Redesigning education programs for business sustainability. (smith 2000b)

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Summary:

Traditional programs on business sustainability have made considerable in-roads in increasing awareness of Business Managers and having them make minor changes to improve their operations. The majority of businesses however are still not sustainable and opportunities for simple improvements still exist. Many of our education programs have a linear underlying assumption that sets up a 'fixes that fail' scenario and can result in serious negative unintended consequences. This paper explores the situation and highlights how systems tools could be used to help redesign education programs for business sustainability.

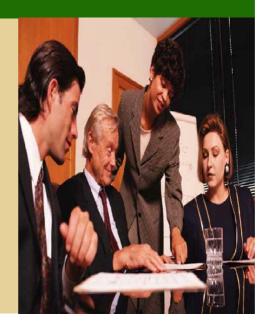
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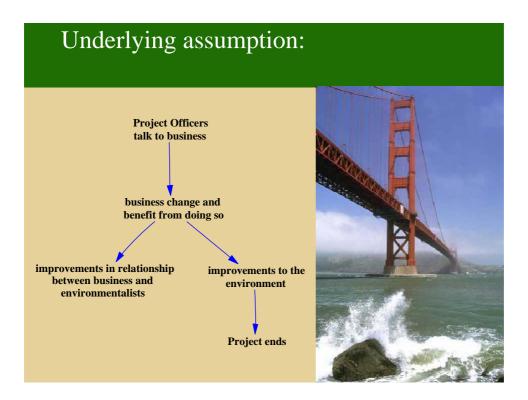
- Traditional education programs
 - (a) What are they?
 - (b) Underlying assumptions
 - (c) Fixes that fail archetype
 - (d) Counterintuitive outcomes
- How systems tools can assist
- The need for change management
- Conclusions

Traditional education programs

What are they?

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

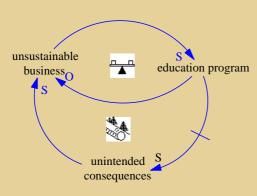




Embedded in our traditional education programs is this linear underlying assumption as to how the project will work. It is expected that the Project Officers will talk to business, business will see the light and change, the environment will be protected and the project will end. A nice side benefit will be a better relationship between environmentalists and business.

This assumption while reasonable is unlikely to result in the expected outcomes due to the complexity and difficulty of change within business and their lack of time to devote to these issues. There are many factors that limit business ability to become sustainable (these have been highlighted in another related paper presented at this conference.) In essence the traditional underlying assumption is like the bridge in this picture, where one expects a smooth transition from one side to the other but this is dependent on the individual rivets that hold the bridge together and if some of these are missing unexpected problems can arise.

Fixes that fail archetype:



Sets up a fixes that fail archetype

continued fix is more \$\$\$, more case studies

but builds significant unintended consequences

These traditional projects risk becoming a fixes that fail situation. They are designed to educate business and make them more sustainable. They make small amounts of progress, and it would be easy to assume spending more money, providing more case studies and information will further speed up business change. However there are other reasons that business are not becoming sustainable. And in forcing the issue continuously with traditional methods it may set up a dangerous situation which leads to unintended consequences.

Unintended consequences:

- · business decide it is too hard / ineffective
- · business think environmentalists don't understand them
- breakdown in relationship between business and environmentalists
- · frustrated, disillusioned environmentalists who lose enthusiasm
- · little improvement in sustainability level of business
- · continued need for expensive regulation and law tightening
- loss of commitment from government and funding bodies who pay for projects
- loss of potential benefits to business

All because we haven't investigated the system surrounding business sustainability and used this understanding to design our programs to best meet the needs of all parties. If the above situation occurs where more and more case studies are being

pushed at business- the project set up to advance sustainability could actually slow down progress.

How systems tools can help:

Identifying and addressing mental models

Business Mental Models

- Sustainability is a hassle, a cost for business
- it's too hard, too complicated, too many issues
- I'll go bankrupt if I do it before my competitors
- I can just move my business overseas
- Laws aren't being enforced

Educators Mental Models

- -business will want to change
- -we know what's best
- ex: Greenie v Business language

We need to incorporate our needs into their terms, to fit with their mental models.

There are many mental models involved in sustainable business issues these are just some of them. One of significance is the language used by the Educators, the project officers. In the projects I've been involved in the Project Officers were all relatively new environmental graduates. They were hired because they were cheap but also because the funding body could gain public relations benefits from saying they were supporting youth. These people naturally spoke in a 'green' rather than a business language. They went to business and talked to them about cleaner production, zero emissions and other programs that offered great benefits to business. But to many businesses these terms are foreign, they are seen as side issues, not core business and certainly not necessary for survival. Yet when you review management terms the same issues could have been described using strategic planning, process improvement, value adding- items that are seen as core business and may have resulted in more positive responses from business. The Project Officers, including myself, needed to understand the mental models of business and to design their programs to meet those models and needs.

How systems tools can help:

Using Influence Diagramming / CLD to:

- help understand the system
- help identify all stakeholders and their needs
- help explain the education methods chosen to project funders

Using Learning Environments to:

- let Managers and other stakeholders explore the issues
- trial solutions in a safe, non-threatening environment
- see the impact of different mental models and alter them

Using other tools like the ST pyramid to:

• help people understand interconnection, behaviour over time

The need for change management:

Systems thinking and system dynamics result in greater understanding and perhaps commitment to act but not necessarily change

- change attempts fail 90% of the time
- blame issue not self
- need to incorporate change management practices
 - stakeholder analysis, managing resistance, communication
 - similar to Learning Organisation concepts



Systems Thinking and System Dynamics can help us to understand the system surrounding our target audience, enabling us to redesign our education programs to meet their needs, and to help them understand sustainability and why they should change. This however will not necessarily result in getting that change.

Change management within business is very difficult and complex. Often we come across business managers who agree with the principles of sustainability and want to change but don't because it is too hard to deal with all the internal issues. There are also those who have tried and failed, they unfortunately blame sustainability methods

and assume they are flawed rather than realising it is their implementation that was flawed. This is what happens with management theories leading to the cynicism of management fads that don't work and come and go.

In order to address that, I believe we need to incorporate change management principles into our education programs. In some ways this is similar to the learning organisation concepts that have sprung up from systems thinking. To educators who do not think systemically it may seem outside of the scope of a business sustainability project to consider such things but if we want to achieve our goals I believe we'll need to.

Conclusion

- Traditional education programs for business sustainability can result in several counterintuitive outcomes
- Incorporating Systems Thinking and System
 Dynamics can result in greater understanding by
 business managers and willingness to become
 involved but may not result in on the ground change
- There is a need to link change management into such programs as well.

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