# Social Learning Systems

Theory and Assessment in Environmental Education

# Environmental Studies Program

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Environmental Studies Senior Thesis

"Social Learning" is an educational pedagogy that has recently entered the lexicon of both resource management and environmental education. Though successful, it lacks theoretical definition and assessment tools. I propose an interdisciplinary theoretical framework for social learning along with tools to assess learning systems with the goal of more critical understanding of their advantages and uses.

Origins of natural resource management as a field.

William Stapp formalizes the field of environmental education.

1973

Alfred Bandura proposes "social learning" - social context seen as part of the learning process.

1980s

Environmental education and resource management criticized for being simplistic.

**2000S** 

2008-

1960s

**—**1969

1977

**1990s** 

Rittel and Weber's "Wicked

Problems" challenge conven-

tional management thinking.

Early use of "participatory

niques in resource manage-

in critical assessment.

process" and other social tech-

Growth in organizational management

Muro & Jeffrey critique "social learning" for being vague, undefined, and lacking

begins to be used in resource management.

literature. The term "social learning"

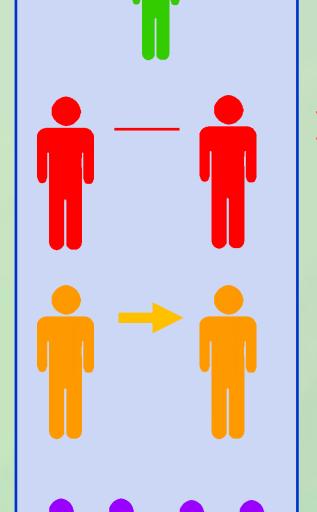
1 Find social learning opportunities.

Several different ENVS courses were used as research opportunities. Sessions were typically an hour, run by peers, and often included either an activity or a group discussion. In all cases, the goal was to draw from the knowledge of everyone in the room to contribute to the learning process.

2 Survey them using the theoretical framework.

A survey was used to assess each learning system.

Questions captured aspects of network analysis (right) to provide common metrics to assess the learning systems. Fill-in-the-blank feedback assisted in assessing governance and belief in the value of social construction.



Scale
How big is the system?

Integration
How densely connected are interactions in the system?

Interaction
How frequent do two-way interactions occur?

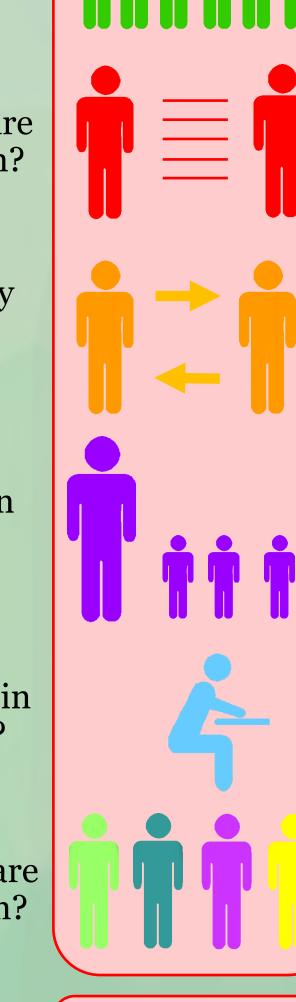
Equity

How is power balanced in the system?

Investment
How engaged are people in learning with each other?

**Diversity**How many perspectives a

How many perspectives are represented in the system?



HIGH

## "Holy Trinity" of Social Learning

Every social learning system is underpinned by three component parts.

### **NETWORKS**

The social organization of a learning system, assessed using six spectrums (see at right).

## GOVERNANCE

The social or political structures that organize interactions in the system, either as norms, physical limits, or rules.



Want more?

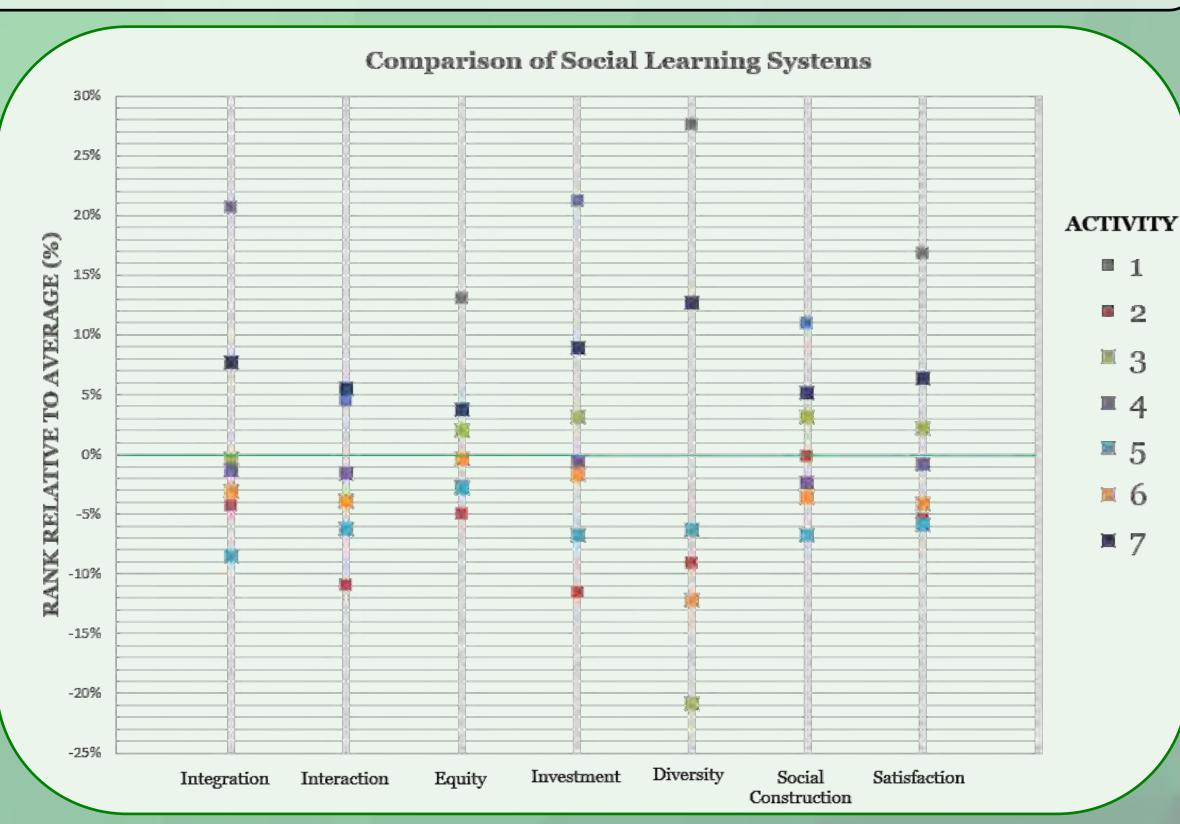
### SOCIAL CONSTRUCTION

The fundamental belief that underpins all social learning—that knowledge can be effectively constructed by social interaction.

## 2 Determine the effectiveness of the survey.

**LOW** 

Results were averaged across *all* activities, and specific activities were measured against that average. Differences between activities could offer some insight into prescriptive feedback for courses, or further hypotheses for study.



### Conclusion

Substantive differences between learning activities could be understood in relation to governing structures, suggesting that this assessment mechanism does capture relevant differences across activities.