

 **nzaee**
ASSOCIATION FOR ENVIRONMENTAL EDUCATION
Educating for sustainability
Te mātauranga o te taiao

 THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

A model for developing education for sustainability websites for communities

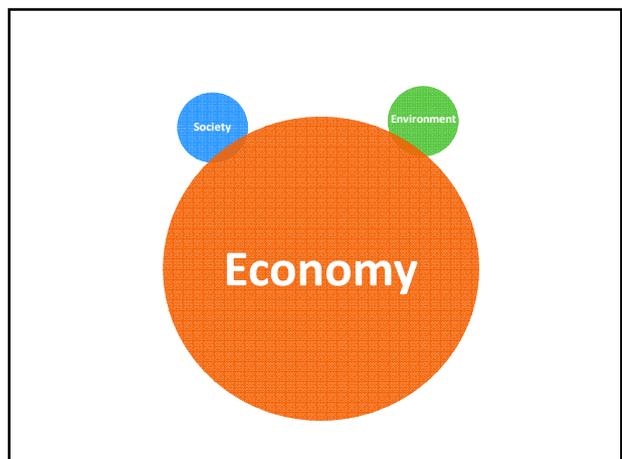
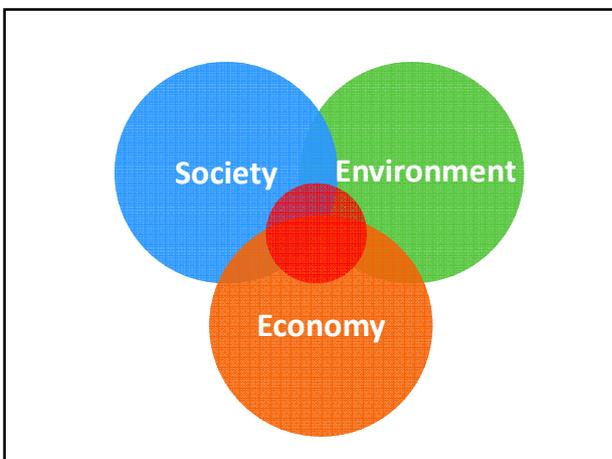
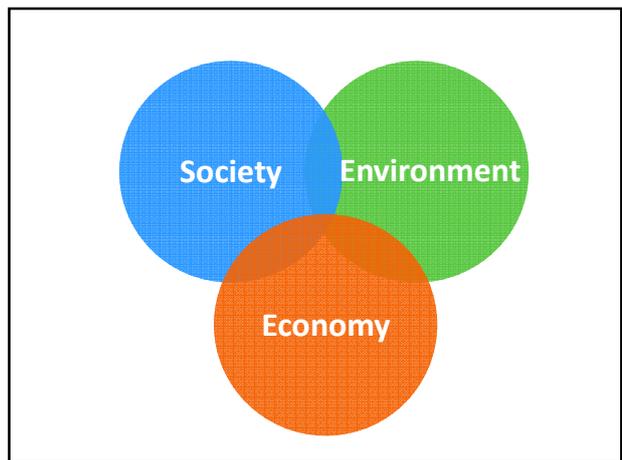
Claudio Aguayo, Chris Eames & John Williams

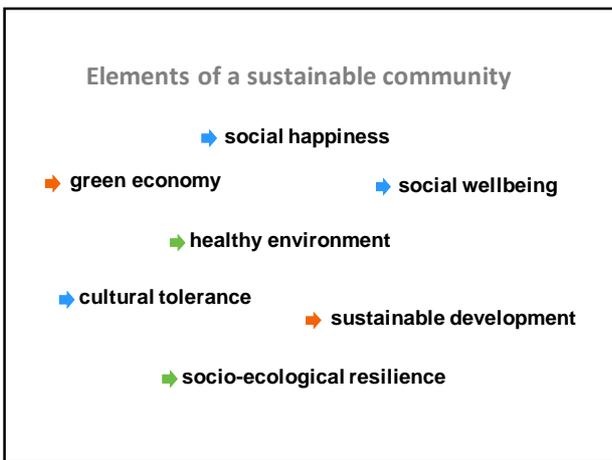
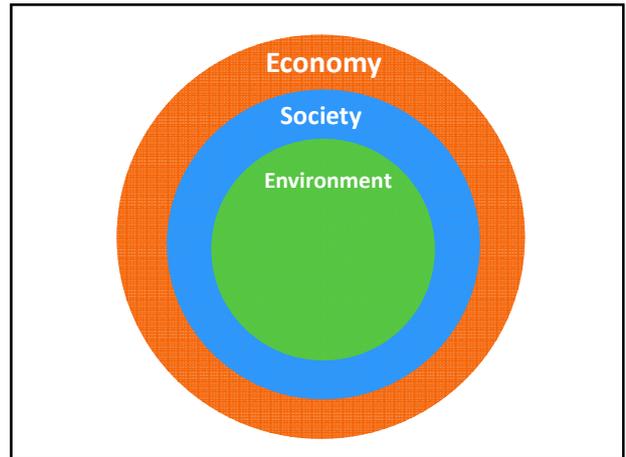
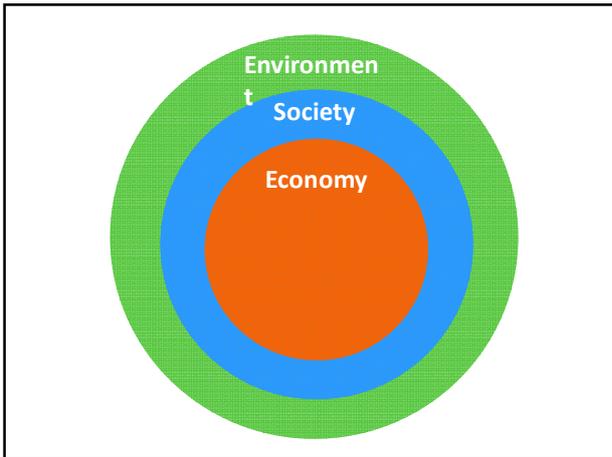
New Zealand Association for Environmental Education Biennial Conference,
Christchurch, 15-17th January 2014

Presentation Overview

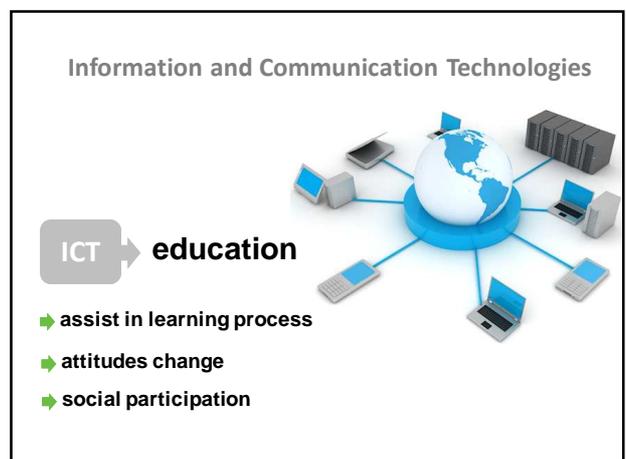
- **Sustainable communities**
- **A model to develop education for sustainability websites**
 - **Theoretical considerations**
 - **Findings from Chile**

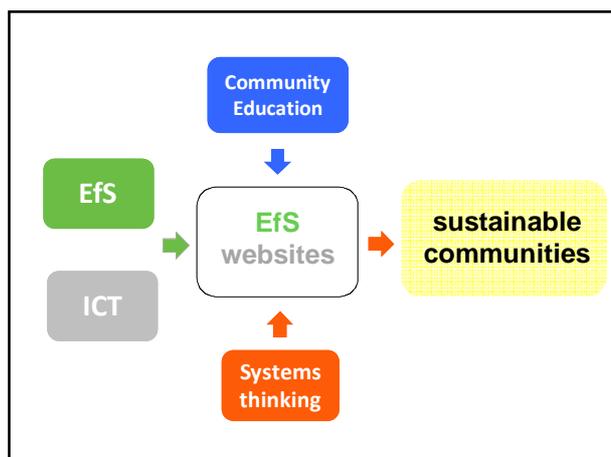
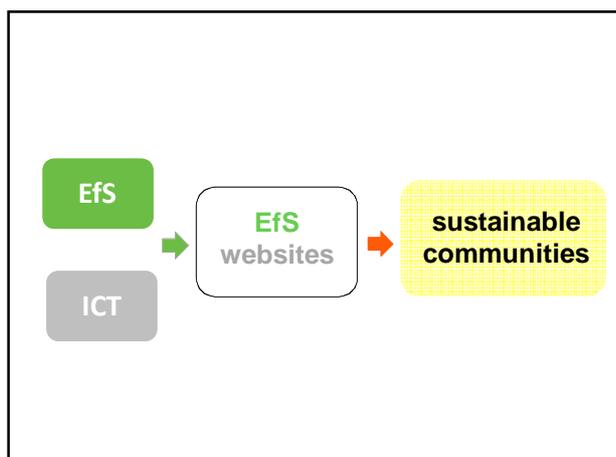
What is a sustainable community?





How to achieve sustainable communities?





Community Education

- Real-life and locally-rooted issues
- Broad audience
- Transformative process
- socio-cultural meaningfulness and relevance

Systems thinking

- Learning context
- Coupling and interaction of learning actors
- Creation and nurturing of educational systems
- Educational systems seen as 'leader and facilitator'

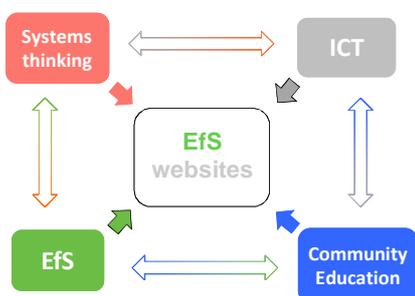
Education for sustainability

- Transformative learning / Thinking shift
- Ecological literacy
- Long-term thinking
- Critical thinking
- Political literacy
- Understanding of local issues
- Action competence

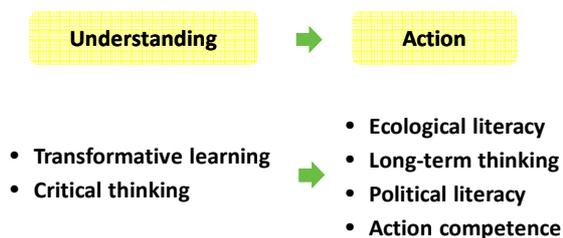
Information and Communication Technology

- Multimedia features (videos, animations, etc.)
- Web 2.0 and social media tools (e.g. Facebook)
- Accessibility
- Socio-cultural context of ICT use

EfS website theoretical model



Learning process associated to EfS websites



Learning strategies for EfS websites

- Emotional / affective domain
- Knowledge integration and inquiry
- Relevance and meaningfulness
- Learners' conceptions / challenging beliefs
- Positive communication

Design and development of EfS websites

- Phase I: Planning
- Phase II: Pre-design research
- Phase III: Design & development of EfS website
- (Phase IV: Evaluation)

I. Planning phase

Determine target community:

- Presence of an environmental / sustainability issue
- Need for an EfS intervention at the community level
- Good ICT infrastructure and Internet penetration

II. Pre-design research phase

Understanding of local characteristics and needs:

- Networking and partnership with local experts and strategic persons and organizations
- Survey on 'existing sustainability conceptions'
- Survey on 'website preferences'
- Document and information review

III. Design and development phase

Development of a culturally-meaningful and locally-relevant EfS website:

- Set up a design team
- Integrate theoretical and collected information
- Address social, cultural and technological characteristics and needs
- Address alternative conceptions

III. Design and development phase

Development of a culturally-meaningful and locally-relevant EfS website:

- Involvement of end-users (local members)
- Diversity of content through collaborators
- Include range of ICT and design features (e.g. multimedia)

III. Design and development phase

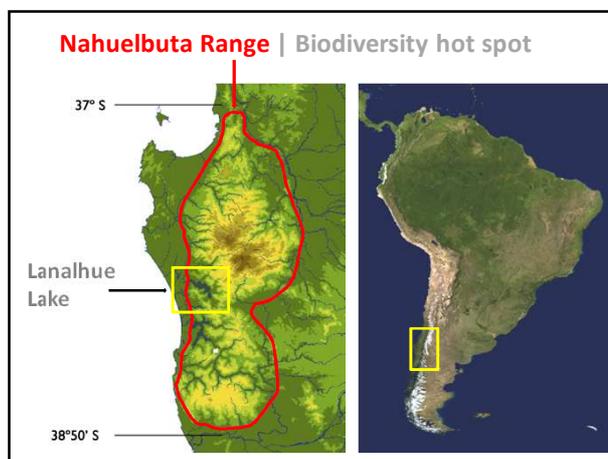
Development of a culturally-meaningful and locally-relevant EfS website:

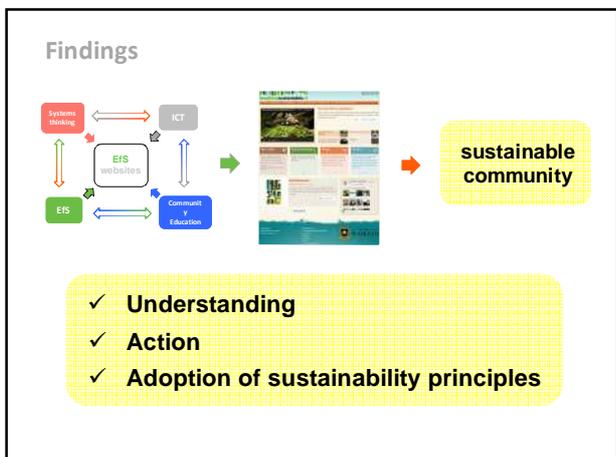
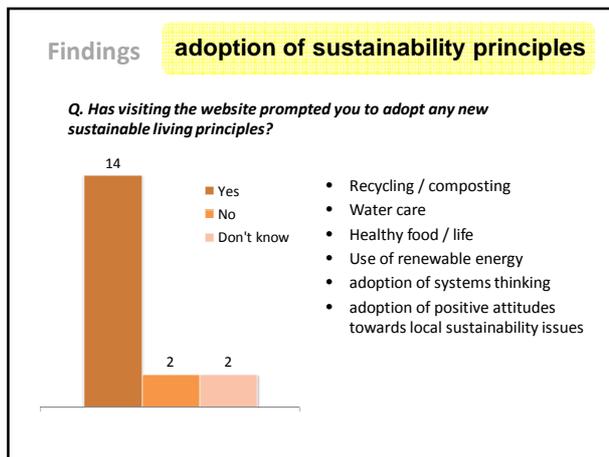
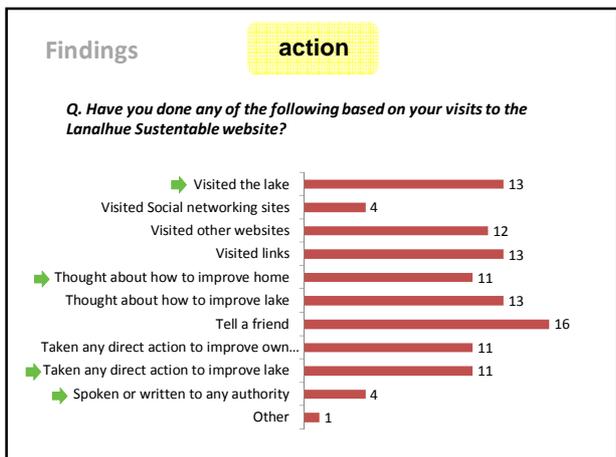
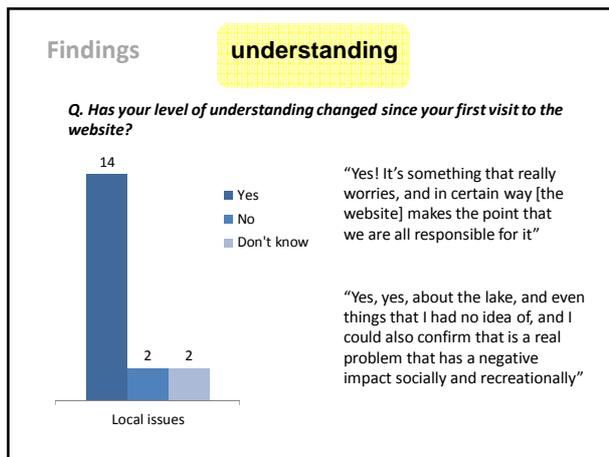
- Set up system of complementary websites (e.g. Facebook)
- Define an administration team
- Trial pilot versions
- Marketing of EfS website

III. Design and development phase

Development of a culturally-meaningful and locally-relevant EfS website:

- Update content and information over time (evaluation phase)
- Maintain interaction with users
- Financial sustainability
- Include non-website based outreach activities





- ### Summary
- In the context of Llanalhue Lake, the application of the model promoted understanding and action at the community level
 - Addressing the local and social characteristics and needs is critical for the success of the model
 - Internet websites present a great potential to engage communities in socio-ecological sustainability, and need to be considered and adopted by EE / Efs practitioners

Thank you for your attention!

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