuss the issues of safety and environmental concerns about foods and food processing (e.g., Genetically Modified Organisms, microorganisms, contamination, irradiation)
  - Suggestion for Integrating International Content:** Compare and contrast food safety measures the U.S. along with one other country in Africa or South America. Then, create a public service announcement to encourage importing food from the chosen country.
  - Resources:** Visit the [South African Department of Agriculture, Farming & Fisheries](#). Also, see North Carolina State University's research on food safety regulations in Colombia [here](#).

#### **Additional Resources:**

- For international agriculture:
  - [World Food Prize](#) is the foremost international award recognizing -- without regard to race, religion, nationality, or political beliefs -- the achievements of individuals who have advanced human development by improving the quality, quantity or availability of food in the world. WFP offers many sources that you can use in your classroom.
  - [Purdue University's Global Food Security Dept.](#) has information and resources that might help.
  - For information from the Global Learning in Agriculture Conference 2017 (#GLAG17), [click here](#) where you will find the presentations and a lot of Global Ag information.
  - [New Ag International](#) delivers the combination of news, in-depth articles and informed analysis.
  - [AgWeb](#) is a one stop shop for international agriculture from all commodity groups.
  - [Association for International Agriculture and Rural Development \(AIARD\)](#) represents the extensive disciplinary base of agricultural and related social science skills necessary to carry out global agricultural development and hunger alleviation programs.
  - The USDA's [Foreign Agricultural Service \(FAS\)](#) collects and analyze data and trends.
  - The [USAID's Agriculture and Nutrition Global Learning and Evidence Exchange](#) has the following presentations, handouts and information to share from their past conference.
  - The [FFA's Mission and Motto](#) shares many elements that provide support for integrating global learning into every K-12 agricultural program.

## Moving along the Journey: Engineering & Technology

“Indiana Technology and Engineering Education is committed to preparing students for college and career opportunities by providing the knowledge and problem solving skills to understand, design, produce, use, and manage the human-made world in order to contribute and function in a technological society.”

Source: <http://www.doe.in.gov/cte/engineering-and-technology>

### **Beginner Steps:**

**Reframe Thematic Units:** Rethink the approach to critical content and skills and use global themes to change the way it is taught.

**Middle School Engineering and Technology: ETE-3.2** *Investigate inventions and innovations of products, processes, materials and tools.*

- Have students investigate the origin of a specific invention of their choosing. Teacher could provide a list of specific inventions with international origins from which students choose like a compass or a kite. Students should share the history of their invention on a storyboard, podcast or video highlighting how it was invented, if its purpose changed over time and what need it filled when it was invented.
  - Here is a [publication about inventions](#) and their origins with some built-in activities and a [website](#) with a video that shares about inventions that changed history.

**Introduction to Construction: ICON-3.7** *Identify and describe the elements of planning a community and procedures necessary to change/maintain the infrastructure of a community.*

- Different parts of the world use different materials for housing than in the United States because of both climate and culture. Students can identify examples of how different communities around the world use different [materials](#) depending on climate.

**Principles of Engineering: POE -1.9** *Explore ways to produce mechanical power using alternative energy.*

- Many countries throughout the world utilize different sources of energy to produce mechanical power. Have students watch a video like [this one](#) about where the world gets its power and have students choose a specific country and energy source to explore. Once the students are well-versed on that energy source from that part of the world, have students share out their findings with classmates to determine if any of them are feasible for their geographical area in the US or for a particular project.

**Civil Engineering and Architecture: CEA-1.1 through 1.6** *Students evaluate historical structures to understand the evolution of design elements, structural components and materials used.*

- Consider having students evaluate the engineering design and architecture of the following famous international structures along with some from their local state and/or community. Ask students to determine how culture factors into the design of the structure and how history impacted the structure and its purposes
  - La Sagrada Familia Basilica in Barcelona, Spain – [Video](#) and [Website](#)
  - The Burj Al Arab in Dubai, United Arab Emirates – [Video](#) and [Website](#)
  - Forbidden City in Beijing, China – [Video](#) and [Website](#)
  - The Dancing House in Prague, Czech Republic – [Video](#) and [Website](#)

**Take Action:** Translate ideas, concerns, and findings into appropriate and responsible individual or collaborative actions to improve conditions [Asiasociety.org](#)

- Have students participate in [service learning opportunities](#) that fulfill course goals and needs of the community.



# Overcoming Roadblocks and Speedbumps

*Questions and Answers about Embedding Global Learning into Instruction*



**Q:** Won't teaching global content take away from my standards-based content?

**A:** Although it may seem like you'd be doing more with the same amount of time, the idea of global learning is to teach the standard that you were going to teach anyway, but simply use resources and contexts that are globally-focused rather than the materials/resources/ideas that are focused on a primarily non-diverse or single-sided ideas.

**Q:** I am not well traveled. How am I supposed to teach globally when I have never been out of the country?

**A:** Although this may seem intimidating, this is where IDOE can help. The resources above, especially the Internationalized Indiana Academic Standards in the links at the top of the content area pages for Math, English Languages Arts and Social Studies, are here to share with you the ideas on how to do this without ever having left the country. Your content area specialists have also selected some standards from their courses to give you even more ideas across the curriculum. Also, consider giving your students some of the reigns and help them use their experiences and home cultures to infuse a "global" element into your classroom. If your school hosts exchange students, invite those students in too. The way that they learned the information that your students are learning may be quite different and could connect to some of your students better!

**Q:** Why should I spend time on global content when it is not in my standards nor is it assessed?

**A:** When you sit back and consider both why you entered the field of education and where students will be headed when they leave your classroom and school, this seems to be an easy answer. This is one of the most critical elements of helping your students be able to spread their wings once they leave the K-12 environment. Many of Indiana's universities are highly diverse both with international student populations that will be teaching some of their classes but also there are many more cultural backgrounds represented than to what some of our Hoosier students may be accustomed. Should your students be moving along to the workforce or the armed forces, interactions with individuals from backgrounds and with languages different than theirs are almost inevitable, thus it is our job as educators to prepare them for their next steps. If you are an elementary or middle level educator, you have the unique ability to establish such a strong and intriguing foundation for students to continue pursuing global topics and cultural studies beyond your classroom.

**Q:** Embedding global learning into my instruction sounds great in a perfect world, but I barely have time to plan lessons on my own content. How will I find time to find content and plan activities?

**A:** You are not alone. Teachers like yourself are being pulled in many directions every day. Our suggestion is to start small. Start with that unit that you already want to re-do or spice up. Let the Internationalized Indiana Academic Standards be a guide to get you started when you pick that standard or unit you want to do differently. There are ideas and resources listed to help get you started. You can also join the "Global Learning" Community on the Learning Connection where teachers can share lesson plan ideas with colleagues as they are integrating global content into their own classes.

**Q:** I teach a course that is not represented in this document. How can I get assistance in globalizing my course?

**A:** Some of the content areas that have examples above represent more than 30 different courses and we could not represent them all here. The pages of this document are meant to spark your ideas and get you started. If you teach a course that is not represented, please consider reaching out to the [Global Learning & World Languages Specialist at IDOE](#), visiting the [IDOE Global Learning website](#), visiting the [Asia Society website](#), or even visiting the [Partnership for 21<sup>st</sup> Century Learning website](#) to get some ideas about integrating global content into ANY or ALL of your classes!