Educating business on sustainability- why most attempts limit their own success.

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Summary:
Many traditional education programs on business sustainability involving provision of pamphlets and case studies have resulted in only minor improvements in the businesses targetted, despite the energy and enthusiasm of Project Officers and the willingness of business to be involved. This paper explores why this is the case and shows that many programs have unintentionally limited their own success. Suggestions of how systems approaches can help prevent this are highlighted. (For further information on the redesign of education programs see related paper presented).

Educating business on sustainability

Why most attempts limit their own success.

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- Conclusions

Economic & Regulatory Benefits to business of becoming sustainable:

Economic Benefits

Enhanced competitiveness and efficiency

Reduced production costs through better management

Reduced waste treatment and disposal costs

Increased income derived through sale or reuse of waste

Reduced compliance costs of permits, monitoring and enforcement

Regulatory Benefits

Enhanced knowledge on how to stay in compliance

Reduced forced regulatory requirements

Liability & Public Image Benefits to business of becoming sustainable:

Liability Benefits

Reduced liability for environmental problems at on-site and off-site treatment, storage and disposal facilities

Reduced risk of spills, accidents and emergencies

Public Image Benefits

Improved public awareness of environmental hazards and prevention measures

Increased activities to use as publicity

Improved image, seen as environmentally friendly

Environmental & Health Benefits to business of becoming sustainable:

Environmental Benefits

Protection of the environment from further degradation

Prevention of irreversible environmental problems

Increased longevity of natural resource supply

Health Benefits

Reduced risks to human health and safety

Reduced worker exposure to toxic chemicals

There are so many benefits to business of becoming sustainable they should be jumping to come on board. But they're not, why not?

Traditional education programs

- Provide brochures and Case studies
- Offer Training and advice
- Site visits
- Grants for improvement

Traditional education programs should in theory be effective. They provide information and offer advice, in some cases they may even give money to support a business. Yet the outcomes of such projects are minimal – why? Before giving you my opinions on part of the reasons we'll go through a case study.

Case Study: Changing Streams Pollution Reduction Project

- Joint project between Local Government, Catchment Boards and EPA
- 2,000 businesses, 56,000 households
- designed to educate community / business on sustainability and reduce pollution into the environment

Case Study: Changing Streams Pollution Reduction Project

Community Activities:

- Education kits to all households
- Competitions
- Olympic Champion- Kate Slatter, Gold Medal Rower
- Displays
- School visits
- Field Days / Cycle Tours

Case Study: Changing Streams Pollution Reduction Project

Case Study: Changing Streams Pollution Reduction Project

Industry Activities:

- Education kits to all businesses
- Industrial resource exchange
- Grants for improvement
- Demonstration Sites
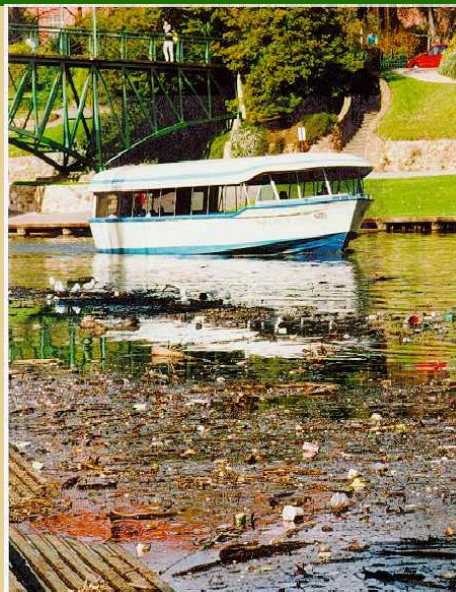- Site visits
- Displays
- Field Days
- Training

## Case Study: Changing Streams Pollution Reduction Project

Outcomes

- awareness increases

- minor changes to business

- reduced pollution levels into waterways

- all parties feel it was worthwhile and want it to continue

- enables legislative teeth in future as natural justice fulfilled

- but could we have achieved more??

Why didn't we receive larger changes to business sustainability levels?

- Project Officers could only advise on generic, simple improvements so this is what was achieved

- Project Officers did not have business backgrounds or qualifications and talked in green language

- While we did highlight benefits to business of changing we didn't specifically address mental models and the barriers these present

- We didn't help businesses address the internal change management issues

- The system surrounding business affected their ability to change eg: competitor actions, laws, lack of enforcement

- People didn't understand the system and blamed each other

Limits to success archetype:
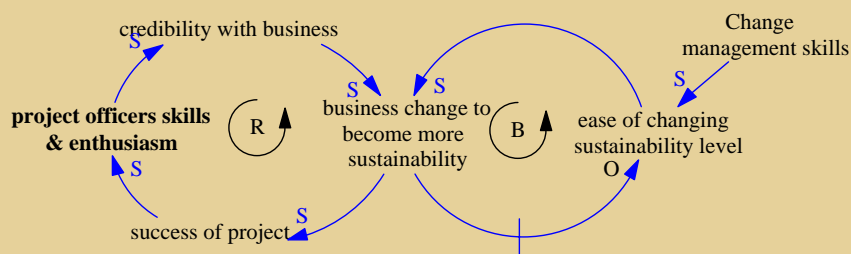
- Project officer skills and enthusiasm level can have +ve or -ve impact on project success -> new graduates

- Change management skills of business effect outcome -> projects don't address this

Many of these kinds of projects use new graduates from the environmental sciences to run the projects. The project officers generally aren't trained in business issues and do not understand business needs and speak in green language, this reduces their credibility with business and limits the success of the projects. Being new to the working world they don't have detailed knowledge of what business can do and can only advise on generic, simple improvements, so naturally this is what is achieved in the project.

Similarly the projects focus on telling business what to do but not helping them with the change. Change is very difficult in business and many who understand the need to become sustainable and want to, fail because of poor change management skills.

If one does not understand the whole system at play it is tempting to think that the way to improve the success of such programs is to simply spend more money on them, send out more case studies and information to business. However this is unlikely to result in significant improvements as it is the barriers to change, the system surrounding the project and the businesses that is affecting the success level and we need to change the design of our programs to better assist business.

Ability of systems tools to help:

- Identifying and addressing mental models to:
  - plan materials to meet peoples needs
  - avoid conflict
  - identify target / focus areas for materials

- Use of group model building, causal loop diagrams, models and learning environments to:
  - increase understanding
  - let people explore opportunities / consequences

Systems tools provide many ways to help improve such situations. Even if it is just identifying all the needs of the various stakeholders and their mental models. This allows you to design your educational material accordingly.

There were many mental models of business managers identified during the project, some of these included:
- If I change before my competitors I'll go out of business
- I don't need to do it as the Government isn't enforcing the laws yet
- It's just another management fad that will come and go
- My business isn't polluting, its not relevant to me
- The world's not falling apart, this isn't really important
- Becoming sustainable means altering my business completely
- It's just too hard, too expensive

- You're hypocritical telling us to change, when the laws still allow brown activities, we can't change until they do

The mental model of the manager involved will effect how they respond to your efforts and material. For many of the mental models above providing them with details of the benefits of becoming sustainable and case studies is not going to result in action. Yet this is what many of our traditional programs do.

The use of group model building, influence diagramming, learning environments, the systems thinking pyramid and other tools all offer ways to help improve the outcomes achieved by such programs. (Further information on how ST/SD can help is presented in a related paper at this conference.)

Conclusion

- Traditional education programs for business sustainability have resulted in minimal improvements
- Often the conditions that they operate in limit their own success
- Systems tools give us an opportunity to improve the design of such programs and hopefully gain further improvements
- A link to change management is also required.

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