

ACPA SUSTAINABILITY TASK FORCE

Student Learning Outcomes Assessment Materials Guidebook



Table of Contents

i	Introduction
iii	Acknowledgements
1	Outcome #1
	2 Understanding Concepts
	6 Institution-Specific Questions
7	Outcome #2
	8 Attitudes Around Concepts
	9 Personal Attitudes
	12 Institution-Specific Questions
13	Outcome #3
	14 Personal Behaviors or Actions
	18 Institution-Specific Questions
19	Outcome #4
	20 Personal Attitudes, Behavior or Action
	20 Ideas for Complex Learning Assessments
22	Outcome #5
	23 Personal Attitudes, Behavior or Action
	23 Ideas for Complex Learning Assessments
25	Outcome #6
	26 Ideas for Complex Learning Assessments
27	Outcome #7
	28 Institutional Measures
	28 Personal Attitudes, Behavior or Action
30	Appendix

Introduction

ACPA's Sustainability Task Force partnered with the Commission on Assessment and Evaluation with the goal of creating assessment tools to help ACPA members effectively measure student learning around sustainability.

Towards these ends, Kimberly Yousey-Elsener (StudentVoice), Diana Richter Keith (Columbia University), and Staci Lynne Ripkey (New York University) formed a team in 2007 to begin a literature and web-search of assessment tools being used by various institutions. The samples in this guidebook are the product of the generosity of those who were willing to share the work they were doing.

Our review revealed a few common themes that link sustainability and student affairs practice:

Bodies of Knowledge and Action

Higher education institutions, it seems, are leading the sustainability discussion and movement towards green initiatives. There is great breadth to the conversation; schools are taking a 360-degree approach, examining sustainability as it affects curriculum, campus operations and community outreach. It is important to note that the majority of established resources we found focused on student behavior, attitudes, and basic knowledge versus deeper levels of understanding and application. This is an indication that student learning around sustainability is a relatively new issue for many campuses.

Student Affairs Programming

The call-to-action is growing louder. Enclaves of students are seeking accountability from their peers and their institutions. Higher education is recognizing its social responsibility and ability to lead as a change agent. Students are reducing waste, joining the sustainable food movement and planning eco-themed events. From the residence hall to the dining hall, to the classroom and beyond to the community, there are growing opportunities for students to get involved in the green movement. Even with central offices, many of the programs are decentralized; a cohesive, deliberate and integrated sustainability curriculum seems to be the missing link that would help institutions delineate, measure and achieve student learning outcomes.

Tools & Assessments

Most assessments take the form of internal audits of consumption patterns and report on supporting student affairs and academic initiatives. Year-over-year, progress is measured quantitatively. Other assessments take the form of surveys, measuring student attitudes, behaviors, and interest in the topic. As colleges and universities create Offices of Sustainability and increase their sustainability and environmental-gear programming and academic offerings, there is a notable gap in instruments for measuring student learning outcomes. Pre-tests and opinion surveys are in use, but there is little that thoroughly measures the effect of institutional modeling, and academic and co-curricular programming on students.

From these general ideas, we sought to create assessment materials that will contribute to the work currently being done, while pushing the movement forward to look beyond campus audit and attitude scales to planning and assessing student learning around sustainability.

This guidebook is built upon a framework of student learning outcomes developed by the ACPA Sustainability Task Force and published in the Monograph, *Toward a Sustainable Future: The Role of Student Affairs in Creating Healthy Environments, Social Justice, and Strong Economies*. Therefore, the assessment tools in this guidebook focus on one piece of the sustainability puzzle—student learning—and should be used to complement the assessment of operation and program effectiveness. For ideas on measuring institutional effectiveness see Appendix A. For a wider look at creating a culture of sustainability and assessment on your campus that includes social justice, economic development, and environmental factors, please refer to, “What Are Students Learning about Sustainability?” (Yousey-Elsener, Richter, Ripkey, About Campus, Nov/Dec, 2010).

Before we present the assessment materials it is important to focus on four points:

1. The content of this guidebook includes “assessment materials,” not “assessment instruments.” The items given under each outcome are individual questions and examples pulled from larger instruments, and therefore are not meant to be simply copied and pasted into a new survey format. Rather, choose the pieces that best fit the program goals.
2. When piecing the items together, it is important to keep in mind the integrity of the final instrument. This includes checking for validity, reliability and neutrality of the items. Validity confirms, “Are you asking what you think you are asking?” Reliability asks, “Are your questions getting consistent results each time you ask them?” Neutrality requires considering, “Is this a leading question, or is this item implying a socially desirable response?” The Institutional Research or Assessment office on your campus can be a great resource in ensuring a valid and reliable instrument.
3. The Sustainability Learning Outcomes created by the task force build on one another in a developmental continuum beginning with knowledge to application, moving towards integration and, finally, synthesis. Just as a student may progress through these levels of knowledge differently, assessment instruments must change to address the complexity of the learning involved. Verbs such as define, explain, understand and utilize indicate acts of knowing and can be assessed with assessment techniques such as multiple choice and scale-based survey questions. As learning becomes more complex, verbs such as demonstrate, integrate, and challenge require assessment materials such as essays, reflective papers, projects, rubrics and pre-test/post-test designs. The assessment materials included in this guidebook reflect that continuum.
4. Several questions include an [insert thread] option, these questions are easily adaptable to include any of the three threads of sustainability (environment, social justice or economic development). Use these questions to adapt your assessment to the thread you are most focusing on.

Acknowledgements

Ad Campaign Class. Hall, R.F. (personal communication, August 22, 2007).

Campus Audit. (n.d.). Retrieved August 23, 2010 from <http://www.iisd.org/educate/learn/audit.asp>

Campus Sustainability Assessment Project Proposed Snapshot Indicators. (2003). Retrieved September 10, 2007 from <http://www.umsl.edu/~asd/ehs/green/EIA.html>*Chronicle of Higher Education—Interactive Quiz.* (n.d.). Retrieved October 2, 2007 from <http://chronicle.com/indepth/sustainable/>

Dunlap, R.E., VanLiere, K.D., Mertig, A.G., Jones, R.E. (2000). New Ecological Paradigm Scale. *Journal of Social Issues*, 6 (3), 425-442.

Dunlap, R.E., VanLiere, K.D. (1978). *New Environmental Paradigm Scale.* Retrieved October 16, 2007 from http://64.233.169.104/search?q=cache:W8TL7tzz2SAJ:www.wsu.edu/~ericsson/172_224_ex.doc+New+Environmental+Paradigm+Scale&hl=en&ct=clnk&cd=4&gl=us&client=safari*Ecological Footprint Quiz* (Earth Day Network). (2002). Retrieved from <http://www.myfootprint.org/>

Green IQ. (n.d). Retrieved October 8, 2007 from http://www.middlebury.edu/administration/middmag/archive/2007/spring_2007/features/green/iq.htm

Greening the Campus at Trinity College Questionnaire. Rogers, C. (personal communication, September 7, 2007).

Live Earth Pledge. (2007). Retrieved August 23, 2010 from <http://www.liveearthpledge.org/>

Live Earth Survey (2007). Retrieved August, 16 2007 from <http://www.joinliveearth.org/page/survey>

Mertig, A.G. (2003). MSU Environmental Survey of Freshmen. Retrieved September, 7 2007 from <http://www.ecofoot.msu.edu/documents/frosh.environmental.survey.pdf>

NYU Sustainability Survey. Yousey, K.Y. (personal communication, September 7, 2007).

Pendarvis, S. (2002). *Environmental Literacy Survey Results*. Retrieved August, 23, 1010 from <http://sc.edu/sustainableu/studentsurvey.pdf>

Rutgers Sustainability Survey Questions. (n.d.). Retrieved August 23, 2010 from <http://purchasing.rutgers.edu/CAUBOJune%2023%20and%2025/Green%20Purchasing%20Survey/Rutgers%20Sustainability%20Survey%20Questions.doc>

Stokking, H., van Aert, L., Meijberg, W., Kaskens, A. (1999). *Evaluating Environmental Education Example*. Retrieved August 23, 2010 from <http://www.unece.org/env/esd/information/Publications%20IUCN/Evaluating%20environmental.pdf>

Student Sustainable Behavior Survey (2007). Retrieved August 30, 2007 from <http://www.st.andrews.ac.uk/media/Findings%20of%20Student%20Sustainability%20Survey.pdf>

Sustainability curriculum at Whitworth University. (n.d.). Retrieved October 8, 2007 from http://classes.nyu.edu/webapps/portal/frameset.jsp?url=/bin/common/course.pl?course_id=_373285_1

Sustainability Rubric (n.d.). Retrieved August 30, 2007 from : <http://www.rovers.net/~fcsu/Assessments/standard%203.9%20sustainability%20rubric.doc>

The Future Leader Survey. (2006/07). Retrieved October 13, 2007 from: <http://www.forumforthefuture.org.uk/node/865>

University of Victoria Sustainability Quiz (n.d.). Retrieved October 2, 2007 from <http://communications.uvic.ca/sustainability/quiz.php>

WIU Theme Survey. Rand, G.P. (personal communication, September 7, 2007).

For more information about the Outcomes and the Sustainability Task Force, please refer to their web site at: <http://www.myacpa.org/task%2Dforce/sustainability/>



OUTCOME #1

Student Outcomes:

Each student will be able to define sustainability

Dimensions of Outcomes (Competencies):

- Understand the definition of sustainability.
 - Understand how concepts of sustainability are connected to issues of social justice, the environment, and the economy.
 - Explore these concepts on local, national, and international levels.
 - Become aware that all ecosystems are degrading and where to go for information about this. (www.worldwatch.org)
 - Become aware that we are exceeding the carrying capacity of the planet, with the U.S. having 5% of the world's population and consuming 25% of the world's resources. If everyone lived like we do in the U.S., we would need 4.5 planets. (www.myfootprint.org)
-

Possible Developmental Experiences for Learning (Strategies):

Residence hall programs; FYE and orientation programs; campus speaker series; bulletin boards; service and service learning experiences; curricular and co-curricular collaborations (e.g. general education outcome and infusion throughout the disciplines — first year community reading book); town hall forums; study- and service-abroad experiences; film series; speaker series; media festivals; information in campus media outlets; office of multicultural affairs/diversity programming; curricular projects

Possible Assessment Strategies

Survey

Quiz

Questionnaire

One minute-assessment/reflection that focus on basic **content knowledge** around issues of sustainability

Note: This outcome focuses on students' knowledge of concepts related to sustainability. To also examine attitudes and behavior be sure to look at resource included with Outcome 2 (attitudes and values) and Outcome 3 (behaviors).

Understanding Concepts:

Scale: Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree

Based on what you learned [at this program, in this course, etc.] please indicate your level of agreement with the following statements:

- The alleviation of poverty is important to a healthy environment
- We are approaching the limit of the number of people the earth can support
- Humans have the right to modify the natural environment to suit their needs
- When humans interfere with nature it often produces disastrous consequences
- Human ingenuity will insure that we do NOT make the earth unlivable
- Humans are severely abusing the environment
- The earth has plenty of natural resources if we just learn how to develop them
- Plants and animals have as much right as humans to exist
- The balance of nature is strong enough to cope with the impacts of modern industrial nations
- Despite our special abilities humans are still subject to the laws of nature
- The so-called “ecological crisis” facing humankind has been greatly exaggerated
- The earth is like a spaceship with very limited room and resources
- Humans were meant to rule over the rest of nature
- The balance of nature of very delicate and easily upset
- Humans will eventually learn enough about how nature works to be able to control it
- If things continue on their present course, we will soon experience a major ecological catastrophe
- Human activity is the primary cause of climate change
- Climate change will affect me in my lifetime
- Climate change can be slowed down
- Which of the following is not a renewable energy source?
 - o Geothermal
 - o Fossil fuels
 - o Solar
 - o Hydroelectric
 - o Wind
- Which of the following is the greatest source of landfill material in the U.S?
 - o Disposable diapers
 - o Lawn and garden clippings
 - o Paper products
 - o Glass and plastic
 - o Aluminum and steel

- What is the most common cause of pollution of streams, rivers and oceans?
 - o Dumping of garbage by cities
 - o Trash washed into the ocean from beaches
 - o Waste from factories
 - o Treated sewage from homes and other buildings
 - o Surface water running off yards, city streets, paved lots and farm fields
- What do you think is the main cause of global climate change, that is, the warming of the planet earth?
 - o A recent increase in oxygen in the atmosphere
 - o Sunlight radiating more strongly through a hole in the upper ozone layer
 - o More carbon emissions from autos, homes and industry
 - o Natural causes (e.g. increased activity from volcanoes or natural Earth cycles)
 - o You don't believe there is global climate change
- The EPA is:
 - o Governmental agency
 - o Industry trade association
 - o Citizen action group
 - o Private company
 - o International organization
- Which of the following uses the least amount of water?
 - o Washing a standard load of laundry in a regular, top-load washer
 - o Taking a 10 minute shower with a regular flow shower head
 - o Washing a standard load of dishes by hand with a full sink of water
 - o Washing a standard load of dishes in a regular dish washer
 - o Running a standard lawn sprinkler for 30 minutes
- Many lawn fertilizers and dishwashing detergents contain phosphorous which can be damaging to the environment. Which of the following is the major environmental impact of phosphorous?
 - o It is poisonous to fish and other aquatic life
 - o It has an unpleasant smell
 - o It promotes excessive plant and algae growth in lakes and rivers
 - o It pollutes groundwater
 - o It decreases the reproductive success of aquatic animals
- The purpose of the 1997 Kyoto Conference was to:
 - o Reduce over-fishing
 - o Protect rainforests
 - o Protect atmospheric ozone
 - o Reduce acid rain
 - o Control greenhouse gas emissions
- What is one of the main benefits of Wetlands (marshes, swamps, etc.)?
 - o They help to control global climate change
 - o They help filter and store water before it enters lakes, streams, rivers or oceans
 - o They prevent the spread of undesirable plants and animals
 - o They provide good sites for landfills
 - o They help reduce ozone depletion

- Which of the following power sources for automobiles releases the least amount of carbon dioxide (CO₂)?
 - o Gasoline
 - o Diesel
 - o Ethanol E-85 (15% gasoline)
 - o Hybrid Gas-Electric
 - o Hydrogen made from petroleum
- Which of the following most closely defines “organic” foods?
 - o Foods that are grown locally
 - o Non-synthetic foods
 - o Foods that are grown without using fertilizers of any kind
 - o Foods that have no harmful effects
 - o Foods that are grown without using chemical pesticides
- Which of the following best describes Biodiversity?
 - o A law passed to protect the rights of animals and plants
 - o Any ecosystem on Earth
 - o Total number of living organisms in any given area
 - o The variety of species found in a given area
 - o The study of plant and animal taxonomy (structure)
- Which of the following makes compact fluorescent light bulbs environmentally friendly light bulbs?
 - o They do not contain mercury
 - o They are 100% recyclable
 - o They are highly energy efficient
 - o They don't affect the navigation patterns of birds and insects
 - o They are made of recycled glass
- The global population is approximately:
 - o 300 million
 - o 500 million
 - o 3 billion
 - o 6 billion
 - o 9 billion
- Which one of these is the biggest contributor to climate change in the U.S.?
 - o Production of electricity
 - o Vehicle emissions
 - o Nuclear power plants
 - o Deforestation
- What is the ecological footprint of a U.S. resident? (correct answer: C)
 - o 2 acres
 - o 10 acres
 - o 24 acres
 - o 200 acres

- How many acres of ecologically productive land are available for the planet's current population of six billion people? (correct answer: A)
 - o 5 acres/person
 - o 15 acres/person
 - o 50 acres/person
 - o 150 acres/person
- Which of the following is correct?
 - o Population growth increases the pressure on the environment
 - o Increase wealth correlates with increased consumption and increased waste
 - o Technological innovation has multiplied the impact of affluence on the environment
 - o Technological innovation can reduce the environmental impact of affluence
 - o All of the above
- Companies leading the way to become more sustainable engage in:
 - o Eco-efficiency
 - o Research and development for "green" technologies and products
 - o Stakeholder engagement
 - o Going carbon neutral
 - o Any of the above
- On average, how much solid waste, per day, did American residents produce in 2009? (correct answer: B)
 - o 5 ounces
 - o 5 pounds
 - o 15 pounds
 - o 50 pounds
- On average, what percentage of electricity was derived from renewable energy sources in 2009? (correct answer: B)
 - o 6%
 - o 13%
 - o 25%
 - o 60%
- In your opinion, to what extent is [insert thread] an integral part of sustainability? (Very much, Considerably, Moderately, Slightly, Not at all)
- [Insert thread] is a term we hear a lot about lately. What does [insert thread] mean to you?
- What is the difference between economic growth and development?
 - o Growth is an increase in the amount of resources put through a system; development is increased efficiency in extracting value from resources
 - o There is no difference
 - o Growth is an increase in the amount of goods available to a population; development is an improvement in the cultural life of a community

Institution-Specific Questions:

- During my time at [insert institution's name] I have:

Scale: Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree

- o Increased my awareness [or knowledge] about [insert thread] issues
- o Increased my awareness [or knowledge] of issues such as [insert appropriate issue, repeat as necessary]
- What was the dominant form of landscape in [insert your state] prior to the 18th century?
 - o Wetland
 - o Prairie
 - o Coniferous Woodland
 - o Deciduous woodland
 - o Glacial
- What is the per capita ecological footprint of [insert institution's name]?
- How much solid waste, per day, did [insert institution's name] students, faculty and staff produce in [include year]?
- How much campus waste was recycled at [insert institution's name] in [insert year]?
- At [insert institution's name], what percentage of electricity was derived from renewable energy sources?
- Which creek has its headwaters on the [insert institution's name] Campus?
- How many liters of potable water does [insert institution's name] save each year by recycling aquatic facility water through the toilets and urinals of the medical science and engineering/ computer science buildings?



OUTCOME #2

Student Outcomes:

Each student will be able to explain how sustainability relates to their lives and their values, and how their actions impact issues of sustainability.

Dimensions of Outcomes (Competencies):

- Self-reflect on values and habits.
 - Identify personal values and understand these values within the context of a larger society.
 - Understand how personal choices and habits can affect sustainability.
 - Understand implications for economic growth and equity. (Foster responsible long-term growth while ensuring that no nation or community is left behind.)
 - Gain knowledge of the effects of individual level, community level, national level and international level choices on ecosystems and human suffering.
-

Possible Developmental Experiences for Learning (Strategies):

Residence hall programs; orientation and FYE activities; one-on-one conversations with student affairs staff members; service and service learning experiences; programs sponsored by campus faith-based organizations and offices; curricular projects.

Possible Assessment Strategies

Survey

Quiz

Questionnaire

One minute-assessment/reflection

that focus on attitudes and values.

Note: This outcome focuses on learning that affects students' attitudes and values. If you are interested in combining questions about students' content knowledge/understanding of sustainability concepts, see the resources under Outcome 1. If you are interested in combining questions in this area with assessing students' behavior, see the resources under Outcome 3.

Attitudes Around Concepts:

Scale: Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree

- We are approaching the limit of the number of people the earth can support.
- The balance of nature is very delicate and easily upset.
- Humans have the right to modify the natural environment.
- Humankind was created to rule over the rest of nature.
- When humans interfere with nature it often produces disastrous consequences.
- Plants and animals exist primarily to be used by humans.
- To maintain a healthy economy we will have to develop a “steady state” economy where industrial growth is controlled.
- Humans must live in harmony with nature in order to survive.
- The earth is like a spaceship with only limited room and resources.
- Humans need not adapt to the natural environment because they can remake it to suit their needs.
- There are limits to growth beyond which our industrialized society cannot expand.
- Mankind is severely abusing the environment.
- Human ingenuity will insure that we do NOT make the earth unlivable.
- Humans are severely abusing the environment.
- The earth has plenty of natural resources if we just learn how to develop them.
- The balance of nature is strong enough to cope with the impacts of modern industrial nations.
- Despite our special abilities humans are still subject to the laws of nature.
- The so-called “ecological crisis” facing humankind has been greatly exaggerated.
- Humans will eventually learn enough about how nature works to be able to control it.
- If things continue on their present course, we will soon experience a major ecological catastrophe.
- All commercial packaging materials and containers should be recyclable or reusable
- If a person’s car makes too much air pollution, he or she should not be allowed to drive it
- Solving environmental problems is hampered by selfishness on the part of individuals
- People should be willing to make economic sacrifices for a better environment
- Humans have an ethical obligation to protect the environment
- Protecting the environment is so important that environmental protection requirements and standards must be enacted regardless of cost
- Large financial penalties should be assessed from any company that discharges pollutants into the environment
- Strict laws and guidelines should be developed and enforced for discharging pollutants into the environment
- People should have a responsibility not to purchase or use products that are known to be detrimental to the environment

- Humans have moral duties and obligations to other animal species.
- Humans have moral duties and obligations to plants and trees.
- Humans have moral duties and obligations to the non-living components of nature (e.g., rocks).
- [insert thread] is an integral part of sustainability
- The alleviation of poverty is important to a healthy environment
- Whose responsibility is it to create change most urgently?
 - o Government
 - o Individuals
 - o Business
 - o Media
 - o Education System
 - o Celebrities Campaigning
 - o Charities
- How much are they doing?
 - o A lot
 - o A little
 - o Very little
 - o Nothing
 - o Don't Know
- To what degree are [insert thread] considerations important when making decisions about your life? Scale: Very Important, Moderately Important, Slightly important, Not at all important
 - o Car purchase
 - o Voting
 - o Career decisions

Personal Attitudes:

- To what extent do you feel your career choices will be influenced by your concerns of [insert thread] issues?
 - o A great deal
 - o Considerably
 - o Moderately
 - o Slightly
 - o Not at all
- Which would best explain your personal motivation for becoming involved in sustainability type behaviors?
 - o That you genuinely believe it will make the world a better place
 - o That it is personally or spiritually rewarding
 - o That you are told or expected
 - o For personal economic benefit
 - o Something else
 - o None

Scale: Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree

- I believe it is my responsibility or duty to help preserve and protect the environment.
- I believe it is morally wrong for me to cause or aid in pollution.
- I believe that there are a lot of pollution problems I can help stop.
- I talk to other people about how they can contribute to solutions for [insert thread].
- I try to convince other people to behave in a way that is better for [insert thread] issues.
- I comment if other people behave in a way that is [insert thread] unfriendly.
- I don't care what other people think about me when they find out what my views about the [insert thread] issues are
- I have not always been honest with myself about my attitudes towards [insert thread] issues
- I always know why I like the things I do about [insert thread] issues
- Once I've made up my mind about an [insert thread], other people can sometimes change my opinion
- I never regret my decisions about [insert thread] issues
- I am completely rational concerning my views about [insert thread] issues
- I rarely appreciate criticism concerning my views about [insert thread] issues
- I am very confident about the correctness of my judgments about [insert thread] issues
- I do mind if some people happen to dislike me because of my views about [insert thread] issues
- I don't always know the reasons why I feel the way I do about [insert thread] issues
- I sometimes tell lies to other people about my attitudes on [insert thread] issues if I have to
- I do not gossip about other people's views about [insert thread] issues
- I sometimes feel resentful when I don't get my way in a discussion about [insert thread] issues
- No matter who I am talking to about [insert thread] issues, I am always a good listener
- I always try to practice what I preach about [insert thread] issues
- When I don't know something about an [insert thread] issue, I don't mind admitting it
- At times I have really insisted on having things my own way in discussions about [insert thread] issues
- I have been upset when people expressed ideas about the [insert thread] issues which were very different from my own ideas
- I rarely form an opinion about an [insert thread] issue until I have thought about the issue thoroughly
- I have sometimes deliberately said something to hurt the feelings of someone who disagreed with me about an [insert thread] issue.
- I feel guilty when I leave the lights on when I'm not using them.
- I feel guilty when I throw something away instead of recycling it.
- I feel guilty when I drive my vehicle instead of taking public transportation when it is available.
- I feel guilty that I don't do more to find solutions to [insert thread] issues

- I feel guilty if I know I have left water running when I'm not using it
- It is my responsibility or duty to help preserve and protect the environment.
- It is morally wrong for me to cause or aid in pollution.
- Which of the following would significantly increase the likelihood of your recycling rather than throwing things away: (check all that apply)
 - o More educational materials explaining what can and can't be recycled
 - o Recycling bins at every trash can
 - o More education about the economic and environmental benefits of recycling
 - o More bins at existing recycling stations so that bins do not overflow
 - o Reassurance that materials in bins genuinely get recycled when they're taken away
 - o Other (please specify):
- Which of the following would be helpful in encouraging you to conserve water: (check all that apply)
 - o A water meter that showed you how much water you are using
 - o A sign or visible reminder in the bathroom and kitchen about water conservation
 - o Education about the reasons for and impact of conserving water
 - o Other (please specify):
- To what extent would the following factors motivate you to do something about climate change. (Scale: A great deal, Considerably, Moderately, Slightly, Not at all)
 - o Clearer understanding of the problem
 - o Desire to protect the earth for future generations
 - o Inner reward that comes from knowing you're doing the right thing
 - o Knowledge of specific actions you can take to solve [insert thread] issues
 - o Knowing my friends are concerned about climate change
- Why do you reduce your energy use? (Place a 1 by your top choice and a 2 by your second choice.)
 - o Save money
 - o Reduce [U.S./Country] dependence on foreign energy sources
 - o Help slow climate change
 - o Concern for ecosystem
 - o Because it's important to friends or family
 - o Other (specify)
 - o I don't see any reason to reduce my energy use
- Which choices describe your attitude toward energy, water and waste reduction at [insert institution's name]:
 - o I pay a lot of money to [insert institution's name] (or for my utilities if off campus) and I'm entitled to use everything I want to, when I want to.
 - o I will participate in conservation only if I will receive a prize or reward
 - o I will participate in conservation/sustainable practices only if I can identify the benefits I'm receiving, in terms of health, lower costs or improved efficiency
 - o I support conservation/sustainable practices and will conserve as long as my comfort and convenience are not jeopardized
 - o I'm willing to make an extra effort to prioritize conservation/sustainable practices

- Please choose the response that best matches each of the following statements:
Scale: Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree
 - o I am concerned about [insert thread] issues
 - o I feel responsible for the future condition of the [insert thread]
 - o I am concerned about the [insert thread] risks that may affect the long-term health of society today
 - o No matter what the cost, we must increase our energy efficiency and our use of renewable energy options
- Sustainability is a term we hear a lot about lately. What does sustainability mean to you?
- What prevents you from prioritizing sustainable choices in your daily life?
 - o I feel that I prioritize as much as I can already
 - o I'd like to, but don't have the time
 - o I'd like to, but I haven't made it a part of my routine so I sometimes forget
 - o I'd like to, but I can't always afford the cost of sustainable choices
 - o I don't have enough knowledge
 - o These issues are not important to me
 - o Other (Please Specify):
- Which reason to recycle is most important to you?
 - o Reduces resource and energy use
 - o Saves the University money
 - o It's the right thing to do
 - o Avoids filling up landfills
 - o Economic benefits from job creation
 - o Recycling is not important to me
 - o Other (Please specify):
- There are a number of citizen's groups in our nation focusing on solutions to [insert thread] issues. Do you think of yourself as... (Check one.)
 - o A very active participant in it
 - o A somewhat active participant in it
 - o Supportive of the movement, but not active in it
 - o Neutral toward the movement
 - o Opposed to the movement
 - o Unsure
- To what extent are the following issues important to you:
Scale: Very important, Moderately important, Slightly important, Not at all important
 - o Foreign Relations (e.g., the war in Iraq and trade with China)
 - o Economic Issues (e.g., the cost of living and availability of jobs)
 - o Environmental Issues (e.g., air/water pollution and global warming)
 - o Social Justice Issues (e.g., equal opportunity and free speech rights)
 - o Moral Issues (e.g., abortion and gay marriage)
 - o National Security (e.g., threat of terrorism or natural disasters in the U.S.)

Institution-Specific Questions:

- Do you think it is important for [insert institution's name] to become 'greener'?
 - Why or why not?
- Scale: Strongly Agree, Agree, neither agree nor disagree, Disagree, Strongly Disagree*



OUTCOME #3

Student Outcomes:

Each student will be able to utilize their knowledge of sustainability to change their daily habits and consumer mentality.

Dimensions of Outcomes (Competencies):

- Demonstrate an understanding of the power to choose responsibility to self and/or responsibility to society.
 - Demonstrate an understanding of how your behavior affects others.
 - Understand concepts of social development. (Throughout the world, people need economic resources, food, education, energy, health care, water and sanitation).
 - Learn how to maintain healthy ecosystems so humans and other species can continue to live on the planet.
 - Understand concepts related to:
 - Lighting
 - Water and other energy consumption
 - Renewable energy
 - Sustainable products consumption
 - Purchasing practices
 - Recycling
 - Transportation decisions
 - Energy Star, and “Leadership in Energy and Environmental Design” (LEED) standards
 - Fair Trade
 - Social Justice Issues
-

Possible Developmental Experiences for Learning (Strategies):

Residence hall and other educational programs; FYE and orientation programs; signage on existing energy efficient/renewable energies buildings/operations; academic projects; campus-wide speakers; bulletin boards; film and speaker series; Residence hall, student organization, fraternity and sorority, and intramural/club sports competitions; personal contracts; community (floor) agreements; health & safety checks with resident feedback; campaign by campus transportation units; sweatshop free bookstores and purchasing policies catalyzed by students; FYE; curricular and capstone projects.

Possible Assessment Strategies

Behavior surveys and questionnaires, journals, time logs, behavior tracking

Personal Behaviors or Actions:

Scale: *Yes, No*

- Do you recycle paper in your office/dorm room/etc.?
- Did you eat locally produced food today?
- Do you turn off your computer and lights at night?
- There are a number of citizen's groups in our nation focusing on solutions to [insert thread] issues. Do you think of yourself as... (Check one.)
 - o A very active participant in it
 - o A somewhat active participant in it
 - o Supportive of the movement, but not active in it
 - o Neutral toward the movement
 - o Opposed to the movement
 - o Unsure
- Within the past year, about how often have you done each of the following? (Select one response for each.)

Scale: *Often, sometimes, rarely, never, not sure*

- o Purchased a product because it was packaged in reusable or recyclable containers.
- o Avoided buying from a company which showed disregard for [insert thread].
- o Picked up litter or trash.
- o Recycled glass bottles or jars or aluminum cans.
- o Tried to use less energy.
- o Made an effort to turn off lights when you were the last to leave a room.
- o Made an effort to use less water when brushing your teeth or bathing.
- o Contacted your elected officials expressing your opinions on [insert thread] issues.
- o Supported or voted for "pro" [insert thread] laws, regulations or programs.
- o Enrolled in a course for the sole purpose of learning more about [insert thread] issues.
- o Chose to read publications that focus on [insert thread] issues.
- o Talked to others about [insert thread] issues.
- o Encouraged people involved in some kind of destructive [insert thread] behavior to stop that activity.
- o Encouraged others to take an action on behalf of [insert thread].
- How willing are you to do more on behalf of [insert thread]? (Check one.)
 - o Very willing
 - o Considerably willing
 - o Moderately willing
 - o Slightly willing
 - o Not at all willing
 - o Unsure

- How much do each of the following reasons stop you from doing more on behalf of [insert thread] issues?

Scale: major reason, minor reason, not a reason

- o I need more information on what to do
- o I'm too busy
- o It's too expensive to buy environmentally responsible products
- o I do not feel capable of doing much on behalf of the environment
- o I do not feel comfortable discussing environmental issues with others
- o I cannot afford to donate money to environmental causes
- o I don't think such activities will make much of a difference
- o Companies and the government, not people like me, should solve environmental problems
- o Not enough people are making sacrifices and I can't solve the problem alone

Scale: strongly agree, agree, neither agree nor disagree, disagree, strongly agree

- I have taken part in a demonstration against the felling of forests.
- I have collected signatures for the protection of endangered species.
- I have taken action on behalf of an organization focused on solutions to [insert thread] issues.
- I am a member of a club or organization that focuses on [insert thread] issues.
- I have written something in the school newspaper about [insert thread] issues.
- Which of the following statements reflect your behavior in relation to [insert thread] issues?
 - o I talk to other people about how they can contribute to [insert thread] solutions
 - o I try to convince other people to behave in a way that is better for [insert thread] issues
 - o I comment if other people behave in a way that is [insert thread] unfriendly
 - o I feel it is not my business to talk to others about [insert thread] issues
- What have you already done to reduce your carbon impact? (Check all that apply)
 - o Change light bulbs to CFLs.
 - o Buy products with less packaging.
 - o Recycle paper, glass, and plastic.
 - o Carpool or take public transportation.
 - o Instituted a recycling program at my school or business.
 - o None of the above
 - o Other (please specify)
- How often do you eat animal based products? (beef, pork, chicken, fish, eggs, dairy products)

Scale: Often, Sometimes, Rarely, Never, Not sure

- How much of the food that you eat is processed, packaged?
 - o Most of it
 - o Three quarters
 - o Half
 - o One quarter
 - o Very little

- How much food that you eat is locally grown?
 - o Most of it
 - o Three quarters
 - o Half
 - o One quarter
 - o Very little
- Compared to people in your community, how much waste do you generate?
 - o Much less
 - o About the same
 - o Much more
- To what extent does your knowledge and feelings around sustainability issues influence each influence your decisions around the following items:

Scale: A great deal, Considerably, Moderately, Slightly, Not at all

- o How much I use public transportation each week
- o How often I use a car or motorcycle each week
- o How far I travel in a car or motorcycle each week
- o How often I use a bike, walk or use another form of manual transportation each week
- o How often I fly each year

- How often do you engage in the following behaviors?

Scale: Often, Sometimes, Rarely, Never, Not sure

- o Switch appliances off rather than leaving them on standby
- o Switch lights off when you leave the room
- o Use energy efficient light bulbs
- o Switch the radiator off before opening the window
- o Reuse shopping bags (plastic or cloth)

- How often do you buy?

Scale: Often, Sometimes, Rarely, Never, Not sure

- o Fairtrade products
- o Organic products
- o Durable products
- o Recycled products
- o Recyclable products
- o Low packaging products

- How much would you be willing to pay for the following good quality second hand goods?

Scale: half the original price; quarter original price; nothing, but I would accept them for free; nothing, I do not want second hand goods

- o Electrical goods
- o Clothes
- o Cutlery

Scale: Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree

- I have signed a petition in support of tougher environmental protection laws
- I have contributed money to a drive to strengthen the laws against pollution
- I have campaigned for a candidate who would support tougher [insert thread] laws
- I have taken a job with a company I knew produced (environmentally harmful or socially unjust) products
- I have voted for higher taxes in order to provide more funding for [insert thread] protection
- I have taken part in a boycott of the products of a company that I knew was evading the environmental protection laws
- I have bought products such as toilet paper, paper towels and tissue paper specifically because they were made from recycled paper
- I have spent a whole morning or afternoon picking up litter on campus
- I have taken a job with a company I knew produced hazardous wastes
- I have signed a petition to increase fees at [insert institution's name] in order to build more environmentally friendly buildings and power sources
- I have landscaped with plants native to [insert state or location name], even if they are less attractive than non-native species
- I have displayed a bumper sticker or clothing accessory supporting a [insert thread] issue
- I have boycotted a product because of [insert thread] concern
- I have reduced the length of my showers in order to save water
- I have joined a protest or demonstration concerned with [insert thread] issues
- I have quite or not taken a job for reasons concerning [insert thread] issues
- I have driven my car as little as possible in order to save energy
- I have used a low-phosphate detergent (or soap) for my laundry
- I have purposefully purchased products packaged in reusable containers
- I have purposefully purchased products that can be recycled
- I have regularly recycled newspapers, glass, or other items
- I have tried very hard to reduce the amount of electricity I use
- If there were insects in my home I have used a chemical insecticide on them
- I have chosen an area or field of study because of its relationship to [insert thread] issues
- I [will choose] a job or career because of its relationship to [insert thread] issues
- I have purposefully purchased products made with recycled paper such as notebooks, paper towels, etc.
- I have contributed time or money to an organization focusing on [insert thread] issues
- I have purposefully purchased some type of product because it address issues of [insert thread]
- I have contacted a government agency to get information about [insert thread] issues

- I have regularly recycled when I'm on campus.
- I have read a book or magazine related to [insert thread] issues
- I have watched a television special or movie related to [insert thread] issues
- I have regularly taken public transportation, walked or ridden a bike rather than drove a vehicle when it is available in order to address environmental issues.
- I have voted for or against a political candidate because of his or her position on [insert thread] issues
- I have purchased recycled products.
- I turn off my computer or monitor when I'm done using it for the day.
- Other people who live with me show concern about [insert thread] issues.
- My friends make fun of people who go out of their way to address [insert thread] issues
- My friends and I talk about [insert thread] issues.
- My parents/care-takers encouraged me to recycle when I was growing up.
- People who are important to me encourage me to save energy (electricity, gas, etc.).

Institution-Specific Questions:

- During my time at [insert institution's name] I have:

Scale: *Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree*

- o Been involved in clubs/organizations that focus on [insert thread] issues
- o Taken a class or had conversations in class with faculty members about [insert thread] issues
- o Had conversations outside of class with faculty, staff or friends about [insert thread here]
- o Attended on-campus programs/events related to [insert thread]
- o Attended off-campus programs/events related to [insert thread]
- o Increased my awareness about oppression
- o Other (please specify):



OUTCOME #4

Student Outcomes:

Each student will be able to explain how systems are interrelated.

Dimensions of Outcomes (Competencies):

- Demonstrate an awareness of the power of an individual in society.
 - Gain knowledge of our interdependence with other humans and the life supporting ecosystems.
 - Gain knowledge of the types and extent of human suffering and how they related to each other, to the degradation of ecosystems and to our choices as individual and community members.
 - Gain knowledge of systems theory and the interrelated effects of economic policy and cultural norms on sustainable consumption and healthy ecosystems.
 - Understand power, cultural norms, the change process, and change agent strategies.
-

Possible Developmental Experiences for Learning (Strategies):

Development of educational modules on change agent skills to be distributed for use by educators; involvement in campus leadership positions; town hall forums; conference attendance; problem based learning in curricular and co-curricular settings; attendance at meetings where policy is discussed and decided upon: town and gown, city council, county council, Board of Trustees; participation in political campaigns; service and service learning experiences.

Possible Assessment Strategies

Written essays and reflections, oral reflections, focus groups, and interviews.

Note: Since this outcome is beginning to show more complex learning by asking students to relate various concepts and integrate them, more complex learning assessments are needed. Below are some ideas that can be developed at a campus level.

Note: Since this outcome is beginning to show more complex learning by asking students to relate various concepts and integrate them, more complex learning assessments are needed. Below are some ideas that can be developed at a campus level.

Personal Attitudes, Behavior or Action:

Scale: Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree

- Everyone should do what is right for the environment, even when it costs more money or takes more time
- There is not much one person can do to help the environment and stop pollution
- It is just too difficult for someone like me to do much about the environment
- I am aware of actions I can take every day to help the environment and I do the best I can to take those actions
- Couple taking an ecological Footprint with a written or oral reflection paper that asks students to reflect on their person behavior and how it interactions with various systems and their ecological impact (www.earthday.net/footprint/info.asp)

Ideas for Complex Learning Assessments:

- Debate issues and how they are related either through formal student debate structures or by asking students what they learned through hearing a debate between faculty, local politicians, etc.
- Conduct interdisciplinary research projects
- Assess oral presentations or programs created by students
- Conduct a document analysis of student writing (sources can be the student newspaper, literary magazines, essay assignments for a course, reflection papers from a retreat or community service experience, etc.)
- Collect one minute assessments. At the end of a program, target one outcome you had hoped the program would meet and ask students to take one minute to assess it. An example may be: "Please take one minute to explain how this program helped you relate economic policies with sustainable consumption"
- Report on sustainability-related items before purchasing/planning programs. This could be done through a form or in a narrative. Suggestions for questions include:
 - o What is the potential impact of this event on the environment?
 - o What steps have you taken to reduce that impact? (i.e. having recyclable products/ recycling bins, used natural light settings, reduce waste or water usage, etc.)
 - o What products are you purchasing for this event? Along with products please list the source, if you were able to purchase it locally. If not, why? And why did you choose a particular alternative? Also indicate if any of these items are being recycled either prior to purchasing or during your event.

- Create a rubric you can use to judge a student's behavior in various settings.
Here is an example:

<p>Outcome Gain knowledge of our interdependence with other humans and the life supporting ecosystems.</p>
<p>Base level (1) Defines and gives examples of ecosystems</p>
<p>Beginning (2) Identifies the individual parts of systems and explains how those parts work together to sustain their respective systems</p>
<p>Intermediate (3) Identifies internal and external influences (e.g. ecological, economic, social and political) on systems and the limits of those influences places on those systems</p>
<p>Advanced (4) Identifies interactions between systems and the limitations those interactions place on those systems</p>

MULTIPLE PERSPECTIVES

<p>Outcome How effectively does the student understand that an issue may be viewed from a variety of perspectives and reflect different values and contexts?</p>
<p>Base level (1) Position on sustainability issue or theme may be unclear or waver Does not mention other perspectives on an issue Does not acknowledge different cultural values presented in texts</p>
<p>Beginning (2) Maintains a clear position on a sustainability issue or theme that reflects some analysis and thinking Recognizes multiple perspectives on a sustainability issue Demonstrates a general understanding of different cultural values presented in texts</p>
<p>Intermediate (3) Maintains a consistent position on a sustainability issue or theme that reflects coherent analysis and critical thinking Acknowledges and discusses multiple perspectives on a sustainability issue Demonstrates an clear understanding of different cultural values and varied world views presented in texts</p>
<p>Advanced (4) Maintains a convincing position on a sustainability issue or theme that reflects nuanced analysis and critical thinking Analyzes and makes connections among multiple perspectives on a sustainability issue Demonstrates a critical understanding of different cultural values and the complexities of world views presented in texts</p>



OUTCOME #5

Student Outcomes:

Each student will learn change agent skills.

Dimensions of Outcomes (Competencies):

- Understands the change process.
 - Is able to assess the political and cultural climates pertinent to change.
 - Has the ability to generate support for change through strong communication skills, consensus building strategies, and with openness to the ideas and struggles of others.
 - Can articulate clear, strategic, and practical course for change.
 - Knows how to challenge the status quo to achieve transformative change.
-

Possible Developmental Experiences for Learning (Strategies):

Development of educational modules on change agent skills to be distributed for use by educators; involvement in campus leadership positions; town hall forums; conference attendance; problem based learning in curricular and co-curricular settings; attendance at meetings where policy is discussed and decided upon: town and gown, city council, county council, Board of Trustees; participation in political campaigns; service and service learning experiences; etc.

Possible Assessment Strategies

Rubrics, portfolios, debates, research papers, conference presentations, written and oral reflections

Personal Attitudes, Behavior or Action:

Note: Asking students to take a pledge is one way you can encourage change agent skills. However, at this level it is important to not only know if they are taking the pledge, but to follow-up to see if they are actually taking action on their pledge. A model where you ask students to decide on a behavior, and then follow up with them a given time later (either through weekly meetings or, if it is a one-shot program, following up with a survey a few weeks or months later) is recommended. Below is an example of a pledge students could take.

- Use a pledge such as this one and adapt it to meet the goals of your program. Then follow-up with students via a survey or focus group or have them write a reflection paper on the extent to which they accomplished their pledge:
 - o I will change four light bulbs to CFLs at my home
 - o I will shop for the most energy efficient electronics and appliances
 - o I will shut off my equipment and lights whenever I'm not using them
 - o I will ride public transportation, walk or carpool one or more times per week
 - o I will forward a sustainable email message to 5 friends (or put a sustainable tip as my email signature)
 - o I commit to the [insert institution's name] pledge

Ideas for Complex Learning Assessments:

- Conduct a document analysis of business plans or budget proposals for clubs and organizations that include sustainable action plans
- Observe the process of writing sustainable goals into strategic plans and constitutions for campus organizations
- Write reflection papers or conduct focus groups after engaging in community service activities around sustainable issues both locally and abroad, follow-up a few weeks/months later to see what other actions students have taken after their experience. Use a rubric tool to gather consistent data.
- Observe or conduct interviews or focus groups with student leaders who are organizing campus initiatives around sustainability
- Create a sustainable action portfolio either with individual student leaders or as campus organizations
- Conduct an analysis to see what sustainable related activities are on student resumes or entered in electronic portfolio systems (if your campus has one)
- Write a philosophy or action statement related to sustainability goals for the next year
- Set goals with individual students (i.e. in a course or program) and follow up to see if they are met
- Establish a "Change Agent" rubric that could be used with student leaders throughout campus. An example may be:

<p>Outcome Can articulate clear, strategic, and practical course for change</p>
<p>Base level (1) Has determined action to take but does not have goal, plan or has not assessed the climate</p>
<p>Beginning (2) Can articulate a preliminary plan but has not thought through logistics or climate</p>
<p>Intermediate (3) Has assessed social and political climate to determine a plan that has a clear timeline, set steps to take, and a practical goal</p>
<p>Advanced (4) Follows through on action steps in given timeline and reaches goal</p>

<p>Outcome Social change process</p>
<p>Base level (1) Unclear thinking about factors necessary to produce social change</p>
<p>Beginning (2) Understands some factors important to produce social change</p>
<p>Intermediate (3) Some overview and developed thinking about social change process</p>
<p>Advanced (4) Complex thinking and reasoning about social change process</p>

<p>Outcome Potential for leadership in sustainability</p>
<p>Base level (1) Little or no reflection on leadership possibilities</p>
<p>Beginning (2) Some evidence of leadership potential, not well articulated</p>
<p>Intermediate (3) Some definition of vision and explanation of leadership in sustainability issues</p>
<p>Advanced (4) Clearly articulated vision and explanation of leadership in sustainability issues</p>



OUTCOME #6

Student Outcomes:

Each student will learn how to apply concepts of sustainability to their campus and community by engaging in the challenges and solutions of sustainability on their campus.

Dimensions of Outcomes (Competencies):

- Demonstrate the ability to take action on issues.
 - Apply effective change agent skills and implement them to achieve sustainable development.
-

Possible Developmental Experiences for Learning (Strategies):

Modify the institution's and student organizations' practices, mission statements, and constitutions; utilize student governance structures to request compliance with LEED and other sustainability standards; awareness raising campaigns; letter writing campaign and implementation project for sustainable practices in dining services unit on campus; work with campus facilities/grounds units to assess current practices; work with facilities and business office to create more sustainable operations and standards; organization of community recycling and reduced toxins program; environmental impact statements from Residence Hall Governments and campus student governance groups; "Walk Don't Ride," "Do It in the Dark" campaigns; collaboration with campus transportation units; Facebook groups; problem based learning (PBL) activities in curricular and co-curricular settings; curricular "change" projects; utilize campus media to carry message.

Possible Assessment Strategies

Portfolios, debates, facilitating training (and facilitator evaluations), rubrics, research papers, conference presentations, written and oral reflections, writing for local news papers and other publications.

Ideas for Complex Learning Assessments:

- Adapt previous questions to be used as pre-test/post-tests to measure this more advanced outcome.
- Conduct document analysis of student organization constitutions
- Sustainability Curriculum at Whitworth University
<http://www.whitworth.edu/GeneralInformation/Sustainability/Research.htm>
 Outcome attained through manifestation of the following description:
 “The process of education will emphasize active, inquiry-based learning and real-world problem solving on the campus and in the larger community. For example, as part of the curriculum, the learning experience for students would include working on actual, real-world problems facing their campus, community, government and industry. The process would also increase group work and learning so graduates will be able to collaborate effectively on complex problems as future managers and leaders.”
- SecondNature.org: Universities Modeling Sustainability as Fully Integrated System

Note: The following vision statement describes how the context, content, and process of learning are interrelated, and provides general examples of student learning outcomes within these domains. This may be used as a tool for modifying institution and student organization practices, mission statements, and constitutions.

- o “The context of learning would change to make the human/environment interdependence and values and ethics a central part of teaching.” A review of all student affairs training programs, documents and other processes could be conducted to determine if sustainability is being included and presented in an integrated fashion
- o “The process of education would emphasize active, experiential and collaborative learning and real-world problem solving on the campus and in the larger community.” Reflection on community service projects, training programs, etc. would require students to consider how sustainability is a component of the challenge or issue they were facing.
- o “Higher education would “practice what it preaches” and make sustainability an integral part of operations, purchasing and investments, and tie these efforts to the formal curriculum.” Conduct document reviews of past practices, create purchasing guidelines and integrate guidelines into staff and student purchasing processes, then review to see trends and changes.
- o “Forming partnerships with local and regional communities to help make them socially vibrant, economically secure and environmentally sustainable.” When they graduate, the students would be able to bring their knowledge, skills and values of sustainability to their future employment, consumption decisions, lifestyle choices, and to the improvement of communities in which they live. Assessments can be conducted with alumni to determine their post-graduation activities as well as conducting a review of current local partnerships in order to develop student experiences around sustainability; then ask students to review or reflect on that experience.



OUTCOME #7

Student Outcomes:

Each student will learn how to apply concepts of sustainability globally by engaging in the challenges and the solutions of sustainability in a world context.

Dimensions of Outcomes (Competencies):

- Demonstrate an obligation to civic engagement.
 - Work to ensure sustainable economies.
 - Work to ensure a healthy and flourishing environment.
 - Contribute to the creation and maintenance of inclusive communities on a local, national, and international level.
 - Work to ensure cultural and social diversity and social justice.
 - Work to ensure that the rights of workers are respected and that all members of society play a role in determining their futures.
-

Possible Developmental Experiences for Learning (Strategies):

Career services center programming and , counseling; residence hall programs; student organization activities; graduation pledges or FYE pledges (currently Graduation Pledge) that are implemented throughout the undergraduate experience; alumni activities; speaker and film series; service and service learning experiences

Possible Assessment Strategies

Same as above, also consider long-term practice of students through alumni pledges and surveys, focus groups with alum, interview with alum



Institutional Measures:

- [SecondNature.org: Universities Modeling Sustainability as Fully Integrated System](http://SecondNature.org)

Refer to model in a Town Hall Meeting, Exit Interview, Sustainability Forum, or as part of an essay question assessment. For example, How could [insert institution's name] realize a vision of sustainability? Consider the content, context and process of learning.

Personal Attitudes, Behavior or Action:

- I will change four light bulbs to CFLs at my home.
- I will shop for the most energy efficient electronics and appliances.
- I will shut off my equipment and lights whenever I'm not using them.
- I will ride public transit or carpool one or more times per week.
- I will forward a [Sustainability] email message to 5 friends.
- Add my name to the [Sustainability] pledge.

Note: A reminder that this is a more complex level. If you are asking students to "pledge" or state their future behavior, it is necessary to follow-up to see if they are actually fulfilling their pledge. These pledges could also be conducted with faculty, staff, alumni, etc.

To what degree are [insert thread] considerations important when making decisions about your life? |

Scale: Very Important, Moderately Important, Slightly important, Not at all important

- o Car purchase
- o Voting
- o Career decisions

Scale: Don't generally participate/aren't involved; Participate or are involved, but not regularly; Involved in on a regular basis

- Volunteer for community services (youth, elderly, disadvantaged, health-related or animals)
- Become actively involved in political campaigns or issues
- Read books or magazines or watch or listen to programs which focus on current issues
- Participate in rallies, fundraisers, or other activities or "causes" you believe in
- Organize rallies, fundraisers, or other activities for "causes" you believe in
- Join professional organizations relating to your career
- Consider how the purchases I make effect my local economy as well as a global economy
- Keep myself aware of global environmental issues
- Make an effort to purchase products that are fair trade
- Made a contribution to a charitable organization that is working domestically or abroad to support sustainable initiatives

- To what extent do you feel your career choices have been or will be influenced by your concerns of one or more of the issues we just discussed? (green energy, urban sprawl, population growth, dwindling natural resources)
 - o A great deal
 - o Considerably
 - o Moderately
 - o Slightly
 - o Not at all

- Use rubric tools that assess students' global perspectives and awareness:
Global Awareness Rubric

Appendix A

Institutional effectiveness or operational outcomes around sustainability are another piece to the sustainability assessment puzzle. Balancing these types of assessments with learning outcomes can create a larger picture of your sustainability efforts. While there are many different types of institutional measures, below are some examples created by the ACPA Sustainability Task Force.

Institutional measures:

- Percent of undergraduate and graduate programs that have incorporated sustainability concepts into their courses
- Percent of students exposed to sustainability related career planning resources (literature, counseling, events) prior to graduation
- Please indicate your [the student's] familiarity with the following [insert institution's name] environmental or sustainability-related groups, projects or programs: [list program]
- How many [insert institution's name] faculty members work within the field of climate change research?
- Sustainability curriculum: Percent of undergraduate and graduate academic programs that have incorporated sustainability concepts into (Some percentage of?) their courses
- Undergraduate sustainability literacy: Percent of undergraduate students who pass a sustainability literacy test (survey)
- Sustainable career planning opportunities: Percent of undergraduate students exposed to sustainability related career planning resources (literature, counseling, events) prior to graduation (survey, program attendance)
- Please consider each of the following recommendations for greening a campus. Indicate if you agree or disagree [insert institution's name] should:
 - o Reduce campus waste through increased recycling
 - o Maximize energy efficiency of new and existing buildings on campus
 - o Buy more local food for the <dining hall facility>
 - o Make modules on environmental issues available to all programs of study
 - o Establish a student environmental centre to promote green issues
 - o Develop a campus transportation plan to reduce the environmental impact of traveling to campus
- Which recommendation is the most important (i.e. should be done first)? (see question above)
- Which recommendation is the most practical (i.e. easiest to do)? _____
- Are there other recommendations you would support that are not on the list?

- Using the following scale, please rate the ease of recycling in the following types of campus buildings and spaces:

Scale: *Very difficult; Somewhat difficult but with extra effort you can do it; Easy, but you still need to make some effort; Extremely Easy*

- o Your Residence Hall (if on campus)
- o Classroom and Administration Buildings
- o Dining Facilities
- o Library
- o [student] Center
- o Outdoor areas at [insert institution's name]

Scale: *No answer, strongly disagree, disagree, neutral, agree, strongly agree*

- Is your campus seen as a leader in the field of sustainable development
- Does your campus have specific environmental or sustainable development policies?
- Does your campus have an Environmental Management System in place?
- Has your campus carried out any environmental audits?
- Has your campus sponsored staff development activities to increase environmental literacy at the instructor level?
- Are sustainable development issues being included in the curricula at your campus?
- To raise awareness of sustainable development issues, does your campus play an active role in organizing or supporting celebrations such as Earth Day?
- Has your campus signed one of the Declarations for Sustainable Development, such as the Copernicus Charter, the Talloires Charter, etc.?

Scale: *Interested (but not currently active), Engaged in (current actions or efforts), Identified as priority area (focus for municipal progress), Need to gain experience, knowledge, Have experience, knowledge to share*

- Green Purchasing (purchasing and using organic, recycled content and environmentally responsible goods or services)
- Brownfields (remediation and redevelopment of former industrial sites)
- Energy (renewable energies, energy efficiency, greenhouse gas reduction)
- Transportation (public transit, active transportation, campus fleet conversion, transportation demand management)
- Waste and Recycling (diversion from landfill, waste-to-energy conversion, hazardous waste disposal)
- Water (watershed management, conservation, wastewater treatment, water distribution upgrades, storm water runoff management)
- Planning (integration of sustainability principles into land-use planning and construction—e.g. green buildings or renovations)

- How much energy from renewable sources does your campus purchase or produce?
 - More than 50 percent
 - Between 1 and 50 percent
 - None

Scale: Yes, No

- Does your institution offer incentives for carpooling, bicycling, or using public transportation?
- Does your office use fluorescent lighting?
- Are you working in a building constructed with renewable materials?
- Is there fair-trade coffee available in your dining hall?
- Does your college guarantee that team and employee uniforms are not made in sweatshops?
- Does your institution have a committee overseeing socially responsible investing?
- Do campus dining facilities compost food waste?
- Does your university incorporate sustainability into its curriculum?
- Does your institution have a sustainability coordinator?
- Is your institution participating in Campus Sustainability Day on October 25?
- Percentage of graduates signing sustainability graduation pledge
- Track jobs of recent graduates through career services. What percentage has gone into professions that will effect environmental and/or social change?
- Conduct an alumni survey as a follow-up to the sustainability graduation pledge. What changes are alumni making in their communities? To what extent are they civically engaged?
- Track student participation in service learning, internships and volunteer opportunities locally and abroad that focus on sustainable issues.
- Sustainable career planning opportunities: Percent of undergraduate students exposed to sustainability related career planning resources (literature, counseling, events) prior to graduation (survey).
- Conduct an inventory of syllabi that include/emphasize active, inquiry-based learning and real-world problem solving on the campus and in the larger community. "For example, as part of the curriculum, the learning experience for students would include working on actual, real-world problems facing their campus, community, government and industry. The process would also increase group work and learning so graduates will be able to collaborate effectively on complex problems as future managers and leaders."

ABOUT ACPA—COLLEGE STUDENT EDUCATORS INTERNATIONAL

American College Personnel Association (ACPA), headquartered in Washington, D.C. at the National Center for Higher Education, is the leading comprehensive student affairs association that advances student affairs and engages students for a lifetime of learning and discovery.

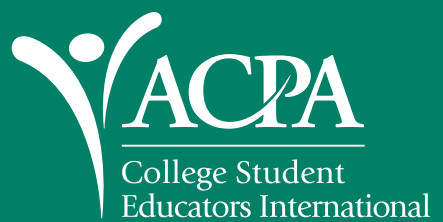
ACPA, founded in 1924 by May L. Cheney, has nearly 8,500 members representing 1,500 private and public institutions from across the U.S. and around the world. Members include organizations and companies that are engaged in the campus marketplace. Members also include graduate and undergraduate students enrolled in student affairs/higher education administration programs, faculty, and student affairs professionals, from entry level to senior student affairs officers.

VISION ACPA leads the student affairs profession and the higher education community in providing outreach, advocacy, research, and professional development to foster college student learning.

MISSION ACPA supports and fosters college student learning through the generation and dissemination of knowledge, which informs policies, practices and programs for student affairs professionals and the higher education community.

CORE VALUES: The mission of ACPA is founded upon and implements the following core values:

- Education and development of the total student.
- Diversity, multicultural competence and human dignity.
- Inclusiveness in and access to association-wide involvement and decision-making.
- Free and open exchange of ideas in a context of mutual respect.
- Advancement and dissemination of knowledge relevant to college students and their learning, and to the effectiveness of student affairs professionals and their institutions.
- Continuous professional development and personal growth of student affairs professionals.
- Outreach and advocacy on issues of concern to students, student affairs professionals and the higher education community, including affirmative action and other policy issues.



National Center for Education
One Dupont Circle, NW
Suite 300
Washington, DC 20036, USA

www.myacpa.org