Designing Interdisciplinary University Courses for Biosphere Reserves

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United Nations Educational, Scientific and Cultural Organization



Man and the Biosphere Programme



Key Questions

1. What course curriculum themes and learning outcomes reflect Biosphere Reserve Management best practices?

2. In what variety of ways can these courses be delivered ?

3. What course curriculum elements reflect the ideas of 'sustainability science'?

4. How might we share these learning approaches with a broader audience across the MAB Programme and its World Network of Biosphere Reserves and with what institutional mechanisms?



Place-based Education: Institutional Entrepreneurship

"Shifting from the notion of leader to that of entrepreneur usefully moves the focus from the leaderfollower relationship to the endeavor itself, and to the imperative of seizing opportunities and mobilizing resources that will gain support for innovations critical to the transformations of social ecological systems" (Westley et al. 2013:27).



Course Curriculum Themes (sustainability science)

- 1. Environmental education
- 2. Place-based ecology
- Indigenous ways of knowing
- Complex social ecological systems & building community resilience
- 5. Transformative leadership
- 6. Community Science (Loucks et al. in press, 2016)



Learning Principles

- 1. Visiting researchers are co-learning with us
- 2. Learning in community requires participation
- Local knowledge keepers are acknowledged & honoured
- 4. We create culturally safe learning spaces to foster empathy & healing



Building a Shared Vision

- 2005 CBT Research Code of Conduct
- 2006 Project Committees mobilize sustainable development grants
- 2011 Higher Learning Committee creates regional vision for education economy
- 2014 Education Asset Inventory & Education Capacity Building Strategy
- 2015 pilot CBT Research Award & University research partnership
- 2016 Initiate west coast Education Tourism initiative as a market mix of education programs for both local and visiting learners
- 2016 pilot University field course on Biosphere & Sustainability
- 2017 pilot a University network of courses on Sustainability, Science and Culture in Biosphere Reserves