Assessing the State of Sustainability Education: A Case Study of Faculty Efforts at the University of Nevada, Reno

Jennifer Huntleysmith Academy for the Environment Donica Mensing School of Journalism Hans-Peter Plag Nevada Bureau of Mines and Geology John Sagebiel Environmental Health and Safety University of Nevada, Reno



University of Nevada, Rend Statewide • Worldwide

Assessing the State of Sustainability Education: A Case Study of Faculty Efforts at the University of Nevada, Reno

- UNR's Sustainability Committee
- The Working Group on Curriculum
- Survey of Undergraduate Teaching
- Main Survey Results
- Key Points and Conclusions
- Points of Discussion



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UNR's Sustainability Committee

Established in 2008 in order to support implementations of steps towards sustainability and the reporting duties within the ACUPCC

Position VPAF Faculty Faculty Faculty Facilities Services **Facilities Services** Parking & Trans. EH&S Academy for Env. **Student Services** Classified Employee Undergraduate Graduate Sustainability Coord. External

Nominating Unit President Faculty Senate Faculty Senate Faculty Senate VPAF VPAF VPAF VPR Provost VPSS SEC **ASUN** GSA **VPAF** VPAF

Appointee Ron Zurek Hans-Peter Plag Scott Slovic David Crowther Steve Mischissin Mike Bennett Melody Bayfield Stephanie Woolf Mike Collopy **Russell Meyer** Melanie England Noah Millett Michelle Da Pra John Sagebiel Duane Sikorski

Working Group on Curriculum

Charge: provide a chapter for the report:

- survey extent to which sustainability issues are covered in (under)graduate teaching;
- identify gaps and recommend extensions;
- identify obstacles and required support;
- draft a policy and recommend specific steps.

Working Group on Curriculum

17 members from 14 Colleges and/or Department:

Name Michael Collopy David Crowther Jeffrey Englin Guy A Hoelzer Jen Huntley-Smith Mary E Hylton Stephen K Lafer Donica Mensing Paul Neill Thomas J Nickles Hans-Peter Plag John Sagebiel Christopher Simon Scott Slovic Julie Stoughton James A Sundali Mark Waldo

Affiliation Academy of the Environment Curriculum, Teaching, & Learning **Resource Economy** Biology Academy for the Environment Social Work Curriculum, Teaching, & Learning School of Journalism Core Curriculum Office Department of Philosophy NBMG & NSL **Environmental Health and Safety Political Science** English Natural Resources and Environmental Sciences Managerial Sciences English

Survey of Undergraduate Teaching

Survey Goals and Objectives:

- Faculty's intrinsic motivation:
 - relevance of sustainability for themselves;
 - interest in teaching sustainability .
- Faculty's practice:
 - teaching towards sustainability or not?
- Faculty's concerns:
 - obstacles, faculty perception of students' priorities.

Aim: collect some baseline data

Survey of Undergraduate Teaching

Introduction to the Survey Objectives

For our purposes in the following survey - and in the larger report to which the results of this survey will contribute - we would like to suggest that "sustainability curriculum" is any aspect of university teaching that helps to raise students' awareness and understanding of the processes by which "our common future" might be enhanced by focusing on the **so-called "triple bottom line" of economy**, **environment, and society**. In particular, we are interested in determining the extent to which the current curriculum at UNR explicitly emphasizes the intersections between economic, environmental, and social issues in the context of sustainability, using qualitative and/or quantitative metrics for describing and evaluating the implications of these intersections.

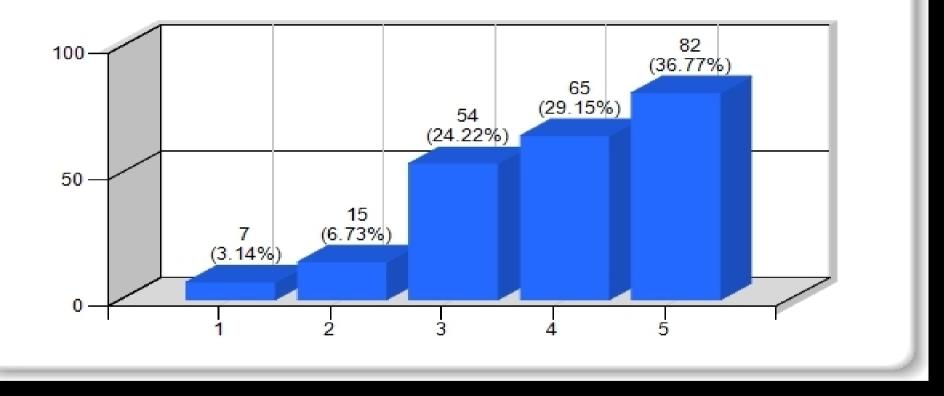
Survey of Undergraduate Teaching

Practical issues:

- no distinct list of people teaching undergraduate courses
- compromise: invited academic faculty and LOAs, excluded administrative faculty;
- in total 1433 invited.
- responses: 223, 15%
- no information on why people did not respond:
 - not involved in teaching,
 - not interested in sustainability
- Many respondents took considerable effort to write comments indicating a strong interest in the subject.

Main Results (1)

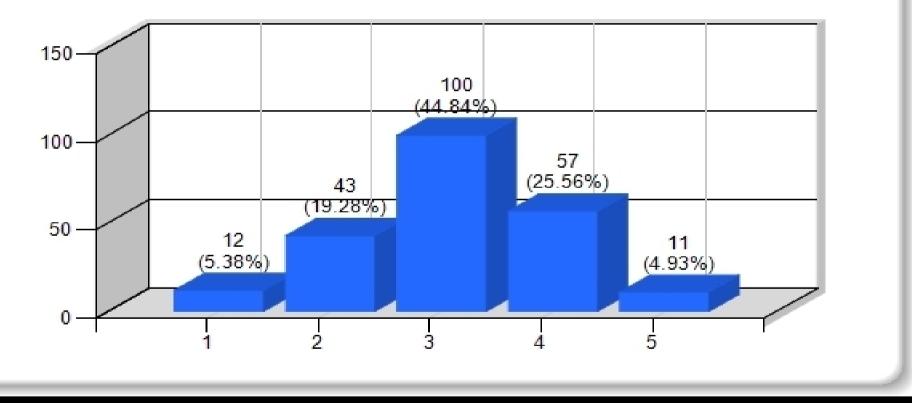
Please rate your level of concern about sustainability issues? (223 Responses)



Over 65% rated their concern a 4 or 5 Very few consider sustainability an unimportant issue

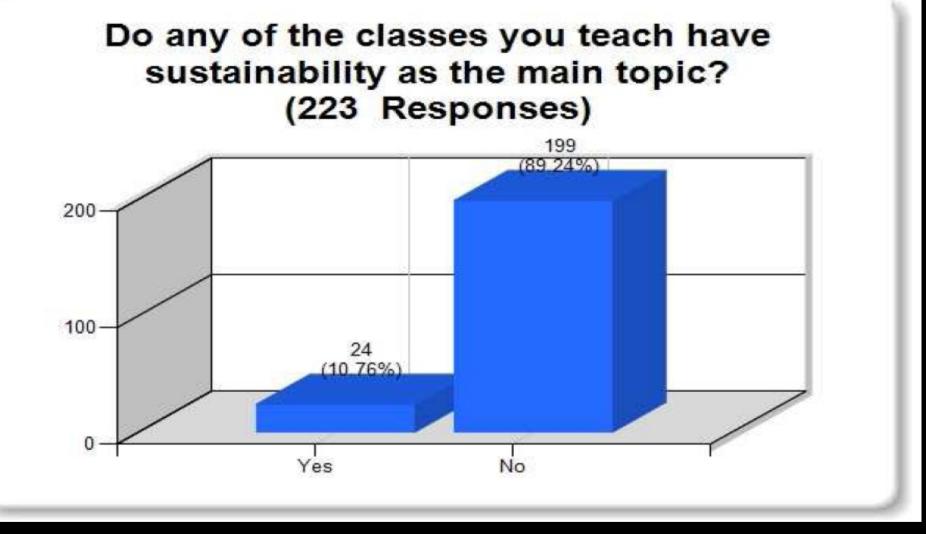
Main Results (2)

How would you rate the students' level of concern about sustainabilityissues? (223 Responses)



- Almost normal distribution
- This is the faculty's' perception;
- Students will be surveyed with this question.

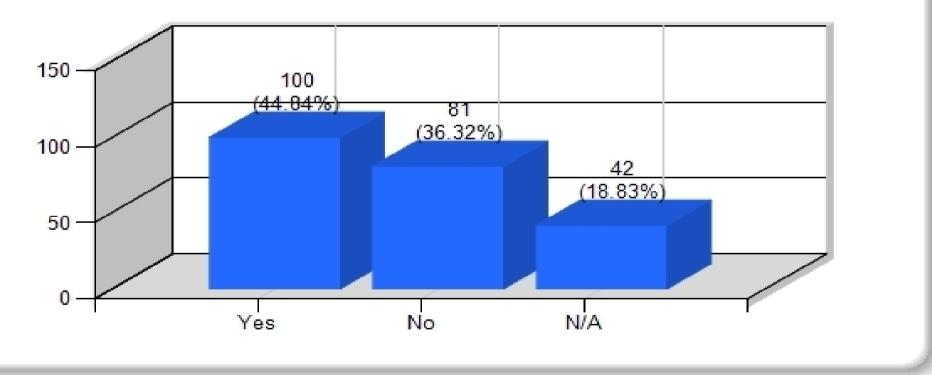
Main Results (3)



- 11% have courses with sustainability as main topic
- Listed courses range from sciences, engineering, anthropology, literature, policy, health, drama, archaeology.

Main Results (4)

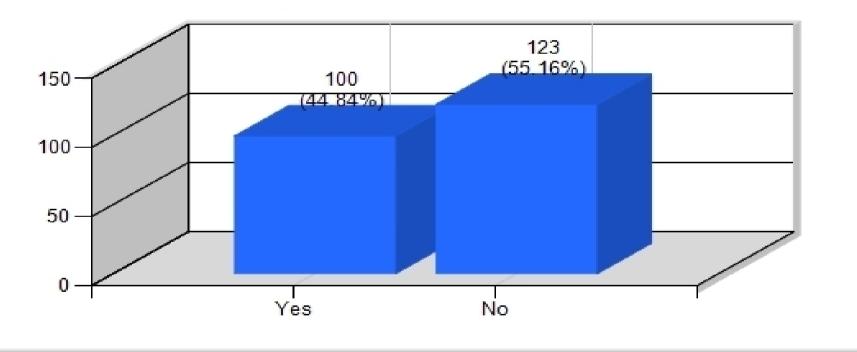
In courses that do not have sustainability as the main topic, do you integrate explicit references to sustainability issues? (223 Responses)



- 45% of respondents do include sustainability.
- Comments indicate a wide range of topics in economic, social, and environmental domains

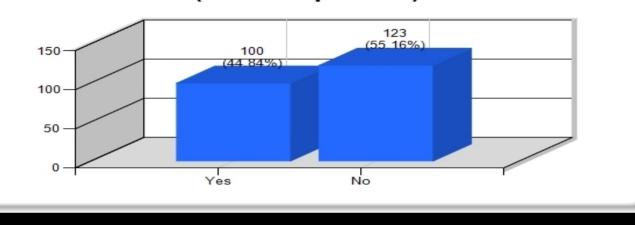
Main Results $\overline{(5)}$

Would you be interested in focusing current courses on sustainability or developing new courses? (223 Responses)

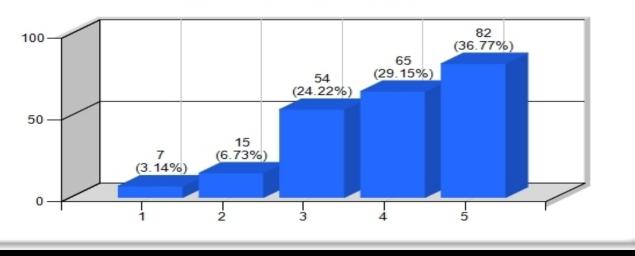


Main Results (6)

Would you be interested in focusing current courses on sustainability or developing new courses? (223 Responses)



Please rate your level of concern about sustainability issues? (223 Responses)



Is there a disconnect of personal concern and focus in teaching?

Should this disconnect exist to avoid a 'personnel agenda' in teaching?

Main Results (7)

- Question: What would help/support you in developing new courses or modifying existing courses to have a stronger focus on sustainability issues?

- 89 Responses, many very interesting comments.

Some examples:

- Attend a workshop where people share models of how they integrate the subjects into their courses. (multiple)

- Time, money & change in teaching assignment. (multiple)

- A push to offer such courses from above, ie. administrative/dean level. Programs on campus which reflect these desires, such as incentive programs to force people/faculty/students to drive less, for example.

- guidelines reference materials guest speakers (multiple)

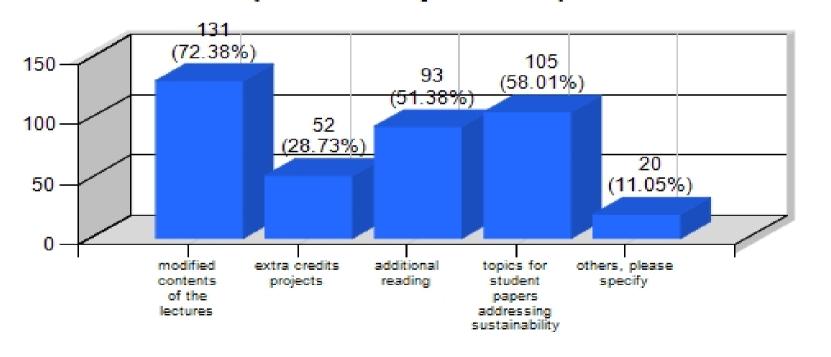
- Simpler paperwork and more rapid approval of course and curriculum changes. Easier approval of core courses, especially capstone courses.

- Readings and discussion with peers.

- Definition of priorities of sustainability by NSHE and our state employment partners!

Main Results (8)

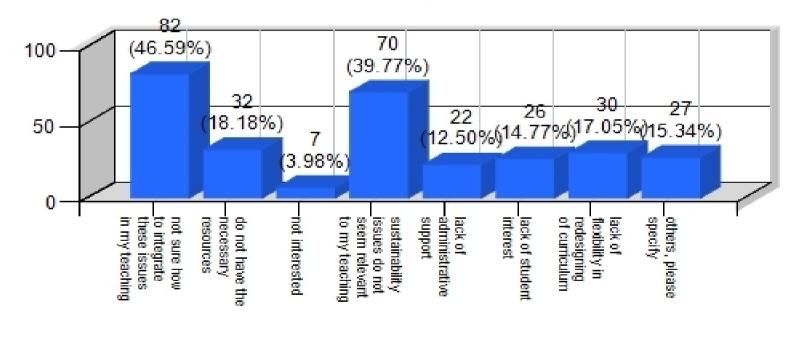
What would you consider to be appropriate ways of integrating sustainability issues in your teaching? (181 Responses)



Most consider modified lectures, additional reading and student papers as appropriate (more than one choice available).

Main Results (9)

Which of the following, if any, do you see as barriers to increasing coverage of sustainability in the curriculum? (176 Responses)



Main concerns are:1) not sure how to integrate sustainability; and2) sustainability issues are not relevant.

Key Points and Conclusions

- Was a baseline survey which leave many questions open and raises new ones.
- Faculty who responded thinks that sustainability is an important issue
- There seems to be a gap between faculty's concern about sustainability and focus on sustainability in teaching.
- But in the absence of a coordinated focus on sustainability in the curriculum, almost half of the respondents address sustainability issues in their teaching and expressed interest in doing more.
- Respondents indicate interest in developing assignments to teach sustainability issues.
- Faculty don't know how to integrate sustainability issues in their courses or think that they are not relevant to their teaching.
- Comments indicate many other reasons, including lack of time, money, not being tenured, institutional support, ...

Points of Discussion

- Survey has value in sparking discussions
- Sustainability across the curriculum is our priority
- Deeply multidisciplinary, integrative
- Skills and perceptions for sustainability in teaching
- Enabling informed decision makers versus guiding students in the 'right' direction
- Hidden/shadow curriculum both for faculty and students

All is work in progress, but a lot of fun ...