# Environmental Literacy

AS Incidental Learning

#### INSTRUMENT & STATS

Reponses on Likert-type scale 1 Agree Strongly to 7 Disagree strongly	Pretest mean	Posttest mean	Т	Df	Sig.
The physical/biological sciences do an excellent job of informing environmental policy decisions	4.31	4.65	-1.122	25	.273
Within the legitimate scientific community there is much disagreement about the desirability of ethanol	2.88	2.31	1.754	25	.092
The United State is a world leader advancing responsible environmental policy.	4.00	5.30	-5.571	25	.000
Within the legitimate scientific community there is much disagreement about the existence of global warming	4.04	3.56	.862	24	.39
Within the legitimate scientific community there is much disagreement about the desirability of wind generated electricity	3.61	3.42	.506	25	.618
Coal burning power plants pose little threat to the environment	5.31	6.00	-2.675	25	.013
Nuclear power plants currently generate about 30% of the electricity in the US	3.81	3.04	2.757	25	.01
As a rule of thumb, the state government recommends that you NOT eat more that 8 ounces of fish from Kansas waters per week	4.28	3.32	2.680	24	.013
Global warming is a serious problem	2.00	2.32	-1.877	24	.073
The US emits less greenhouse gasses than China	4.00	4.92	-3.130	24	.00
Most environmentalists are extremists	4.76	4.92	485	24	.632
The United States is in as much danger from environmental hazards, such as air pollution and global warming, as it is from terrorists	3.16	2.96	.594	24	.55
I am comfortable describing myself as an environmentalist	4.63	4.08	1.965	23	.062
I am pessimistic about the state of the environment	4.00	3.21	2.402	23	.02
I expect the world's natural environment to be in worse shape in 10 years than it is now	2.72	2.72	.000	24	1.00
I approve of the way President Bush is handling environmental issues	5.36	5.80	-2.031	24	.05
Scientific studies are subject to much biasespecially is they are funding by corporate interests	2.58	1.63	3.922	23	.00
The attitudes of lay people should not direct environmental policy decisions	4.40	5.20	-2.164	24	.04

## ABSTRACT

Incidental learning is unplanned, perhaps unintentional. In senior-level public-relations-cases courses taught in the fall semesters of 2007 and 2008, students examined case studies and readings dealing with environmental issues. Out-of-class experiential learning activities and a cumulative-points grading system were also utilized. Incidental learning was measured using a self-designed, 18-item environmental literacy survey. Using a pre-post survey method, results show students' environmental knowledge and attitudes changed during the semester.

#### RESULTS

Statically significant changes were found for 9 out of 18 items on the pre-post environmental literacy instrument. For example, students were significantly more likely to disagree with the statement that the U.S. is a world leader advancing responsible environmental policy at the end of the semester and more likely to think lay people should be involved in environmental policy decision making. They were more likely to agree that scientific studies may be subject to bias and more likely to agree that coal-burning technologies pose threats to the environment. They were more likely to be pessimistic about the state of the environment now, but their assessment of the environment ten years from now remained unchanged. Such changes in attitudes were not overt course objectives but were incidental outcomes of the students' immersion into understanding environmental issues through public relations cases and their involvement in out-of-class experiential learning activities.

#### STUDENT FEEDBACK

Twenty-five students successfully completed the course in the fall semesters of 2007 and 2008. Positive student feedback included:

- "I feel like I have learned so much and it wasn't a chore learning like classes sometimes can be. This class has made me think about the environment and possibly working in a PR office specializing in this"
- "I had never thought of myself as an 'environmentalist,' but now I find myself paying attention to our countries [sic] energy problem etc. I also found that I have an interest in green design and sustainable design because of this class."
- "I especially liked ... grading procedures because it was easy to get an A if you put in the extra effort outside of class"

Not all feedback was positive. One student reported: "I felt like I took an Environment [sic] class, and I am a PR major. It was frustrating." And other noted that the "grading system was frustrating because it seemed hard to earn points."





### COURSE METHODS AND OBJECTIVES

Several specific course methods were incorporated including:

- Environmental case studies and readings were employed
- All assignments (whether in-class or experiential) were either graded as acceptable or unacceptable
- Acceptable assignments were awarded points that accumulated to pre-set cutoffs for letter grades
- In-class points were awarded for outlines of reading assignments, participation in in-class content review sessions, in-class quizzes, take-home assignments, and oral presentations of book reviews
- Experiential points were awarded for out-of-class learning experiences when students presented 250-word write-ups of activities including attendance at community functions such as a Department of Homeland Security scoping meeting, field trips, and student-proposed experiential learning activities such as conducting interviews

#### Course objectives were:

- 1. To explore the interaction between publics, media, and motivated communicators along with the resultant effects on public policy formulation and human behavior
- 2. To explore public relations theories gaining a better understanding of the analysis of public perceptions, attitudes, and behaviors and how theories can be applied to "real world" cases and problems
- 3. To gain experience and improve ability to analyze controversial public relations problems
- 4. To understand the application and importance of ethics in analyzing cases and problems in public relations
- 5. To understand concepts of environmental justice and inequitable distribution of risks
- 6. To be able to thoughtfully describe the environmental issues pertinent to Kansans
- 7. To understand how different ways of knowing and different worldviews influence people's perceptions of their relationship to nature and the environment
- 8. To assess critically various kinds of local or traditional knowledge and their relationship to expert knowledge
- 9. To be able to prescribe public relations principles and approaches to problems and opportunities which occur in a variety situations including environmental controversies
- To gain understanding from professionals, environmentalists, other guest speakers and field experiences

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