Partnering business schools and corporations

Education about and for Sustainability in Australian Business Schools: Stage 3

Engendering and enhancing sustainability principles and practices for small tourism business enterprises

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Final report

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Foreword

"Education for Sustainability requires:

- A focus on the **future** and *capacity* to create a sustainable future – more than just focusing on trying to problem-solve our way out of our current situation
- Less emphasis on science and technology delivering solutions in isolation of the social context, and more on **participatory action**
- Less emphasis on people as the problem and more on seeing *people* as **agents of change**
- Less emphasis on awareness-raising and more emphasis on **critical reflection and systemic thinking**
- A focus on people influencing **structural change** – not just on individual environmental actions
- More focus on **changing mental models** that influence decisions and actions rather than solely changing individual attitudes."

Source: ARIES 2008 *Key concepts*, working document, p.9.

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Acknowledgments

Executive summary

The project, *Engendering and enhancing sustainability principles and practices for small tourism business enterprises*, has been conducted in an environment supportive of change with regard to *Education about* and *for Sustainability*. The internal and external environments at Griffith University and Griffith Business School, GBS, facilitated the implementation of this project.

The project aims were:

- to partner with micro, small and medium tourism enterprises located in the south eastern corner of Queensland and northern New South Wales in order to engender and/or further enhance sustainability principles associated with such enterprises' tourism operations;
- to improve pedagogy, andragogy, ethnogogy, as well as curriculum content of four courses in the GBS in addition to enhancing educational praxis associated with Education about Sustainability/for Sustainability within the GBS.

Micro, small, medium enterprises (MSMEs), were categorised using the Australian Bureau of Statistics (Small Business in Australia, 2001) definitions: micro enterprises employ less than 5 staff, small enterprises employ between 6 – 19 staff and medium enterprises employ from twenty up to 200 staff.

The project team utilised a community of practice approach in conjunction with action research cycles and action learning, experiential learning, profession-based learning, critical reflection and reflexivity principles.

The key methods used in action research cycles included: lived experience, reflexive team conversations, team digital journals, reflexive journals, interviews, focus groups, and student learning materials, industry engagement, and industry reflexive conversations with students and convenors.

The project incorporated both formative and summative evaluation as part of the action research processes.

The champions[1] of the project were primarily convenors of undergraduate courses where the project would be able to be actualised rather than MBA courses. The rationale to incorporate undergraduate courses into this program was based on the belief that if change could be affected with regard to *education about* and *for sustainability* at the undergraduate level and from various stakeholder perspectives, then these practices would have transferability to postgraduate courses as well. In addition, the undergraduate students who were about to enter into professional careers would be better informed and able to influence change in the businesses and organisations in which they would be employed. The four courses which participated in this project included the postgraduate course, *Current Issues in Leisure Studies* and the following three undergraduate courses: *Tourism Enterprise Management*, *Project* and *Ecotourism*.

The project achieved the following:

1. Development and application of a practical learning based model of change for application by business, students and corporations. This model was predicated on action research and action learning cycles.

2. Development of effective teaching programs that incorporated Industry partners to facilitate change in curriculum to underpin change across the business sector.

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[1] These champions were also part of the project team.

3. Improved capacity for sustainability within the GBS and partner organisations.

4. Provision of input from business into GBS courses with feedback into these organisations' corporate policy and practice.

5. Provision of support and increased expertise of MSMEs regarding sustainability.

6. Establishment of a mutual learning environment with partner organisations.

The following additional outcome emerged in the course of the project:

7. Complementary contributions to sustainable praxis within the GBS. This outcome has complementarity with Output 3 above.

Recommendations

Recommendations regarding the process of action research/learning within the project are as follows:

- Project timelines for final reporting be such that they include all elements within a complete cycle of action research/learning so that student and industry involvement in the action research/learning cycle can be maximised. For example, project timelines for completion need to take into consideration differing end of semester dates between participating universities. This would enable timely inclusion of formal student, industry and project team evaluations as well as completion of internal projects including industry feedback within each of the courses.

- Strategies for student engagement be explored and detailed prior to course outline development by tailoring to experiential learning needs of each cohort. In this way, assessment items within courses can be included within complete action research/learning cycles. We recognise the challenge with this recommendation as students do not aggregate on campus into courses in a physical sense until Week 1.

- Processes to facilitate flexibility in course content, delivery and assessment to address changing circumstances in volatile business environments and the need for student learning based assessment require development at the local level and for this to be situation specific.

- Develop and/or engage communities of practice in a fluid learning environment of academe through non-official/informal group interactions associated with both professional and social development in order to serve to facilitate informal exchange of knowledge and experience and thereby influence praxis.

- The mix of students, industry and convenors in action research cycles links theory to praxis and re-enforces the effectiveness of communities of practice and profession-based learning as well as lifelong learning. Such connectivities should be continued and extended and managed within localised settings and networks as it is founded on "co-powerment".

- Change does occur through self-organising entities, which coalesce due to shared agendas that become collective actions as represented by complexity theory. With specific regard to this project, this in turn resulted in engendering and enhancing sustainable change regarding education *about* and *for* sustainability. The use of complexity theory is recommended as one of the strategies to engender change.

Partnering business schools and corporations

Education about and for Sustainability in Australian Business Schools
Stage 3

Context

In response to the challenge of sustainability, there is a need for managers and leaders who have the capacity to create strategies and drive change for sustainability. Corporations and business schools have an important role to attract, develop and foster these abilities. For this reason, Stage 3 aimed to build partnerships between business schools and corporations to improve organisational capacity, and accelerate change to achieve tangible sustainability outcomes. This year-long Action Research program brought together sustainability champions from an Australia-wide selection of business schools and corporations in a collaborative process of learning-based change.

This research was funded by the Australian Government Department of the Environment, Water, Heritage and the Arts, and supported by Macquarie University.

Background to this program

Stage 1 of this research examined business schools in Australia and overseas to identify and benchmark best practice in education *about* and *for* sustainability in Masters of Business Administration (MBA) and Executive programs. Stage 2 focused on driving change within seven leading business schools across Australia that worked together to make changes to their MBA program using an Action Research process within an Education for Sustainability framework.

What this program aims to achieve

Stage 3 aims to build on Stage 2, by strengthening partnerships between corporations and business schools to decrease the gap between current 'best practice' in business and business school curricula, and assist corporations to better understand and address environmental and sustainability concerns. Sustainability outcomes sought by the program include:

- Changes in business school pedagogy, resources and core curricula which incorporate learning insights and resources generated from this program
- Corporations moving from awareness to implementing improved corporate policies and practices
- Changed policy and practices leading to improved sustainability outcomes in the management of the organisations' operations
- New and stronger partnerships among corporations and business schools, to build engagement and capacity
- A Community of Practice involving participating corporations and business schools to generate and share knowledge and experience
- Improved identification and dissemination of effective learning and management practices that generate organisational change for sustainability.

The learning insights, partnerships and resources will also support the long term goal to develop a leading edge MBA course *about* and *for* sustainability.

Source: Contract document

The following research report, "Engendering and enhancing sustainability principles and practices for small tourism business enterprises", is part of the *Partnering business schools and corporations: Education about and for Sustainability in Australian Business Schools: Stage 3* through the auspices of the Australian Research Institute in Education for Sustainability (ARIES) – and the Australian Government Department of the Environment, Water, Heritage and the Arts (DEWHA) from which this research was funded.

Engendering and enhancing sustainability principles and practices for small tourism business enterprises

Project environment

This project, *Engendering and enhancing sustainability principles and practices for small tourism business enterprises*, has taken place within an environment that has been supportive of change with regard to *Education about* and *for Sustainability*. The internal and external environments at Griffith University and particularly within the GBS have been especially conducive to the implementation of this project.

Focussing on the internal environment, at the University level, two of the eight stated university values[2] have direct implications for the sustainability elements of this project:

- "Contributing to a robust, equitable and environmentally sustainable society
- Commitment to individual rights, ethical standards and social justice."

Another three values associate with the learning/teaching engagements used in this project:

- "Participatory decision making and problem solving
- Lifelong learning and personal development
- Tolerance and understanding of diversity in society."

The remaining three values are linked to the reflexive praxis applied during the conduct of this project as well as the preparation and writing this report:

- "Rigorous standards of scholarship
- Continuous quality improvement
- Accountability as befits a learning organisation."

In addition to this University framing, GBS states as its mission[3]:

> "GBS seeks to excel as a provider of high quality, cross-disciplinary and internationally relevant business and public policy education and research, emphasising the relationship between business and society in promoting sustainable enterprises and communities."

The current Pro-Vice Chancellor of GBS, Professor Michael Powell, has set a leadership vision with regard to sustainability and this is reflected in the mission above. This vision has been supported by senior executive, individuals, teams, researchers, research collectives, working groups and sustainability retreats to further embed and engender the principles of sustainability into the GBS culture, ethos, education, research and praxis. The vision positions the GBS to merge external environments into internal environments. For example, the GBS is:

- a signatory to United Nations Global Compact (see: http://www.unglobalcompact.org/);
- a member of the Globally Responsible Leadership Initiative, (see: http://www.globallyresponsibleleaders.net/);
- committed to PRME – the United Nations' six Principles for Responsible Management Education (see: http://www.unprme.org/);
- a founding member of Asia Pacific Academy of Business in Society, APABIS, (See http://www.apabis.org/APABIS+Website/default.htm);
- and sponsor of the Global Step Change annual review (see http://www.lifeworth.net/).

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[2] Griffith University values accessed at: http://www.griffith.edu.au/about-griffith/mission-statement
[3] Griffith Business School Mission statement accessed at:
http://www.griffith.edu.au/business/griffith-business-school

A number of these have direct reporting consequences and are related to evidence-based outcomes for maintenance of membership and so serve to strengthen the sustainability agenda.

In addition to GU and GBS activities, the Department of Tourism, Leisure, Hotel and Sport Management from which the project team were drawn have had active involvement in a number of other related activities with sustainability agendas. These included convening the 2008 Council of Australian University Tourism and Hospitality Education (CAUTHE) annual conference. The conference program incorporated sessions on critical issues in a changing world, climate change, tourism and diminishing resources, ecotourism, tourism and hospitality sustainability, stakeholders and tourism development, the relevance and role of education to tourism and industry. Other activities included a review to identify courses which addressed sustainability, participation in a Tourism Queensland and Ecotourism Australia roundtable, and an international Tourism Education Forum Initiative regarding values based curricula.

In particular, over the last three years, there has been a coalescing of a number of initiatives, agendas, and numerous fora, which have served to situate GBS not only as espousing to be committed to sustainability principles but also to put it colloquially "to walk the talk". For GBS, the issue of sustainability is paramount. The invitation to be part of this Stage 3 program - *Partnering corporations and business schools*, was therefore timely and complementary to outcomes of the 2007 Sustainability Retreat and overall GBS sustainability agenda with regard to educational praxis.

As a consequence, participation in this project in order "to improve organisational capacity, and accelerate change to achieve tangible sustainability outcomes" via "a year-long action research program" that brought "together sustainability champions from an Australia-wide selection of business schools and corporations" in a "collaborative process of learning-based change" corresponded to internal and externally informed sustainability agendas in GBS.

For Stage 3, GBS champions/co-researchers were drawn from the Department of Tourism, Leisure, Hotel and Sport Management. Each had been variously involved in sustainability agendas of their own and with others including industry. While also connecting with large enterprises, networks also existed with micro, small and/or medium enterprises, MSMEs. It should be noted that within Australia, micro, small and medium sized enterprises/businesses account for 97% of private sector businesses[4]. Further, "[t]he [Australian] tourism industry primarily consists of small and medium-sized enterprises (SMEs), with more than 90% of businesses employing fewer than 20 staff"[5]. To address the imbalance between continual project and research foci on larger enterprises, the champions chose to focus on MSMEs.

The decision to focus on MSMEs was also influenced by the acknowledgment of the following challenges faced by MSMEs as reported in extant literature. As already noted, tourism and hospitality industries are populated by a large percentage of micro, small and medium enterprises; into which family owned businesses may also be classified. "... [M]any, if not most of the owners in this [family owned] industry are not particularly well qualified through experience and training. Not only do they require educational assistance, but they need models and a vision of what they can become." (Getz, Carlsen and Morrison, 2004, p. 183). Further, literature suggests that a "[l]ack of professionalism is a frequent complaint levelled at family businesses. In tourism and hospitality, low entry barriers might attract investors with little or no relevant training or education. This can severely limit their potential to grow or prosper "(Getz, Carlsen and Morrison (2004, p. 8). Furthermore, Matthews (2002) has noted that two of the characteristics of innovative SMEs are ongoing

[4] Source: Australian Bureau of Statistics, Downloaded 21 April, 2007:
http://www.abs.gov.au/ausstats/abs@.nsf/e8ae5488b598839cca25682000131612/97452f3932f44031c a256c5b00027f19!OpenDocument
[5] Source: http://www.oecd.org/dataoecd/44/13/40122319.pdf, downloaded 23 May 2008

learning and highly qualified staff. By participating in this project, MSMEs had the opportunity to engage in ongoing reflexive learning processes. Such organisations, which embrace learning organisation principles, are able to continue to respond to challenges, such as, sustainability issues through learning and knowledge as well as innovation. Moreover and to reiterate, [M]SMEs may not have the resources, personnel or time to undertake skills training (Chatterton and Goddard, 2000 in Gunasekara, 2004). The MSMEs, which participated in this study were professional and interested in innovation. Staffing profiles reflected varying qualifications, skills and experience sets. Some ran family owned businesses, some did not. All were interested in the educative benefit of engaging in the various courses and linking theory into practice and vice versa.

Additionally, the champions were associated with undergraduate courses rather than MBA courses. The champions perceived that if change could be affected with regard to *education about* and *for sustainability* at the undergraduate level and from various stakeholder perspectives, then these practices would have transferability to postgraduate courses as well. Furthermore, it was recognised that the undergraduate students would soon be graduating and (re)commencing their professional careers. As a consequence of participating in this project, the champions believed that these future graduates had the potential to become informed change agents regarding life-long learning and *education about* and *for sustainability* within industry settings. They would also be in positions to address some of the challenges noted in the previous paragraph. Contemporaneously with the three undergraduate courses, a postgraduate course was also incorporated in the project since this course had complementarity to the project's aims. Subsequently, in this project, three courses focussed explicitly on *education about* and *for sustainability* at the undergraduate level and one at the postgraduate level.

The overall action learning process associated with this project, therefore, needs to be situated within the preceding internal and external environments. There is one action research cycle, which involved the entire project team, then there are four concurrent action research cycles associated with each of the courses involved in this project. Changes have been and continue to be made within GBS, within the student cohorts and via industry partnerships. This project is one of the contributors to that change. This change is representative of complexity theory in action, a number of self-organising entities/fora have been operating and working towards embedding and engendering a sustainability ethos in the GBS culture, which is inclusive of learning/teaching engagements, research, commercialisation, community engagement and praxis. These various fora have served to drive positive change and engender further interest and reflexivity with regard to educating for and about sustainability, which has been contemporaneously facilitated by a committed and supportive senior executive. Such change is evidence of the power of *foruming*[6] to affect positive change. Figure 1 outlines the action research context and processes associated with this project.

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[6] See Rynehart, R. L. (2004) *Foruming: A theory of influencing organisational change.* Unpublished PhD. Central Queensland University, Rockhampton, Australia.

Figure 1: Action research context and processes

Action Learning Processes Connectivity with Internal and External Environments, Agendas and Fora

INTEREST CONNECTIVITY
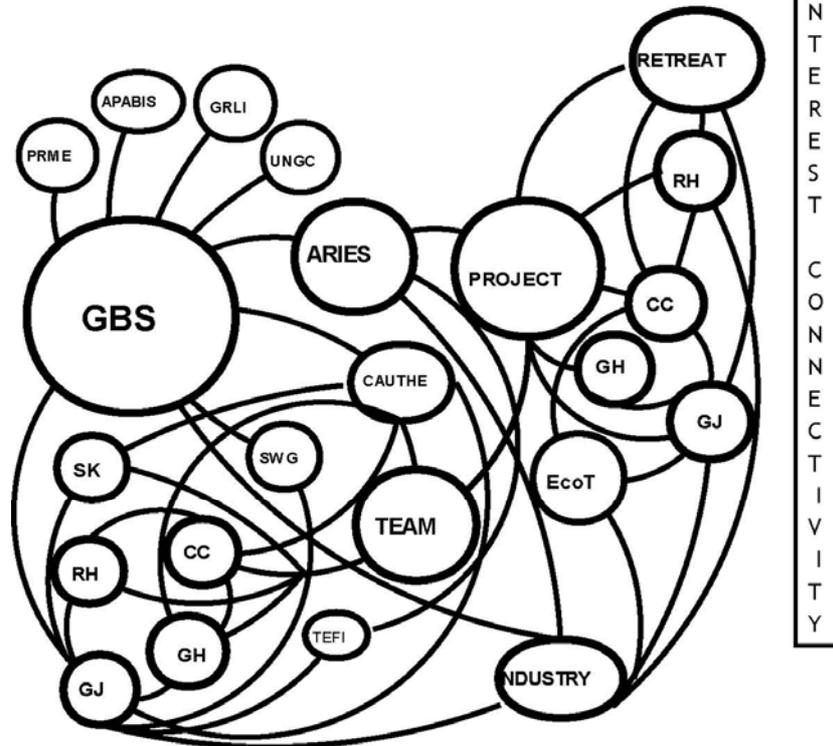
APABIS   Asia Pacific Academy of Business in Society
ARIES   Australian Research Institute in Education for Sustainability
EcoT   Ecotourism
GBS   Griffith Business School
GRLI   Global Responsible Leadership Initiative
PRME   Principles for Responsible Management Education (UN)
SWG   Sustainability Working Group
TELFI   Tourism Education Futures Initiative
UNGC   United Nations Global Compact
GJ; CC; RH ;GH; SK - Project Team Members

Project aims

This project aimed to partner with micro, small and medium tourism enterprises located in the south eastern corner of Queensland and northern New South Wales in order to engender and/or further enhance sustainability principles associated with such enterprises' tourism operations that are connected to climate change, as well as energy and water usage. This project uses the standard ABS definitions of MSMEs: Micro enterprises employ less than 5 staff, small enterprises employ between 6 - 19 staff and medium enterprises employ from twenty up to 200 staff (ABS, 2001, Small Business in Australia). The project also aimed to improve pedagogy, andragogy, ethnogogy, as well as curriculum content of four courses in the GBS in addition to enhancing educational praxis associated with Education about Sustainability/for Sustainability within the GBS.

Project rationale

The rationale for the focus on MSMEs is that they constitute the largest percentage of business operators involved in tourism albeit that the corporate enterprises and businesses have higher profiles and iconic representation. However, it is often the MSMEs who are not able to participate in initiatives such as this project since their staffing and other resources

especially micro and small businesses restrict such participation. We aimed to leverage student participation to assist such staffing and other resource issues as well as skills and knowledge levels regarding sustainability principles and practices within the participating MSMEs, academic staff and students. Across the four courses, 10 MSMEs from tourism participated in this project. This number represented the best spread of resource usage without overstretching resources and thereby negatively impacting on the intent of the project.

Team reflections on project, aims, rationale and background context:

The aims, intentions, rationale of the project were supported by the team as a collective and as a community of practitioners. Several team member reflections appear below regarding background contexts:

> *Between April 11-14, I attended the TEFI Summit 2008 which is a Tourism Education Futures Initiative. The focus was values-based frameworks for and in tourism curricula. A number of the values that were devised in this group were associated with sustainability and the types of values that we want students to have as professionals. So there's some linkage between TEFI intentions and the ARIES project -- especially the impetus of initiatives that are happening in Australia broadly across business schools and with the ARIES project in particular. I think that the latter, as focussed initiatives, are somewhat ahead of some of the initiatives that are happening, specifically, within tourism studies. I know that there are people in tourism who are working from sustainability … ethics … corporate social responsibility platforms but as a concerted initiative I think it's demonstrable that the summit evolved in the first place to identify something that wasn't being done. It just seems there's almost a "tipping point" – multiple fora and initiatives that are coalescing regarding education about and for sustainability.*
> *For example, next week I am facilitating the GBS Sustainability Retreat on Tuesday 22 April at Nathan campus which will enable us, when I'm saying us, Rob and Carl are attending, and they'll be able to put forward the things that they're doing in ARIES which will be right along the intentions of the School and their expectations of sustainability. They will be able to share what they're doing with the broader GBS audience in regard to curricula development and sustainability. (Gayle Jennings,* Week 6: 18 April 2008*)*

> *The engagement with MSMEs builds upon existing organisational developments. For example, the department has in the past engaged with MSMEs through field project courses. As well as this, there is ongoing relationship development through two dedicated industry liaison officers within the department. (Glen Hornby,* Week 12: 2008*)*

> *Changes to individual courses such as 3119HSL are part of a larger move to embed sustainability throughout many of the courses in The Department of Tourism, Leisure, Hotel and Sport Management.*

> *There have been new and stronger partnerships among small to medium enterprises and the Department of Tourism, Leisure, Hotel and Sport Management that have generated and shared knowledge and experience as a result of the inclusion of the ARIES project within the course 3119HSL. These partnerships will be useful in the course commencing in 2009. (Robert Hales,* Week 10: 2008*)*

> *The implementation of an action learning approach to education for and about sustainability in this setting has parallels to the philosophic practitioner curriculum guide suggested by Tribe (Figure 2). Such an approach attempts to*

> *break down the divides between theory and practice and encourages the development of individuals 'capable of high quality and competent actions in tourism operations' (2002, p.349). By creating the communities of practice in this project we encourage students to understand the implementation of vocational 'best practice', whilst simultaneously reflecting and challenging what these practices might be. (Carl Cater,* Week 12: 2008*)*

Figure 2: The Vocational/Liberal and Reflection/Action Axes

Stance / Ends	Reflection	Action
Liberal	Reflective Liberal	Liberal Action
Vocational	Reflective Vocational	Vocational Action

The Philosophic Practitioner
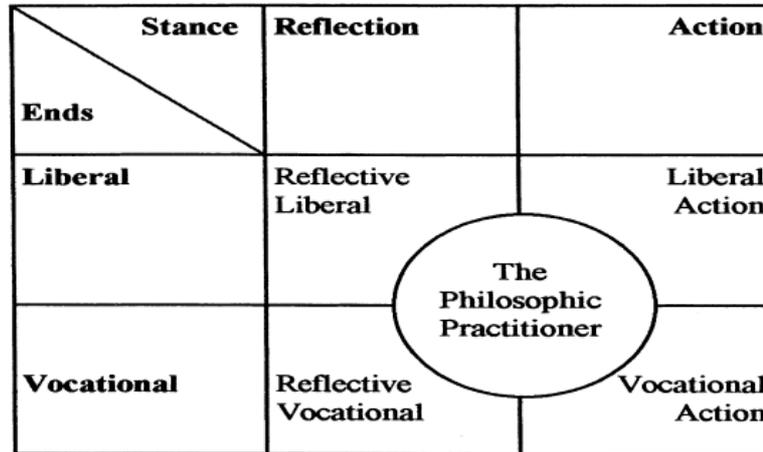
Source: Tribe (2002, p. 342)

Project learning/teaching pedagogies

The learning/teaching engagements of the project were informed by pedagogy (the science of teaching), andragogy (the science of teaching adult learners) and ethnogogy (the science of teaching students from different cultural backgrounds). In particular, from pedagogical and andragogical perspectives, the principles of action learning (Revans, 1980), experiential learning (Kolb, 1984), communities of practice (Wenger, 1998), profession-based learning (Jennings et. al. 2007), critical reflection and reflexivity (Hertz, 1997) were utilised. Why these principles? Because each of these requires active engagement by learners in:

- critical thinking regarding individual and/or group learning needs
- knowledge and skills development
- devising own/group learning experiences; and
- iterative evaluation processes.

Additionally, the principles support self direction and responsibility with regard to sensemaking and meaning making (Weick, 1995) as being social processes. Specifically:

> [h]umans do not find or discover knowledge so much as we construct or make it. We invent concepts, models, and schemes to make sense of experience, and we continually test and modify these constructions in the light of new experiences. Furthermore, there is an inevitable historical and sociocultural dimension to this construction. We do not construct our interpretations in isolation but against a backdrop of shared understandings, practices, language and so forth." (Schwandt, 2000, p. 197).

To support this continuous (re)construction and (re)interpretation, learning/teaching environments were predicated on seven conditions for learning (Cambourne, 1984): immersion, demonstration, approximation, expectation, responsibility, practice and feedback. These are outlined below:

1. *Immersion* in culture, skills, praxis and provision of "real world" models, examples
2. *Demonstrations* both formally and informally, showing process-in-use, that is, "real life" contexts

3. *Approximation*: "Having a go", trying out the skills and "rules", making "miscues", refining knowledge and skills
4. *Expectation*: "Teacher" and learner expect to be successful
5. *Responsibility*: Learner is responsible for engaging in learning teaching engagements
6. *Practice*: Using and modifying learnings to improve skills, knowledge and competencies
7. *Feedback*: Gaining timely and constructive feedback.

Complementing the seven conditions was the inclusion of communities of practice and profession-based learning. Why, because communities of practice (Wenger, 1998) emphasise community, identity, meaning and practice and subsequently have strong synergy with the discussion about principles and learning environments. Within communities of practice frameworks, the term *community* is used in the sense of "communitas" (Turner, 1969;78), that is, *belonging*. *Identity* is associated with *becoming* a member of a specific community in this case, *professionals for sustainability*. Relatedly, by incorporating profession-based learning, "learning and teaching engagements are founded on building a professional culture of praxis in and with the learner. Such profession-based learning experiences … engender culture -- 'communitas' (*belonging*) beyond formal learning environments to incorporate "profession" – business and industry as well as enhance learning" (Jennings *et. al.*, 2007). The use of profession-based learning then enhances *meaning* as knowledge and processes are directly connected to profession. Further, sensemaking is best achieved via process rather than content-based learning. Such learning *experiences* embed *meaning* as does *practice*, that is, *doing* based on real life scenarios or circumstances. This emphasis on profession-based learning draws on and further develops skills, knowledges and practices towards professions into which people are to enter and further enhances partnerships between industry and education towards *education about* and *for sustainability (EaS and EfS respectively)*.

The following five key principles of Education for Sustainability were also embedded into action learning cycles, for the three key stakeholder groups: students, industry and staff:
- "Imaging a better future: envisioning or futures thinking
- Systemic thinking
- Critical (reflective) thinking
- Participation in decision-making, and
- Partnerships for change."

(Source: ARIES 2008 Key concepts, working document, p.9).

"This type of approach would typically involve participants in addressing the following types of questions:
- What is our role in a sustainable future?
- What can we do to make a difference?
- What skills/knowledge do we need?
- How do we make a difference?
- Who has the power?
- How can we influence?
- How can we change our involvement?
- Can we design something better?"

Source: ARIES doc: Working document: *Key concepts*, p. 8.

Given the diversity in the student cohorts within and between courses, consideration of ethnogogy, the teaching of students from differing cultural backgrounds was also pertinent for this project as well as germane for education in general. This was especially true for the postgraduate course 7109HSL, which had no domestic students. Subsequently, as extant literature suggests course "delivery" considered the following principles/strategies:
- slowing the pace of learning (Noronha, 1992);
- tailoring curricula to accommodate differing student needs (Hofstede, 1986; Ladd, 1999, Williams, 1997);

- contextualising the application of theory into practice by taking into account globalised settings and case studies (Abdalla, 1993);
- developing reflexive learning (Guile, 2001);
- accounting for the level of English literacy that some students bring to the learning setting (Wicks, 1996);
- acknowledging the restricted specialised English-disciplinary vocabulary-expertise of students (Narduzzi, Coleman & Huntsman, 1993);
- understanding of differences between writer- and reader-responsible languages (Swales, 1990).

As noted above there is a need for all students, convenors, and industry members involved in the project to be reflexive by critically examining outcomes of actions, considering the effectiveness of such actions, and adjusting future applications and usage. In particular we were mindful of the following with regard to reflexivity being:

> "about 'ways of seeing which act back on and reflect existing ways of seeing' (Clegg and Hardy, 1996: 4). It involves 'metatheoretical reflection that is a form of inquiry in its own right', but also 'an applied practice that, while drawing on general metatheoretical categories, is involved integrally … in the overall process through which research is produced' (Morrow, 1994: 228)."
>
> (Alvesson & Sköldberg, 2000, p. 248).

Project methodology

The project used action research (see Lewin, 1948; Kemmis & McTaggart, 1980, 2005). Figure 3 also demonstrates the iterative nature of action research and this figure represents the processes that evolved in the progress of this project. While the overlying theoretical paradigm informing the project was participatory action research, the team incorporated critical theory into project planning with specific regard to the nature of business partners. The team invited small to medium enterprises to participate in this project in order to redistribute knowledge and power from traditionally included large-scale corporations to MSMEs who by nature of the scale of their enterprise may be marginalised from participation. While small in scale they are large in number and tend to be "othered" with regard to knowledge and skills. The team subsequently sought to redress this, as a consequence, the methodology might better be labelled action research informed by critical theory as its key methodology.

The tourism enterprises in this project were general tourism operators who were contacted through various industry associations and groups, networks, as well as via personal connections with individual operators. We aimed to draw on a number of tourism MSMEs types, adventure travel, marine tourism, bed and breakfast operators, ecotourism and more. Subsequently, as already discussed, we targeted the small end of business rather than the corporate side. Via action research cycles, the project aimed to establish baselines for sustainability practices and measures for up to 10 individual MSME businesses. That baseline was to be used to benchmark (compare/contrast best practice with another industry or same industry) as well as to develop future policies, guidelines and travel experiences. Students were involved and served as co-facilitators of this process. In the course of moving through iterative action research cycles, the originally planned action research processes were revised in the following ways:

a. Workshops with students and industry were not conducted. Participation became more individual enterprise focussed with students in conjunction with course convenors and these constituted communities of practice.

Figure 3: Action Research Cycles

Issue
Diagnose

Plan &
Design
research

Revise
plan

Revise
plan

Act
Collect
data

Act
Collect
data

Act &
Collect
data

Monitor
Observe

Learn &
Communicate

Action

Monitor
Observe

Reflect
Evaluate

Monitor &
Observe

Reflect
Evaluate

Reflect &
Evaluate

Cycle 1	Cycle 2	Cycle 3...

Project management

10
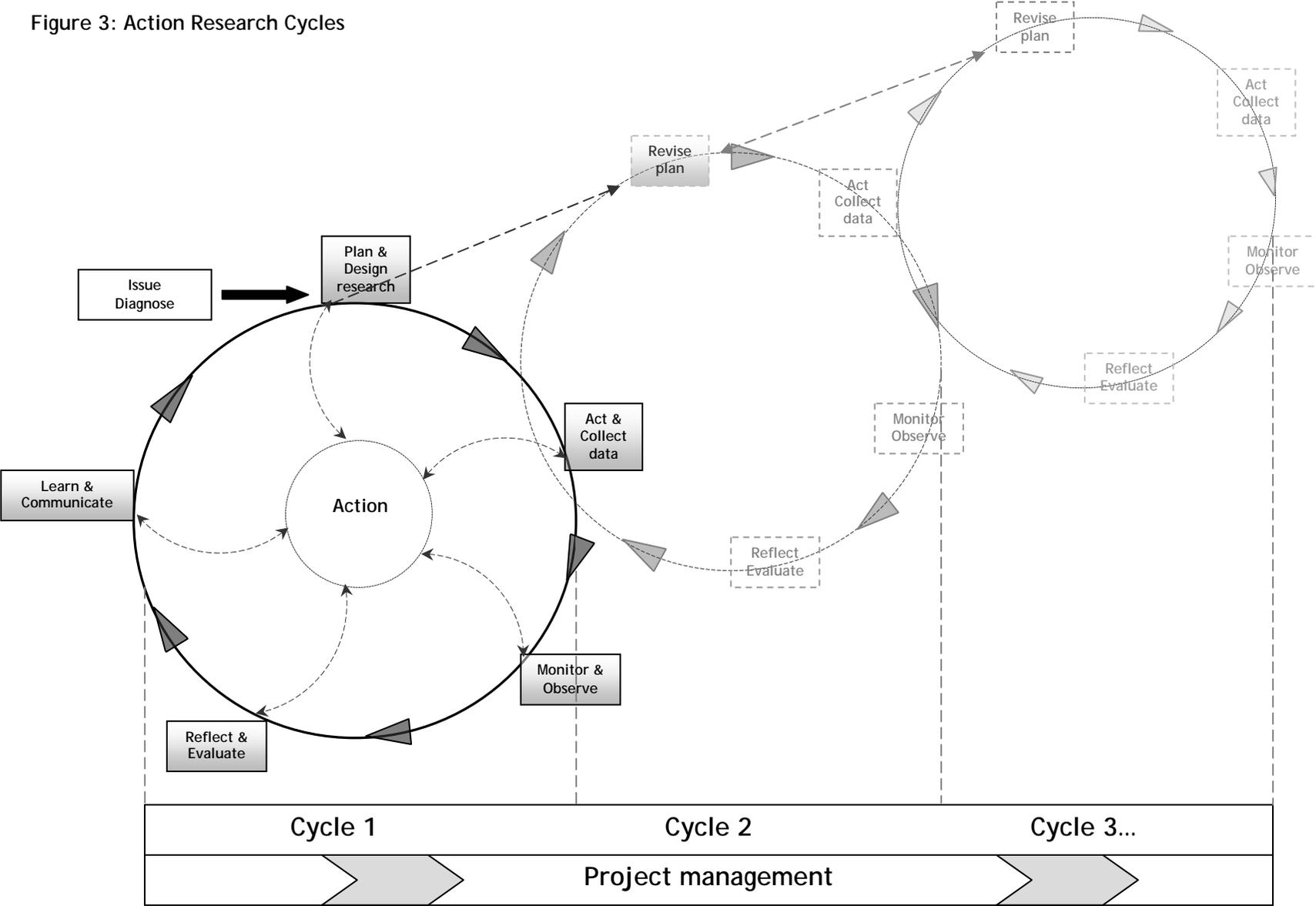
b. Development of communities of practice online networking site away from usual networks was not developed. The project team used existing network functions and communication media.

c. Recruitment of students was unable to commence until the start of semester over Weeks 1-3, when course enrolments were established.

d. Questionnaire re: knowledge, skills and practices were established in Week 4 (commences 31 March 2008) rather than in Week 1, once the student cohort had stabilised.

e. Focus group discussions with industry participants were replaced with interviews.

More detail with regard to changes that naturally occur as part of action research cycles are presented in the individual course narratives that are presented later in this report.

Methods

As already noted, this project is situated in participatory action research with influences from critical theory orientation. The main methods used to capture the "project-in-action" included: lived experience, reflexive team conversations, team journals, reflexive journals, interviews, focus groups, and student learning materials.

Lived experience involves "a reflexive re-living and a reflective appropriation of something meaningful" (Van Manen, 1990), in this case, the participatory action research process of embedding and engendering sustainability principles and practices for small tourism business enterprises.

Reflexive team conversations were held on a weekly or fortnightly or "at need" basis. These were recorded and reinterpreted using content analysis (this is explained on page 22 under the "Interpretation" heading). In addition to team conversations, each convenor had a reflexive dialogue with the project assistant to assist with weekly reflections regarding the project. These were captured digitally and transcribed. This process significantly enhanced the reflexive journal keeping.

Team journals, initially, team conversations record keeping was via notes of key points, with the appointment of the project assistant this shifted into digitized conversation recordings. These were then transcribed and served to capture the depth of conversation rather than only key action and modifications to action learning and research cycles. These then became our team journal entries.

Reflexive journals were kept by individual project team members and by the students. The project team recorded their journal reflections on a weekly basis and these were digitally captured in conjunction with conversation with the project assistant. Students maintained their journals on a weekly basis in 3202HSL Tourism Enterprise Management. Students were given and encouraged to use journals for their own reflexive praxis in 7109HSL, Current Issues in Leisure Studies.

Interviews were also used. These were framed as conversations to enable more interaction and freedom of flow regarding the processes associated with engendering and embedding education. Interviews as conversations occurred with students and with MSMEs.

Focus groups were held with students as a means to summatively evaluate the project and the students' learnings.

Student learning materials were diverse and included critical scorecards, summary pages, indices reports, written reflections, exam responses, direct contact with industry followed by debriefs with course convenors, and evaluation reports.

The variety of methods used meant that the team was able to "crystallise" the varying facets of the project and the four individual course-related action learning cycles. We have used the term "crystallise" instead of "triangulation" because:

> "the central image for qualitative inquiry should be the crystal, not the triangle. Mixed genre texts in the postexperimental moment have more than three sides. Like crystals, … the mixed genre text "combines symmetry and substance with an infinite variety of shapes, substances, transmutations …. Crystals grow, change, alter … refract within themselves, creating different colors [sic], patterns, arrays, casting off in different directions" (Richardson, 2000, p.934)." (Denzin and Lincoln, 2005, p. 6)

Additionally, the term triangulate is associated with surveying and in particular with achieving a fixed location or perspective, and has specific links to "validity". Validity is contrary to the intentions of action research processes. In action research, a number of social processes operate, which are multiple in number and are constantly overlapping each other. Validity is not an appropriate term to use. A better term is "goodness of fit", that is, how well the reporting matches all stakeholders' perceptions of the experiences. Subsequently, in using action research, we acknowledge that we are unable to provide an exact representation of all these multiple perspectives/realities. We recognise instead that we can only provide a variety of views – that is, to represent a number of facets of our collective experiences.

Interpretation of project team empirical materials

As noted above, processes were established to capture ongoing development of the team members as they participated in the action learning cycle. Specifically these included weekly reflections from team members that were accumulated and 'content' analysed to capture the process and progress of change from a personal perspective and to monitor the development of knowledge from within the team interaction and also from interactions with students and the broader industry community.

On a weekly basis, a range of topics/questions were used to focus each team member's reflections on *EaS* and *EfS* with students. These topics/questions served as prompts for engagement of the team members in the reflexive process. The range of topics considered is listed below.

1. What changes have you made to the course?
2. What were you doing before?
3. How are you teaching sustainability?
4. What changes have you had in your reflections in the ARIES project?
5. What has it been like in the first (three) weeks?
6. Are the students interested?
7. Have you asked baseline questions?
8. What could we do better?
9. What was your focus for this week?
10. What was the sustainability related teaching/learning engagement?
11. How did the students respond to it?
12. If there is an assessment item coming up how are you preparing the students for it and how does it associate with sustainability?
13. How have you found student participation in the ARIES related side of the course?
14. Have you had any assessment at this point in time and when are the due dates for assessment?
15. Anything extra that you want to comment on related to the students' activities?

Interpretation of student based empirical materials

Content analysis was used throughout as the primary interpretive method for understanding student based empirical materials. In order to demonstrate this process, the interpretation of students' baseline knowledge about and for sustainability is explained.

In order to establish a baseline for the measurement of student's initial understanding of sustainability a content analysis of written components gathered early in the semester was undertaken. A content analysis is defined by Berg (2007) as "a careful, detailed, systematic examination of a particular body of material in an effort to identify patterns, themes, biases and meanings" p. 304. The students' definitions were collected verbatim from informal class exercises (3202HSL), exam questions (3119HSL) or assignment items (7109HSL). To identify the students' subjective definitions of sustainability a combination of both word and phrase elements were identified as content units with the criteria of selection rules being maintenance of exact words or literal terms as the *in vivo* codes, which became our constructs. Tally sheets were created with each construct (category) listed at the top. Determination of the strength of the categories was achieved by identification of the magnitude of the proportion of the sample that made similar statements. Three plus (3+) was considered a pattern. The wording of statements, as well as patterns in the empirical material also conveyed the students' understandings. Refer to Table 2, page 50 for details.

A major understanding was indicated by the manifest content of an 'environmental' aspect that was also supported by some undertones such as mention of 'energy conservation', 'water management', 'waste management' and the words 'protect' or 'conserve', along with 'pristine' , 'original' and 'undamaged'. A clear need for human interaction was also indicated with 'maintain' 'managing' and 'carrying capacity'.

Further inductive identification of categories showed the second major indication of meaning as an 'ongoing' or 'future' component. Approximately one third also indicated 'resident community', 'culture' and 'society' and 'economic' as integral parts of sustainability. A content analysis of these first baseline definitions reveals students initially regard 'sustainability' as almost partitioned categories rather than a holistic concept.

Interpretation of industry based empirical materials

Industry empirical materials were interpreted using successive approximation. Successive approximation involves researchers in repeatedly coding and categorising. Tentative codes are advanced as evidenced in the empirical materials; these are repeatedly modified and examined to ensure "goodness of fit" to the original empirical materials (Jennings, 2001).

Evaluation methods

"Evaluation is a structured, staged process of identifying, collecting and considering information." (Commonwealth of Australia, 2001). This project used a number of evaluation methods throughout the project's life. Such methods included formative and summative evaluation - formative evaluation being progress evaluation and summative evaluation being endpoint evaluation (Jennings, forthcoming). An alternative view proffers that "formative evaluation is the process of determining the achievement of project benchmarks in order to refine project strategies in the course of project implementation (Hernández, 2000)"; while "summative evaluation is the process of determining the failure or success of projects by matching outcomes to goals" (Jennings, forthcoming).

The particular formative evaluation methods used in this project included:

- reflexive journals by students and course convenors
- reflexive conversations between project team members
- reflexive conversations with industry participants

- dialogue with ARIES team
- dialogue and reflexive conversations with other business school participants
- interviews with students and industry
- monitoring shifts in understanding.

The particular summative evaluation methods used in this project included:

- reflexive focus group involving project team members
- reflexive focus groups with students from each of the courses
- reflexive interviews with students from courses
- formal evaluation using learning/teaching questionnaires
- content analysis of empirical materials
- comparison of pre- and post- empirical materials
- comparison of pre- and post- reflections with regard to knowledge, skills and practices associated with sustainability for students, academics and business partners
- industry review via workshop and project material dissemination processes
- ARIES and DEWHA review
- peer review of processes associated with dissemination of education *about* and *for* sustainability
- peer review process associated with journal article reviews.

Overall project reflections on methodologies and methods

Knowledge
The processes of action research and action learning were not new to the team. What was new knowledge related to the "power" of linkages of various aspects of action research and learning processes that arose from collective team thinking, that is, "dialogue" and issue resolution.

Processes
The action research cycles also influenced the processes that were used in courses with positive improvements to "delivery".

In terms of praxis, the linkage of teaching, research and industry aspects was a motivating strategy for academics. This had positive spin offs in terms of the potential for academics to champion sustainability not only in courses and programs but the daily organisational operating procedures and culture of a university organisation. The action research methodology was invaluable to achieve this motivating strategy. It was also motivational to focus on process when much of university life is predicated towards performance and outputs.

Outputs
The team developed an innovation on written journal keeping via reflexive conversations with a sympathetic (to the project) audience/listener. The team had weekly "couch sessions" (to use the term in the metaphoric sense) with the project assistant. These sessions were digitally recorded, transcribed and returned to the course convenors. The team recognised the value of this process for increasing reflexivity and critical thinking regarding the overall action research project cycle and individual course action research cycles. In addition, the reflexive conversation transcripts resulted in further reflexivity and informed the writing of this report. The sessions also ensured regularity of reflections.

Individual courses narratives/storying (four stories)

Course: 7109HSL Contemporary Issues in Leisure

Course Convenor: Carl Cater
Enrolments: 40 students
Semester 1: Start 03/03/08 End 28/06/08
Level: Postgraduate
Core: *Graduate Certificate in Business* (Tourism and Hospitality pathway)

Overview

Forty predominantly international students in a Graduate Certificate pathway program were involved in this course in Semester 1, 2008. The course examines the relationship between the growth of leisure, sport and tourism and the roles assumed by commercial, voluntary and public sector organisations in influencing consumer behaviour in these areas, and considers the implications of these roles for service provision in a mixed economy. This examination provides a context for reviewing contemporary issues that impact on the management of organisations involved in tourism, sport, hotel and event management. Issues of sustainability and corporate social responsibility are central to this discussion. The effective management of leisure services calls for skills in identifying forces of change (issues), using appropriate strategies for analysing issues, planning and implementing strategies for managing change, and evaluating the outcomes of the change process. These skills are developed in the course through seminars, a mid-semester exam and a final issues paper.

Course content in 2008

This course maintained an action learning approach in exploring the issues currently significant in the study of leisure. Strategies for identifying issues and working through processes of change were developed through a proposal, a works-in-progress seminar, and a final paper. Students used search techniques, literature review and learning community consultation processes to identify broad trends impacting on leisure contexts as well as preferred futures. Course outcomes included:

1. demonstrated understanding of the roles of government, the market and voluntary sectors in structuring the nature and distribution of services in tourism and hospitality, sport, and leisure-related events in Australia;
2. demonstrated an appreciation of policy frameworks, participation trends, and issues related to the management of tourism and hospitality, sport and leisure-related events;
3. demonstrated skills in scholarly inquiry and critical thinking in relation to the analysis of management and policy issues associated with tourism and hospitality, sport, and leisure-related events.

At the start of this project, this course had some, but limited discussion of sustainability and corporate social responsibility. Particular focus was placed on conceptualising and understanding concepts related to the participation and consumption of tourism, sport and leisure.

Student knowledge re: sustainability beginning

Students' knowledge of sustainability principles for this course was extremely varied. As this course serves as a pathway program into the Masters suite, where students can specialise in event, sport or tourism and hospitality management, the students come from a variety of educational and national backgrounds. In an early assessment, only six out of the class of forty provided definitions of sustainability that closely reflected the general

Brundtland definition with intergenerational equity at its core. Most grasped the dictionary definition with some extent of the 'ongoing' nature of sustainability, and environmental concerns were also present. Far fewer acknowledged the centrality of ethics and corporate social responsibility in their definitions.

Table 1: Content Analysis – major themes identified or words used as components of understanding

Environment	Undamaged Original Pristine	Residents Community	Society	Economic	Protect Conserve
15	3	2	15	6	7
Ongoing Future Lasting	Managing Responsible	Renewable resources Recycling	Minimum Impact	Maintain	Climate Change Global Warming
29	7	18	1	3	3

Convenor knowledge re: sustainability, action learning; action research, education about sustainability, Education for Sustainability

My thinking about sustainability has been shaped by undergraduate and postgraduate degrees in Geography with a strong cultural/social focus. I find it somewhat ironic, then, that sustainability has only recently reached a 'tipping point' in terms of public awareness, since I seem to have been immersed in these discourses for over twenty years. Therefore, I am to some degree amused by the idea that sustainability is a 'new' concept, but also concerned that media interest has the potential to turn it into another 'fad'. As a cultural geographer, I am acutely aware that the concept of sustainability is socially constructed and politically negotiated in line with Hall; 'It is highly political. The goal of sustainability is not a given. It is a contested concept that we need to be arguing for' (2000, p. 205). However, I am also aware that pragmatic solutions must follow critical thinking, especially in terms of getting industry to 'buy-in' to these ideals. Perhaps my other geographical 'hangover' is a preference for field trips as a forum for effective experiential learning. In recent years, I have taken students to see community-based tourism operations in New Zealand, Papua New Guinea and Nepal. Overall, my conceptual understanding of sustainability rests on the complexity of the issue/s and the need for a holistic approach that identifies multiple pillars. Without the presence of all of these foundations, it is very likely that the others will fail, however well intentioned and planned they might be. This quadruple bottom line is represented in the diagram in the following figure:
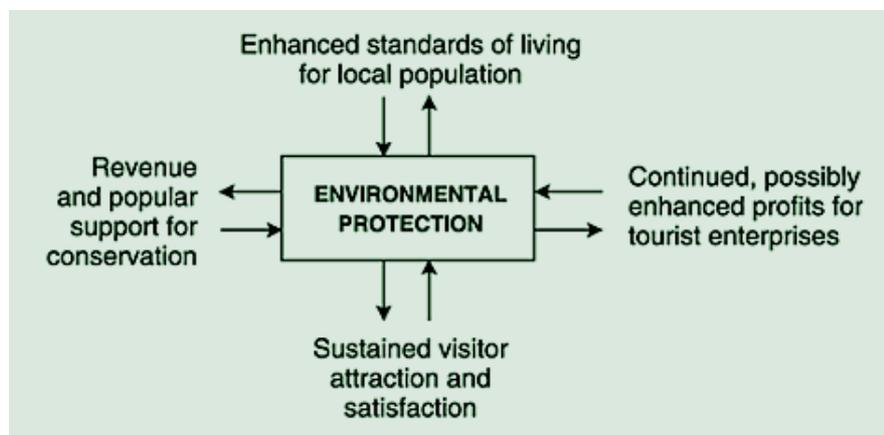

Figure 4: Four elements of Environmental protection

Industry knowledge re: sustainability, action learning; action research, education about sustainability, Education for Sustainability

As part of this project I engaged with an ecotourism roundtable and certification workshop held on the Gold Coast in conjunction with Tourism Queensland and Ecotourism Australia. This was an information session for nature-based SME tourism operators to hear about Tourism Queensland's nature-based marketing initiatives for the year and promote accreditation through Ecotourism Australia membership and 'ECO' Certification. However, discussions on important local ecotourism issues facing the industry were relatively free-ranging. Although sustainability was not discussed per-se, it was implicit in most of the discussion and is of course central to most 'eco' accreditation processes. As has been my experience in the field, most ecotourism operators are passionate about the environments in which they work, and are keen to preserve its characteristics whilst sharing it with others. Given its recent media focus the potential impacts of climate change, and subsequent changes to the regulatory and long haul travel environment were a dominant source of concern. As these operators were nature-based, a strong bias towards the environmental pillars of sustainability, at perhaps the expense of ethical and CSR was to be expected. However, the fact that this is replicated in the Ecotourism Australia 'certification workbook', which devotes well over three quarters of assessment items to the former, is of note:

> Carl Cater (CC): 'the workshop on Friday with Ecotourism Australia was actually quite productive . and I was quite .. well (a) I was intrigued to see how extensive the Ecotourism Australia latest manual is . . ah certainly there's this dominance .. you know the whole climate change thing has been interesting cos its reinvigorated the sustainability debate BUT it has lead to it all being focused on the environment. So the environment is still very heavily done although looking at the Ecotourism Australia manual the ah … yes there is business ethics and business sustainability in there but it is ah .. a minor part .. how many pages is that .. ethics there's twenty pages and the environmental stuff is a hundred pages … and social sustainability is a little bit sort of tacked on at the end … that's probably only… ten pages … so it shows the dominance of where its all going … nevertheless seeing how Tourism Queensland and this sort of partnership between Tourism Queensland and with Ecotourism Australia .. and the operators … and the way that they're profiling Australia as a high quality destination for sustainable .. and the best practice .. on the route that they're going down is interesting . So that was pretty much what came out of that . Lots of minor points … concerns .. people are obviously worried about fuel price rises and what might happen if it all goes … you know skyrocketing … yeah interesting'. (18 April 2008)

If I was to make one important comment on my experience with industry and sustainable tourism solutions, I would echo that made by many others that "the bottom line of green is black". Without realistic financial planning and foresight, even the most well-intentioned sustainability initiatives are doomed to fail.

Changes to Course

The ARIES project made a significant change to the *Contemporary Issues in Leisure* course in terms of stimulating education *for* and *about* sustainability. As this was my first semester teaching this course, embedding critical and holistic thinking was central to my aims. Attending the ARIES workshop in February gave me some good ideas how I could encourage thinking about sustainability through action learning processes inside and outside of the classroom. For example, in week 2 of semester, students in the class were introduced to the 'Linkingthinking' exercise based on Irving (2005). In this case a potent symbol of leisure, the Nike running shoe, was substituted for the cup of coffee, and the question posed as 'what did it take to get this here?' in small groups. Although it took a while to get students to think beyond the obvious logistic aspects, the ensuing discussion was fruitful, and a scribe was elected from the class to present some of the links on the whiteboard. A wide variety of nodes representing issues were derived, ranging from branding and identity

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issues to ethics and stakeholder discussion (e.g. child labour). Attempting to derive links and flows between these issues added another level to the discussion and concluded with the complex interactions of a multitude of factors. This was an extremely useful exercise, with the iterative development of concepts placed firmly within the student cohort.
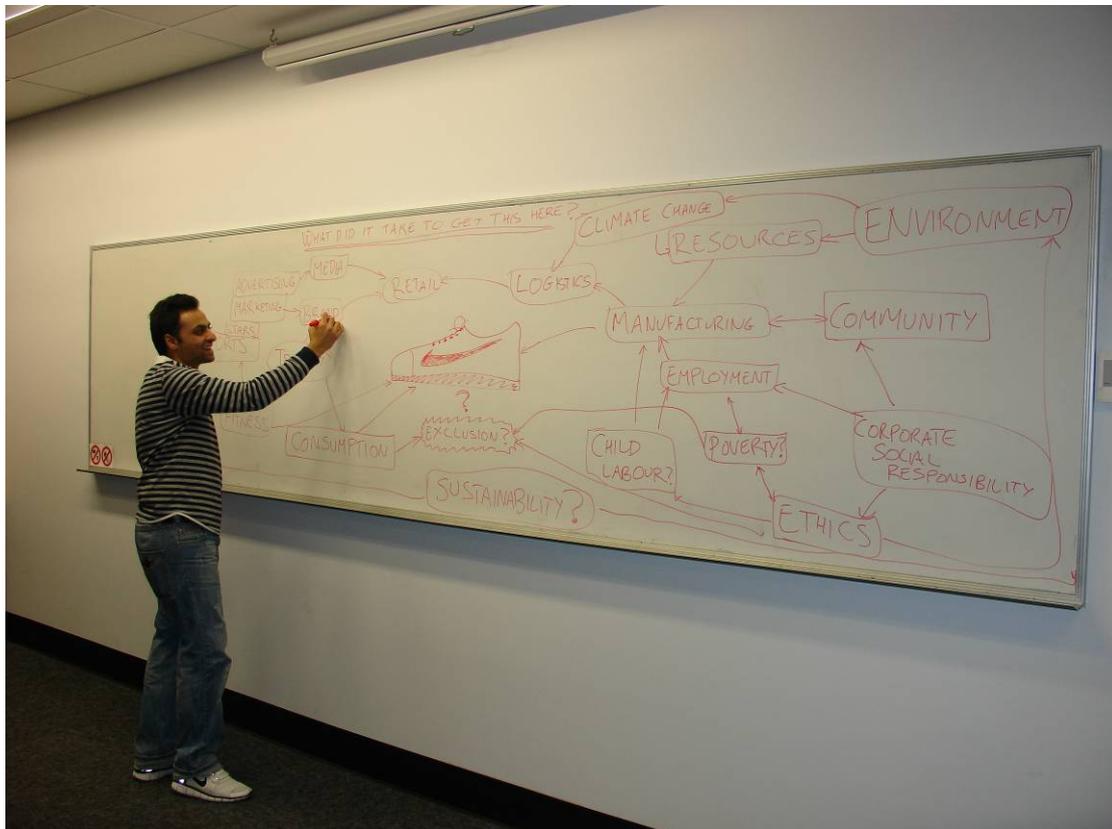
Image 1: 7109HSL Student recording the Linkingthinking dialogue as a mind map

Image 2: Linkingthinking exercise - mind map

A subsequent lecture introduced students to a short history of sustainability thinking, and contemporary examples to show lay and technical meanings of the term. This was not present in earlier versions of this course. Although this might be seen as a rather traditional learning process, it is important to equip students with baseline knowledge of concepts. This was followed by discussions and reflections on how these issues might apply to other leisure issues. Although *Education for Sustainability* was a major pillar of this course, the remit of 7109HSL is broader than this particular concept. Since I was trying to encourage the sustainable individual assets of critical thinking and project ownership, I was unwilling to make all students study aspects of sustainability in their issues paper. Most wished to identify a specific issue in leisure management relevant to their personal interests and

values. Students, who wished to be involved in the more focused ARIES project, involving action learning/Education for Sustainability with industry, self-selected this opportunity. The remaining students were nevertheless engaged with an action learning approach, following repetitive cycles of planning and designing, reflecting and evaluating and learning and communicating:

Education *for* and *about* sustainability (non-ARIES project students)

Linking/thinking & Sustainability Principles
Cycle 1

Issues Proposals
Cycle 2

Convenor & Class discussions
Cycle 3

Issue development
Cycle 4

Issue presentation
Cycle 5
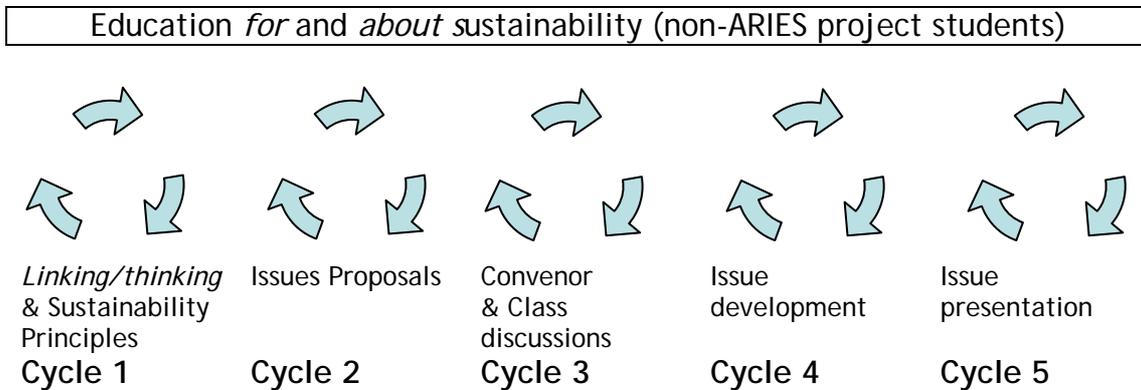
Those students who opted to be involved in partnering with a MSME followed a parallel track, joining the community of practice of the course convenor and a marine tourism operator. For these students the action learning took on a research component with the following cycles:

Education *for* and *about* sustainability (ARIES project students)

Linking thinking & sustainability principles
Cycle 1

Meanings and Measuring
Cycle 2

Ecotourism workbook
Cycle 3

Partner discussions
Cycle 4

Site evaluation
Cycle 5

Reporting and Feedback
Cycle 6
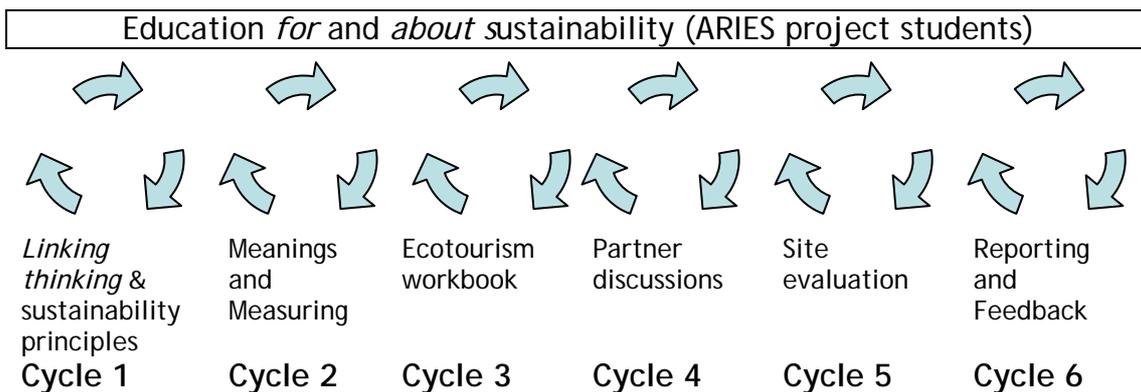
Initially the conceptual knowledge of sustainability learnt and tested in the above exercise was further developed through the task of identifying what is meant by sustainability and how can we measure it? This was followed by supplying the students with the ecotourism Australia workbook for critical evaluation. The third phase was to develop a list of key meanings and issues for sustainability that could be discussed with the industry partner in the fourth phase. Action research was implemented in the fifth phase where students were allowed to partake in the tourism experience and observe and evaluate the operation from a sustainability perspective. These students were given full access to patrons, staff and the environments in which the company operates. This enabled the students to evaluate the operator in order to see how they interpret sustainability principles associated with climate change, as well as energy and water usage. This baseline was then used to benchmark as well as to develop future policies, guidelines and travel experiences in a report, which is presented to the operator in a subsequent meeting. Examples of suggestions made to the operator were changes to environmental education, operating practices and customer communication.

Action learning processes reflections

Embedding action learning cycles in this course, as outlined above, was vital for effective *education about* and *for sustainability*. The Linkingthinking exercise was very useful at the outset for giving the class ownership over their learning and the issues surrounding sustainable practice. By implementing parallel learning tracks, for the ARIES and non-ARIES students, different learning styles and preferences were enabled. Given that the majority of students came from quite traditional Asian educational backgrounds, I was surprised and delighted that they engaged with these learning processes so readily:

> CC: "so I've just had a meeting with the students today so they're going out Monday .. so they are quite keen .. and again I'm always surprised how much work they've done" (9 May 2008)

Indeed, once the cycles were commenced, I really felt that I was there only as a guide, as students began to take ownership over their learning process. This was particularly apparent when I took the students for their first meeting with the industry partner. I felt that I needed to contribute little to the discussion, for the students and the industry were beginning to create their own community of practice with a two-way flow of ideas and observations. By developing a report but deliberately meeting to discuss the findings in coming weeks, we embedding systemic change in the organisation, such as integrating sustainable principles into their mission statement, which will contribute to their accreditation process later in the year.

Changes to the baseline

Evolving "stuff"
This evolution and development of a community of practice will continue, as the students have already indicated an interest in writing and providing feedback on the operators' whale watching trips later in the year. There is also potential for these students to contribute to the sustainable development of new markets and employment possibilities down the track.

Student feedback
The students' engagement with industry from a sustainability context helped to develop their contextual knowledge as well as their research skills and reporting strategies.

Industry feedback

Operators found involvement in the process extremely useful, particularly as it helped to frame and negotiate their practices as they were going through the accreditation process. These translate into direct actions, such as alterations to their waste management policies. One of the students has helped operators to integrate principles of sustainability into their mission statement.

An interview was conducted with the industry partner in late 2008 to ascertain the impacts of the ARIES project. The partner found being involved with the project a useful process, and was grateful for the student insights. They noted that the timeline for their own accreditation process with Ecotourism Australia had slipped as business objectives had taken priority.

The industry partner was presently most concerned with the issue of risk management in relation to business sustainability. This had been compounded in the wake of a publicised accident earlier in the season in a rival company.

Management of sustainability in risk assessment is made more difficult by having to subcontract certain services and facilities to other providers, and it is not current procedure to immediately know what risk management (or sustainability) procedures they might have in place. However, the 'bad guys usually get flushed out'.

There was also reflection on a perceived lack of legislation in Queensland for marine tourism operators, in contrast to New South Wales and Victoria, where legislation is much stronger. The Queensland approach tends to appear to be predicated on guidelines in order to influence and encourage operator practice (perhaps regulation is stronger in the Great Barrier Reef Marine Park Authority but that leaves the rest of the state somewhat 'undercovered').

Finally, industry is concerned with making *doing* sustainability 'easy'. Firstly, there is a need for templates to make manuals and accreditation easier to understand and implement, and government agencies could help in this regard. Secondly, there needs to be recognition from government that conducting audits or implementing sustainable practice costs a lot of money. Furthermore, the company may not necessarily have the resources to do it, and often this is more human resource (in terms of personnel and skills) than financial.

One might perceive these sentiments as being somewhat reactive, but it is interesting to note that operators, quite rightly, take a broad lay understanding of sustainability, couched most strongly in terms of business viability. It is suggested, then, that sustainable business education takes a holistic view of sustainable business practices, where attributes such as risk management are a central (and cross-sectoral) component of sustainability management.

Convenor feedback

- I found that both industry and student perceptions of sustainability are broad.
- Industry and accreditation agencies appear to remain heavily focused on environmental aspects and consider social sustainability as an afterthought.
- My personal concern is for the need for practical outcomes of sustainability initiatives. There is a need to be concerned about rhetoric over action.
- My personal concerns regarding the restrictive use of discourse and terminology particularly in relation to engagement with the practical world of industry.
- My delight and surprise at the depth of student uptake of the sustainability concept.
- I found students are very keen to participate in action learning cycles.

CC: "Ahm . I suppose .. well partly the language one still comes up .. its something I do still feel quite strongly about the .. you know I think its very important that they recognise that not everyone speaks the same discourse as them .. and that shouldn't matter from a methodological standpoint .. they need to recognise that .. so for me its really about Community of Practice .. airing aspects .. in the iterative program processes is what's key to the whole learning bit ... and as long as you've got those I think that's all that matters .." (9 May 2008).

CC: "My overall thinking maybe of sustainability hasn't changed but maybe the practice and certainly the educational element has, and it's refreshing to see the involvement with operators, and to see they are taking things on board. The industry operators consider sustainability important, and are becoming involved on their own accord so that was what interested me was to see that they recognise the value of having eco certification. I think the students have benefited from particularly seeing how sustainability works in practice." (23 May 2008).

Course Convener: Robert Hales
Semester 1 (Start 03/03/08 End 28/06/08)
Level: Undergraduate
Degree: Bachelor (Tourism and Hospitality suite of degrees)

Overview

From the Course Outline in 2008 (formulated within the ARIES Project Timeframe):

This course provides a conceptual basis for understanding sound professional practice in the development and management of ecotourism opportunities. Students will be provided with the opportunity to critically reflect upon their own direct experience of ecotourism operations in terms of concepts and research presented during lectures.

The course represents the theoretical foundation for the effective management and implementation of a variety of nature based opportunities that are underpinned by the philosophy of sustainability. The course is designed to enhance the student's knowledge of and interest in the nature, theoretical basis and practice of ecotourism in Australian and international contexts.

Ecotourism is an elective course within the Bachelor of Business (Tourism, Leisure, Hotel and Sport Management) and should be of interest to other GBS students as well as undergraduates and postgraduates in other programs, especially Environmental Science and Environmental Planning.

Baseline

Course content

In 2006 the course had the following learning outcomes:

Upon completion of this course students should be able to:

1. *understand the theories of ecotourism experience.*

2. *critically evaluate ecotourism business operations and planning contexts.*

3. *understand the benefits and professional status of ecotourism.*

4. *apply knowledge of a variety of interpretations and approaches to ecotourism, in a number of case studies.*

5. *apply knowledge of sustainable ecotourism to management practices.*

Student knowledge re: sustainability

The complexity of students' theoretical and practical knowledge of sustainability prior to the commencement of the course was varied. This was due to the fact that *Ecotourism* is taught as a core subject in an International Tourism Undergraduate Degree program as well as a large proportion of students coming from other majors/programs taking the subject as an elective. (This program is an undergraduate program and is different to Dr Carl Cater's course mentioned in the previous section).

Knowledge about sustainability was noted to be higher among those students taking this subject as an elective. This was due to the fact that these students had considerable exposure in their undergraduate courses to the concept and practice of sustainability. These students were mostly from *Environmental Planning* and a generalist *Leisure*

Management degree. The students who chose *Ecotourism* as an elective also may have had a personal interest in sustainability.

Convenor knowledge re: sustainability, action learning; action research, education about sustainability, Education for Sustainability

My understanding of sustainability has developed in 2 phases of my professional life. Before becoming a lecturer I worked as 1) an outdoor/environmental educator as well as 2) a guide in the adventure/ecotourism industry for 10 years. During this time, I developed a working knowledge of practical ways of implementing education initiatives into my practice. This was helped enormously by the completion of a Graduate Diploma in Outdoor Education in 1992. One of the theoretical cornerstones of the program was experiential learning and gaining this knowledge/practice helped my skills in facilitating of learning experiences that are still relevant in university contexts.

In 2003, I completed the *Masters in Environmental Education* at Griffith University and during this time was not only influenced by the critical pedagogical approach but also the passion and enthusiasm displayed by John Fein, Jo Ferreira and Barry Law (From Canterbury University, New Zealand) in their approach to teaching education for the environment. Recent developments here at Griffith University in changing the name of the *Master of Environmental Education* to the *Master of Environment (Education for Sustainability)* indicates changes in the way education and environmental issues and solutions are conceived. This is also reflected in the developments in sustainability initiatives in GBS.

With the opportunity to teach *Ecotourism*, I have the dual privilege of not only crafting ways to teach *Education for Sustainability* (sustainability is one of the 4 criteria that defines ecotourism) but also crafting ways that students will teach *about sustainability* through progressive approaches to environmental interpretation (another one of the 4 criteria that defines ecotourism).

Industry knowledge re: Sustainability, Action learning; Action research, Education about Sustainability, Education for Sustainability

Based on the cycle of action research, this stage was not reached in this course.

Changes

The major changes to the course during the project were as follows:
1. Changes to teaching
   a. Addition of critical thinking conceptualisation activities in classes for students.
   b. A focus on real life critique of tour operators as opposed to an in-house sheltered context.
   c. Reflection on personal teaching practice as a result of the processes engaged in through the ARIES project.

2. Changes to assessment
   a. Inclusion of exam questions that focus on problematising sustainability. Problematising, in this sense, is understanding the issue/matter in question from a number of stakeholder positions and also from a number of theoretical viewpoints.

   b. Inclusion of a question on the students' personal understanding of sustainability in the exams. The same question was given in the mid semester exam as the final exam to determine differences in student understandings. Students were informed that the final exam would have the same question in the exam as the mid semester exam. Teaching was also directed towards shortcomings in their conceptualisation of sustainability based on the results of the mid semester exam.

    c. Contact with an ecotour operator was undertaken after the completion of the assignment in which students audited and critiqued the ecotour. This contact was organised by me (Rob Hales) and a written power-point slide presentation and the assignment that the students prepared was sent to the operator. Feedback from the operator to the student was mediated by me. All correspondence was either through telephone conversations or email.

    d. I needed to arrange the assessment task deadlines to reflect the extra action learning approaches/cycles that the ARIES project required. The deadlines were brought forward a week to ensure the reporting timelines for the ARIES project were incorporated..

3. Changes to students learning activities
    a. Production of posters in tutorials that outlines ways that appropriate, sensitive feedback could be made available to the operators.
    b. Resources placed online for access regarding the project.
    c. Resources placed online for developing critical thinking skills and concepts. This was evidenced in the use of key texts in the assignments completed by students.

4. Recommended changes to the learning outcomes of the *Ecotoursm 3119HSL* course for future implementation

    Upon completion of this course students should be able to:

      i. understand the theories of ecotourism experience.

      ii. understand the benefits and professional status of ecotourism.

      iii. critically evaluate ecotourism business operations in light of future visions of sustainability.

      iv. apply knowledge of 'education for sustainability' to ecotourism management practices.

      v. apply knowledge of process and community oriented models of ecotourism development to improve sustainable operations.

Action learning processes reflections

My reflections are as follows:

Interruption!: In actually writing the above statement I came to a major realisation about this project. We live in the harried world time where we can (falsely?) claim to be rushed when sitting at a computer desk all day. Time to reflect has become a prized commodity despite this being a stereotypical hallmark of academia. Being part of a process in which you are required to reflect is a major positive step but this is not the aspect that is innovative for me in this project. The feature that has helped with the time/reflection issue is the inclusion and combination of A) (potential) research output (in the form of collaborative papers outlined elsewhere in this report) with B) teaching practice and industry linkages. This has been the fundamental driver in my motivation for engagement in this project. Having said this I can outline some of the reflections:

1. In terms of the proposed ARIES action research methodology I think the "learn and communicate, plan and design and act and collect data" stages of student action learning has been done well by the students. As identified in point 2 below the inclusion of communication with operators and students are needed in the teaching part of semester (weeks 1-13). This would bring these elements of the ARIES action research cycle up to the high standard achieved in the first two elements

2. Linking assessment tasks to industry practice is a good concept. After possessing the information gained and writing the assignment on their experience (using critical academic perspectives) the feedback to industry needs to have been placed entirely within the semester of teaching. This would enable feedback from

operators to be worked into the reflection and evaluation stages by both the student and the operator.

3. I think a phenomenographical approach to developing critical thinking within a cycle of action learning would be a good idea. The idea that there are a range of understandings of sustainability of any given cohort and each student has differing depth of understanding in each of the aspects is important to developing a critical perspective. It is also a useful teaching tool. Feeding back the results of the final exam within the course teaching time frame would allow for review of the learning gained from the process of learning about sustainability.

Changes to the baseline

Upon the completion of the final exam, an evaluation of the difference between conceptions of sustainability of the students at the mid semester compared to the end of semester was made. This is represented in Table 2, page 50.

Student feedback

There have been anecdotal reports of a positive response to the action learning approaches involved in the course. There are also a large number of students who want their assessment of the eco-tour to be given to the operators.

Industry feedback

Many students have noted that the operators have been positive about the prospect of receiving feedback in the form of student assignments. In total 13 students engaged in the research project. Four organisations were involved in the project. The reports were not individual assignments. Up to 4 students could form a group to analyse the organisation. Student reports that critiqued the organisation/tour were sent to those organisations. After the organisations have analysed the report they were requested to provide formal and informal feedback to Rob Hales and the respective students. Communication of the feedback occurred through informal phone conversations between the operators and Rob Hales and emails between the operators, Rob Hales and the students. As already noted, MSMEs have many calls on their time, one of which was providing feedback. At the time of writing this report, not all feedback from operators had been received.

The operators that were involved found the process beneficial to their business and were grateful for the feedback. The feedback from one of the operators is tabled below (operator A). There were a number of students undertaking tours with this company. Each comment below is directed to 2-3 students per assignment. As is noted, some of the feedback from the operators; leads to further reflection by the students in regard to relevance and use value of their commentaries. Not unusually, such feedback is demonstrative of action learning cycles being iterative in nature. The operators' comments provide further opportunity for student learning.

Table 2: Feedback from operator (A) on the student critique of tours

Assignment 1
1. OK paper – safe but lacking any real creative thought.
2. Seemed to contradict a little – asking for a non built environment and then suggesting interactive multimedia on the tree top walk.
3. Questioned waste water use – something we do – however no water is used at the tree top walk – unsure if he meant up there or in the retreat.
4. Encourage visitors to touch and feel – not generally considered a sustainable practice with volume numbers.

Assignment 2
1. Not so sure about this one. Obviously the National Park is not "the company's National Park" – getting the name right is a pretty basic requirement.
2. Strangely – according to our records, we don't have a guide who was ever a chef, nor do we take tours of 100 pax with only one guide. A bus holds 28 pax and a walk maximum is 25 pax.

Assignment 3
I liked this paper because the student showed creative and insightful thinking and had a few innovative ideas – some of which I liked and may implement. 1. Good. 2. More aboriginal history and questioning the gifts on sale. 3. No concessions for students. 4. Culturally shallow – timeliness of the area should be a focus. 5. Encourage day visitors to stay overnight. 6. Smoker's canisters are provided – though we have very few smokers staying with us – most just visit for the day. Not so good. 1. …. is not a residential development and there are no permanent residents – it is commercial accommodation. Owners are subjected to strict bylaws however which do not allow pets or even live plants to be bought on site. 2. …. wrote a report on the …. - they had no other involvement.

It is heartening to see that students can actually contribute to the operation of an organisation that prides itself on its sustainability credentials. The comment noted in Assignment 3: "I liked this paper because the student showed creative and insightful thinking and had a few innovative ideas – some of which I liked and may implement." is testament to the level of engagement of some students in the course.

From operator B, there were general comments about the report. They indicated that they would incorporate some conclusions from the student assignments. However, they did not specifically state which of the aspects they would incorporate.

In both cases, I forwarded the emails from the operators to the students who participated in the research project. Some of the students replied to thank the operator for their time and feedback.

I will recommend to the convenor of Ecotourism (3119HSL) that when it is offered again in the second semester of 2009 that the two operators that gave feedback be included in a similar project to the one documented in the report. With the inclusion of the feedback from industry within the semester so the outcomes for students can be documented and enhanced.

Convenor feedback

I would like to implement many of the ideas I have gained through the process of undertaking the ARIES project. The major points would be:

- Inclusion of complete action learning cycles in the 13 week teaching period
- Inclusion of changes to student praxis in relation to education for sustainability in the course
- More upfront discussion of *Education for Sustainability* in weeks 1-3.

This may be hampered by the fact that I am not the main convenor for this course. After communicating my perspective and learning from this project the convenor, who normally takes this course, has agreed to introduce many of the recommendations I have made.

Course Convener: Gayle Jennings
Enrolments: 50 students
Semester 1 (Start 03/03/08; End 28/06/08)
Level: Undergraduate
Degree: Bachelor (Tourism and Hospitality suite of degrees)

The Tourism Enterprise Management course aims to introduce undergraduate students to some of the operational practices and challenges (underpinned by theoretical constructs) faced by today's public and private sector tourism enterprise managers. Expected student outcomes related to this course included:

1. Development of an understanding of the principles and contextual issues relating to the operational practices and challenges when managing a tourism enterprise.

2. Ability to acquire, interpret and analyse information, problem solve and find practical solutions to management issues relating to tourism enterprises.

3. Maintenance of a critical journal that contained critical thoughts, analysis and reflections regarding management issues relating to tourism enterprises.

4. Demonstration of the ability to articulately explain issues facing tourism enterprise managers through written responses and presentations to tutorial peers.

Critical reflection, discussion and evaluation was emphasised throughout lecture/workshops and tutorials. Online materials and links as well as readings sourced from selected materials supplemented lecture/workshop and tutorial content as well as contributed to critical reflection and discussions.

Source: 3202HSL *Tourism Enterprise Management* course outline.

What changes were made to this course as a result of participation in the ARIES project?

While the course aims remained the same as for 2007, a number of changes were made to learning/teaching engagements, tutorial activities and assessment. The significant changes related to explicit "education" of students with regard to critical thinking, reflexivity, education *about* and *for* sustainability as well as profession-based learning and explicit outlining of the seven conditions of learning. In 2007, the course included these but they were not explicit foci - they were integrated into learning experiences. Learning/teaching engagements, tutorial and assessment activities involved respectively a smaller number of guest industry speakers in the lecture series, an individual student-selected and directed field-trip to a tourism sector enterprise, individual oral presentations on student-negotiated topic relevant to weekly content, and an exam. Upon reflection, although there was an emphasis on processes, the examination process reinforced an implicit emphasis on content despite the nature of the questions inviting students to offer their own critiques.

Last year the assessment activities were focused around issues in tourism enterprise management and we dealt with a variety of industries that were associated with tourism attractions. The students undertook an individual field trip and made a report about it based on managerial and operational issues. They were to identify ways to rectify any of the issues and/or provide suggestions for the future. They also had an oral presentation which was linked to Edgell's (2007) top ten issues in tourism and organisational and management issues associated with the industry enterprise that was the focus for that week. The students also had to sit a final exam which consisted of four questions. One question was compulsory and then a choice of three questions from a set of eight. The course last year was associated with tourism enterprise management; managerial and

operational issues and trying to have students focus on the top ten issues that Edgell indicated. One of these was sustainable tourism, and climate change was included as was natural disasters. This year we've changed the whole course quite considerably. We had guest lecturers last year and we are continuing with those guest lecturers/speakers in 2008. This year the guest speakers were asked to address issues of sustainability. Every assessment task incorporated the students reflecting on sustainability issues for managers of tourism enterprise management and management associated with the lecture theme elements. The students had to consider business ethics and corporate social responsibility and sustainability. These were the key three themes. Last year, it was only if the students chose sustainability as their topic; whereas this year it was a constant theme.

Guest speakers from industry also talked about how sustainability impacts on both their management and operational management of their enterprises. This year instead of having an exam we have asked the students to maintain a reflexive journal. This involved using a reflexive journal to encourage students to think about the lecture content, to go and find other sources, and to do their own independent research. To look at the web pages that I suggest they have a look at and they're to reflect on their own particular major, whether they're coming from marketing or HR or operations but everyone of them has to focus on sustainability, business ethics and corporate social responsibility and how that is an issue for each of the enterprises. So it is a constant theme, to make them think about their role as future professionals.

Each week students made reflections and they are also asked to reflect on their own learning that they had achieved over the course of the thirteen weeks. The final assessment item involved the students looking at all that information that they've gathered and then they completed a two page summary which in a sense had the students focus on what were the critical operational and managerial issues for tourism enterprises both for today and tomorrow. The summary did not actually direct them to look at sustainability and corporate social responsibility, however, I'm interested to see whether they indeed pick up on that in that final part.

There was one other assessment item - students had a critical scorecard that they had to undertake and that's almost an indices or audit document which we have created which again focuses on sustainability, corporate social responsibility and business ethics. We directed students to particular sites where we knew they would be able to work through and complete the scorecard and we're made a focus on what were the issues both managerial and operational. The students were required to make a critique drawing on literature to justify their statements and to make recommendations based on their critique. So we had two critical scorecards and weekly reflexive journal entries. The third element was an oral presentation and this year we organized to have debates and panels so we could try and generate more discussion with the students and some of these linked into sustainability, and some into business ethics.

> The course started out with seventy-five and now has stabilised after the cut-off date for enrolment or withdrawal at fifty. Of those students, all of them are engaging in tourism enterprise management with sustainability both embedded and part of the assessment. (Gayle Jennings, Week 5: 10 April 2008)

Initially, for 2008, the course was to have provided two learning/teaching options: an intensive mode and a weekly delivery mode. As a result of other university service commitments, time became a critical resource that was in short supply during the initial planning for the first semester of 2008. This subsequently reduced the opportunity to set in place the necessary inputs to actualise the intensive mode. The student cohort did not settle until Week 4. The diversity of knowledge, skills and experience that the cohort contained suggested that the intensive mode was also not feasible and a convenor facilitated approach was a more responsible practice-based way to proceed. Further, action learning and research cycles and reflexivity with project team members, supported the decision not to offer the complementary intensive mode of teaching.

I was going to have the "normal" course, which we changed to explicitly deal with sustainability as well as embed it. I was trying to run an equivalent intensive mode -- where students would come together with industry. We would have specific foci on those enterprises in regard to 'examining" sustainability issues, such as, energy and resource efficiency … but in the end my cohort of students weren't necessarily coming in with the knowledge and skills so from my perspective, I think it would have been irresponsible to send them out because the MSMEs would have had to have adopted a greater "educative" role than that which we had anticipated. The MSMEs were already resource limited. (Gayle Jennings, Week 5: 10 April 2008)

The weekly delivery mode explicitly focused on critical thinking, problem solving and innovation skill development associated with sustainability, business ethics and corporate social responsibility. Learning/teaching engagements included industry representatives as regular guest industry speakers regarding tourism enterprise management with follow-up questions related to key sustainability, business ethics and corporate social responsibility challenges and innovations.

Guest speakers were drawn from a range of MSMEs: ecotourism accommodation owner; built tourism attraction; marine operator, tour operator, event organisers, and transport provider. Learning/assessment tasks included use of critical scorecards to review particular tourism organisations with an online presence; a reflexive journal and final summary, as well as debates and panel sessions. Overall, the course is predicated on developing learning/teaching tools to engender sustainability, business ethics and corporate social responsibility knowledge and skills related to tourism enterprise management.

The following text expands on the learning styles used in the course, as well as reflections made during the course of the semester with regard to cooperative learning, critical thinking and problem solving and tutorial activities. An overview of the students' knowledge about and for sustainability is presented. Interspersed throughout the section are excerpts from related reflexive journal materials.

Learning style:
From the outset, emphasis was on experiential learning and action learning. In the first lecture, the students were asked to write down the process that they used when they had the opportunity to learn something of their own volition. How did they go about it? The students individually reflected and then the class brainstormed the processes. The processes came out to be fairly similar to the seven conditions of learning developed by Brian Cambourne (1984): immersion; demonstration; having time to approximate and to get feedback; practice. Two other critical elements were responsibility for their own learning and expectation to learn. These conditions complemented Wenger's (1989) communities of practice (community, identity, meaning and practice). Following the brainstorm, the students and convenor negotiated that those principles from the brainstorm would operate throughout the course as our learning/teaching "principles". As a consequence, learning/teaching engagements would become much more interactive with the students being a large part of the engagements as well by being reflexive. The students were agreeable to that. Subsequently, in Week One's lecture the learning philosophy for the course was established.

How does this operate in practice? I'll use the journal and the scorecard as examples. The students hand them in very early in week four. They're assessed bearing in mind the stage of development the students are currently in - that is being mindful that the students will be approximating to varying degrees with regard to critical thinking, problem solving and creativity. In the short period of time from the start of semester to submission of the first assessment pieces, the students drew on the models and demonstrations that have been provided as well as the dialogue session we have had in class time. They also receive individualised feedback. It is then up to the students to take the feedback onboard and if they want to improve their next submission they can and simultaneously move closer to the mark that they're trying to achieve. The students are engaged in

experiential learning. The learning engagements adopt a progressive improvement perspective rather than you're either right or wrong and that is the end of the assessment. They've got the opportunity to improve. That happens with both the scorecard and the journal. Obviously with the oral, you can't rerun that but we have had the students being reflexive and asking them how they think they went in their own presentations. We also incorporated informal written peer review of the students as well. Students in the audience provide feedback to the students presenting. This helps the students to be reflexive on their own and others' presentations.

Critical thinking, problem solving, innovation and creativity

As already noted, modelling and demonstration were continuously used as part of the teaching pedagogy, as was timely feedback, however, a number of students were still challenged with regard to critical thinking, problem solving and innovation. Their learning preferences appear predicated to teacher-directed reliance and lock-step mastery processing. While platforms were provided by models and demonstrations and support, shifting to the use of critical thinking, problem solving and innovation was a challenge.

> Today I had a short reflexive task and the students didn't give a lot but when I went into the tutorials they again iterated that while sometimes it was challenging it was different from what they've been used to. They found that they were finding the course's approach more useful for their learning and that they were retaining more rather than having a big rush two weeks before the exam trying to get it together and then just get it out and drop it out so the transference between practice and theory and practice is important and the guest speakers are indeed reinforcing that theory into practice as well. (Gayle Jennings, Week 5: 10 April 2008)

> I'm enjoying the journals and the scorecards that I've been marking. It's been really good to see some of their reflections. I think that the students are moving more from a generic perspective into specifics … I'm really pleased. I think they're going to come out the other end having a really strong understanding of sustainability so I'm happy with how the course is going. (Gayle Jennings, Week 5: 10 April 2008)

> The students received their feedback last week on the critical scorecard and since that's been received I've had a number of students write to me and say that they are really liking the way the assessment is going and the way they are getting their feedback and that they're really enjoying the course from that perspective. So the strategy is working well and particularly the philosophy of learning that we've embedded into the course … that was just some anecdotal feedback that came through … (Gayle Jennings, Week 7: 23 April 2008)

> Today they hand in their second scorecard and I asked them how they went with that and what did they learn from it – to be reflexive. One student said 'a bit of this and a bit of that', and didn't want to elaborate, some weren't very descriptive about what they learnt. Others said I didn't realise some things about the sector that they had chosen. Or that there was so little concern at least in the public area on the web pages about environmental issues and sustainability given the nature of the enterprise or that the students didn't realise how broad the reach of some of the enterprises were. The students also became aware of HR issues. They all felt better about the experience this time having been through it before and having received feedback. It is making them more critical and reflexive .. and I'm really pleased that they can see that they are doing that. … The feedback was that they really learnt a lot going through the enterprise each had selected and its associated web pages. The students are seeing the scorecard as more than just an assessment task which I am pleased about. (Gayle Jennings, Week 8: 1 May 2008)

Throughout the course, all students were involved in critical thinking, problem solving and innovation skill development associated with sustainability, business ethics and corporate social responsibility. This occurs on a weekly basis and particularly with regard to the guest industry speakers.

> I've been really impressed how the students have taken on the challenge of being critically reflexive because it has been a challenge. I was really impressed that by week five now and we've only had two weeks of guest speakers that students are willing to ask reflexive questions rather than simple recall-based questions such as "how many people visit your attraction?" The students are framing questions such as, "what are the consequences of that with regard to sustainability? "How do you act in a sustainable manner given that context?" (Gayle Jennings, Week 5: 10 April 2008)

> Today, at the end of the lecture with the guest speaker, we had a reflection time where we talked about what we liked as an audience and the students were noticing that they were actually becoming more critical in their thinking their reflections and their questioning. And they have indeed since about probably week four when they did the first scorecard and the journal articles. The students have started to really focus on the questions of sustainability issues. Today's person spoke about energy, water usage, emissions … a whole variety of things and the students were engaged with the person really well so that was exciting. (Gayle Jennings, Week 8: 1 May 2008)

> The students have engaged a lot through the course of presentations instead of waiting until the end which was really refreshing to see. That was okay with the speakers too -- they weren't concerned about being interrupted during their presentations. Some of the students have also taken the opportunity to come up to the industry speakers after their presentations which I have been trying to encourage the students to engage in individual personal contact with the speakers. (Gayle Jennings, Week 11: 22 May 2008)

Online support
Material was placed on the web to help students think about critical thinking. It was also used to help them with their journal and with the scorecard.

> Those students that have tended to do well are ones that already demonstrate critical thinking skills. But those that didn't understand it and who did go to the web sites and read them as well as reflected on it in their journal entries appear to have transferred that information across into their scorecard which I was really pleased with. When they say they don't know how to do it, there were enough props around for them to do it. Part of my teaching is to challenge students with problem solving and being creative in how they approach things rather than relying on lock step progression and having me tell the students what to do next. In addition, there is the element of taking responsibility about your own learning as well. (Gayle Jennings, Week 6: 18 April 2008)

Lecture/workshop and tutorial content was complemented by online learning activities based on Leiper's (2004) comment that managers need to have general knowledge. In Weeks 3 and 7 this was particularly the case as there was no formal face to face component. Everything was online. The additional materials were not obligatory they were recommended.

> What I've done is I've suggested to the students that they visit the TED site which stands for Technology Entertainment and Design. I've found a number of short videos on ethics, sustainability and climate change and several on Utube. I've located at least about six, which have relevance. I have suggested that they have a look at those and they're particularly looking at ethics and corporate social responsibility which are tied to sustainability. I'm going to be interested to see in the journal reflections how many students actually go to that to build their

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general knowledge. Whether the students pick it up or not will depend on what type of learner they are whether they are a surface learner or a deep learner.

There are some on-going challenges with changing learning styles, materials and critical thinking:

> I still have the issue of some students not being critical or working through their own problem solving and/or looking for creative solutions. This is right down to the very symptomatic perspective do they actually look online to find the answers that are all there. I'm becoming almost like their research assistant. It is a frustration within the classroom I talk generically about those issues and say that if I was their line manager and they were coming to me with those types of questions, how do they think I would be reacting. Shifting the context makes them a little more reflexive about being responsible. That certainly comes back to the learning theory that as a class we negotiated at the beginning, which says that they have to be responsible rather than me being responsible for them. That's still a learning for some of them and I suspect that it still has to be a reinforcement because the ones I'm thinking about are primarily Confucian heritage background students where the teacher may be viewed as a guru and keeps directing traffic. There's still that difference between ways of learning and knowing. (Gayle Jennings, Week 6: 18 April 2008)

Cooperative learning and communities of practice

Part of the profession-based learning agenda in the course focuses on co-operative learning and establishing communities of practice. The cooperative approach worked well at the start of the semester.

> We had a panel session where two of the three panellists had dropped out of the course. That left just one panellist. We negotiated in the class for group work and someone would report from each group and join as a panellist out the front so we still were able to run a panel session. These students still had to stand and try and speak without notes -- they weren't being assessed only one person was. That's really pleasing to see being cooperative to assist a peer to a positive outcome. The students are taking that on board and pushing themselves a bit more especially those that took the opportunity to informally rehearse their oral presentation skills.

The course also attempted to draw on student expertise and students' work as exemplars. Not always with overwhelming success.

> I've identified students from having marked their scorecards. Those students are the ones that were assessed as having "very well fulfilled" or "exceptionally well fulfilled" the criteria. I've identified those students and invited them to cut and paste those cells that they did well in the scorecard so I can put it up as a model for the students. As of this morning, I have been inundated by zero numbers of people who are wishing to share so if I don't receive anything by the end of today I will be emailing a number of students and asking them specifically if they would allow that. (Gayle Jennings, Week 6: 18 April 2008)

> We've posted models onto learning at Griffith (learning@griffith) so everyone has an example to at least focus on. I haven't got as many back from students as I had hoped and that was one of the disappointing things for me. ... I think I mentioned previously - out of the class there has been only one student so far that was willing to do that so now I will go ahead and email students and ask if we can have them .. I'm sure that they'll share it but I just was hoping that others would have a more generous nature from that perspective. (Gayle Jennings, Week 7: 23 April 2008)

Action research cycle adjustment: change to tutorial activities:
Using action learning and research has been useful to constantly reflect on practice and revise in the formative stages of the project rather than waiting until the end of semester for the summative processes.

> We're realizing that some of the students may be getting a bit tired of the debate and the panels that have been alternately happening throughout the semester. The use of a debate then a panel was a good strategy. If all the students had operated in debates and panels as they did in the first few weeks they would have been sustaining, but what we're seeing is that as we get further into the semester, students are progressively relying heavily on reading notes. Subsequently, there's no engagement with the audience, no passion being demonstrated so they disconnect with the audience. Consequently, some students may need to understand debate and panel processes more than was provided on learning@griffith and in tutorial session overviews at the commencement of semester. Additionally, oral presentation skills need further development to engage audiences. Some students are not showing up if they've got some other task or because they have had their turn. Unfortunately, they do not seem to feel that they have a responsibility to continue to be part of the tutorial audience. This morning we sent out an email to say consider aspects of reciprocity and being an ethically responsible person.

In several weeks we used role play when there were no debates of panels scheduled. This added some variety to the debate and panel schedule.

> What we were trying to do in the role play was to shift the students from thinking about generic motherhood statements about what we should do as managers with sustainability to pushing them down to more [practical] levels and in fact the students have done that. The tutor has prepared a scenario based on a briefing I gave her regarding context and foci. Students were able to self select which department that they were representing and then at the end of the day the tutor kindly wrote up after reflecting with me what the learnings were. The comments were that this was a good strategy and worked well to get them to think more critically beyond a very generic level since they were not currently employed in managerial positions. (Gayle Jennings, Week 11: 22 May 2008)

> **Tutor evaluation of board meeting:**
> Based on the active engagement of the students in the discussion and the limited time during the tutorial, not all issues listed in the scenario could be addressed. Further, because of the low attendance in both tutorials, not all departments were represented. However, students commented positively on the small group exercise and an interesting set-up (different departments) for the discussion of such a topic. Students also commented on the different contributions made, as not everyone has the same knowledge and so contributions supplemented one's own knowledge and contribution. (Gayle Jennings, Week 11: 22 May 2008)

Student knowledge re: sustainability
In week four, the students wrote down individual reflections/definitions of sustainability. Some of these were shared to generate class dialogue. This dialogue was followed by a discussion regarding the consequences of their individual definitions for managers. The focus moved from management roles to operational roles and responsibilities with regard to making operations more sustainable.

> The emphasis here was on specific agendas in order to get them to actually follow through with specific action items rather than making comments such as "oh well we'll just increase the amount of money to train and educate staff to be sustainable". We considered what we would have to do in the training and education packages, what was the consequence of the budget being redirected to this area and away from another in the enterprise. And is that sustainable?

So we were teaching about and for sustainability by getting the students to be reflexive; by being self directed; and by reflecting on the top ten issues for tourism. In addition, some of the assessment areas were specifically tailored around sustainability. Weekly guest speakers also participated by being reflexive regarding sustainability as well.

> So sustainability is explicit and embedded … within the students' conversations and learning/teaching engagements …. (Gayle Jennings, Week 5: 10 April 2008)

Knowledge re: sustainability, action learning; action research, Education about Sustainability, Education for Sustainability

Convenor
I have education qualifications which were predicated on understanding various teaching philosophies as well as an emphasis on experiential learning. I have been an education consultant so the terms action learning and action research are familiar to me. In the 1980s, the education department that I worked for used action research as a key strategy to facilitate curricula change. I also have qualifications in social sciences and I support research communities with regard to various research theoretical paradigms and strategies. My teaching praxis has held strong social and environmental justice frameworks. My social sciences background has immersed me in sustainability issues since the 1980s, particularly, developing nations and globalisation impacts.

I have also worked for a federal natural resource management agency and management for which sustainability was a daily praxis. The terms education about and for sustainability are a different framing to what I have used before but nonetheless similarly important.

Industry
Industry knowledge regarding sustainability was holistically framed, many of the MSMEs realised the nature of their businesses relied on sustainability principles and practices. The terms education about and for sustainability were lesser known. As this course did not involve students in action research cycles with individual enterprises, online linkages to industry were used. In particular, those enterprises that had explicit commentaries regarding sustainability guidelines, accreditation processes, standards, and policies.

Industry presenters were impressed by the critical thinking skills displayed by the student questioning. Industry comments:

> "I was surprised by the nature of some of the questions -- they were thought provoking and made me think."

> "It is great to see the students chairing and managing this session – it will build their skills and is good for their professional development."

> "The students seemed very engaged and interested."

Challenges
One of the challenges though is MSMEs are at distance from the university and transportation is an issue for students to gain access. As our guest speakers for the last two weeks have added -- it is a problem for staff. (*Gayle Jennings,* Week 5: 10 April 2008)

I think some of the issues relate to diversity in student cohort with some of the learning styles the international students bring. Self directed learning, problem solving and creativity can be quite challenging for them and so we do have to demonstrate and develop those skills and processes. The Confucian-heritage background students are more reliant on what the teacher says to do and rote learning so creativity and innovation is quite a challenge so working through strategies to do that is important … and I think that's it. (Gayle Jennings, Week 5: 10 April 2008)

Students

In the final week of class, students reflected on Education for Sustainability. The following questions focussed those reflections:

- What is our role in a sustainable future?
- What can we do to make a difference?
- What skills/knowledge do we need?
- How do we make a difference?
- Who has the power?
- How can we influence?
- How can we change our involvement?
- Can we design something better?

The students' reflections on these prompts are provided below:

What is our role in a sustainable future?
Students commented that their role was one which was multiple. They had responsibilities as global citizens and as tourism and hospitality professionals. They also emphasised a need to focus on sustainability beyond environmental issues and to consider and/or address social and cultural elements of sustainability. In addition, the students commented that the bottom line of business is to be profitable otherwise it isn't a business, which lead to a discussion regarding the following two definitions:

- What is Business Sustainability?

"Business Sustainability is the opportunity for business to improve its profitability, competitiveness, and market share without compromising resources for future generation."
Source: http://www.sustainablebusiness.org/

- What is a sustainable business?

"Business that contributes to an equitable and ecologically sustainable economy."
Source: http://www.sustainablebusiness.com/info/aboutus.cfm

Students positioned themselves with either one or the other of the two definitions above.

What can we do to make a difference?
Students commented that in their professional careers depending on their level of employment that they may be hindered with regard to making a difference. Discussion then turned to "leading without authority" or "leading by influencing". Specific actions included alerting managers or people in responsible authority positions of sustainability issues. Another suggestion was preparing a brief which identified the issues and various ways to solve the issue with positive outcomes being identified for each of the ways in the brief. Students also reflected on what are the avenues when they have no power to influence and personal value bases are challenged which lead to conversations about conflict between personal and professional sustainability values personal and company values. Dialogue included resigning if the conflict of values was too great or consideration of "whistle blowing".

What skills/knowledge do we need?
Students indicated that the skill set that was required in addition to already developed skill sets was practical application or lived experiences. The suggestion was to work with industry during the course to address sustainability issues (the original intention for this course).

How do we make a difference?
This related to the previous discussion "what can we do to make a difference". Students emphasised the need to "walk the talk".

Who has the power?
Students' perspectives indicated as future employees that their power would be limited although again the students did consider how to "lead from within" rather than only from a power position.

How can we influence?
Students suggested by dialogue and praxis founded on critical thinking, innovation and creative responses.

How can we change our involvement?
As most were not graduating into positions this was not discussed except to note their global citizen responsibilities.

Can we design something better?
Students were unable to provide suggestions except again to consider models and demonstrations of good practice, use their critical thinking, innovation and creative skills.

Student Feedback
A focus group was conducted after the final 3202HSL lecture, Thursday 5 June 2008, by a member of the research team and independent of the Course Convenor. Analysis of the empirical material was through application of 'open coding' as described in grounded theory methodology (Charmaz, 2006). The students' critical reflection on their own learning processes revealed several strong themes. Initial avocation for a broader and more in-depth examination of sustainability is typified by a student's comment "… we need to position so that we aren't focused on environmental sustainability but rather on HR and marketing … um accounting … finance … things like that so we have to learn how to deal with those in a sustainable manner as well …" Student's opinions coalesced around an appreciation of the deep involvement of industry in their course and calls for further real world examples as well as clear definitions and indices to measure sustainability.

Students also expressed appreciation with a view that their learning was enhanced through challenging them with the use of innovative learning tools such as journals, panels and debates rather than conventional rote learning exam processes. As one student explained the weekly reflexive process was more effective "…the journal did the same thing as the exam like regurgitating the knowledge that you've learnt but it was fresh in our minds each week…" Another student commented on learning being more integrated "I like the debates, I think I learnt more in this subject through the assignments … if you go do an exam you've forgotten it the next day … so it is better retention … but with an exam you don't know anything about the one that you have just done … like we had to keep writing about this stuff every week … about sustainability. The industry contact and learning tools employed in the course fostered an ongoing learning culture as one student explained "…when I started this course I had no idea what sustainability was … but now I have a more clear idea of what it actually is … and I think I need to learn more …" Overall the involvement with industry appears to be considered a valuable learning experience.

Industry feedback
Industry perceived that linking with students was important and emphasised that they were also the future and that was in their hands as well. All industry members indicated they were willing to continue participation into future offerings of the course. Additionally, several indicated field trips to their enterprises would further enhance learning. This is being considered with regard to socio-economic issues regarding field trips as well as access and transportation issues. Industry indicated in post-lecture debriefs that some of the student questions made them reflexive as well which they appreciated. Such questions were not specifically identified.

Convenor feedback
I think that pedagogically, the strategies that we're used with the classes were really great. Informally the students seemed to be enjoying it and their journal reflections in the first submission indicated that while it was challenging that they were finding that they were learning. In one lecture, there was some critique that came back to me regarding some

improvements for the course and online materials, which I think was really good. The students were willing to provide this critique and knew that they are operating in a trust-based environment. They knew they weren't going to be harangued or anything like that because they made such a critique. I'll take the critique on board and do those things, which is part of modelling and demonstration.

Course Convener: Gayle Jennings
Enrolment: 1 student
Semester 1 (Start 03/03/08; End 28/06/08)
Level: Undergraduate
Degree: Bachelor (Tourism and Hospitality suite of degrees)

This course is not a regular offering. It is a research based course and the topic is negotiated between the convenor and the undergraduate student(s).

> The other exciting thing that has happened is that I had one student who is a fourth year student on exchange. She already has graduated at her home institution I understand. She was enrolled in Tourism Enterprise Management. She came to the first few weeks and then she wrote me a really long email which indicated that she didn't feel she was being challenged enough by the agenda that was in the course. She was in the course Field Project last year which normally follows this course so she's already moved through critical thinking, creative problem solving. She asked if there was some way that she could renegotiate assessment within the course. From an equity basis for all the other students, this was not possible. I did speak with some of our staff within the university to see if there was any other option of a course offering that she could take that might fulfil her needs. We found one which is a research project. She is now working on critically reviewing and evaluating a selection of sustainability indices associated with business in general. She also has to combine that with a specific review and evaluation of the hospitality indices if they exist and develop her own sustainability scorecard or index for a specific tourism hospitality industry or businesses. She is working on that as her core research project. We meet for half an hour each week. It's research driven so she drives the discourse. Her assessment tasks are a reflexive journal just as the students are in Tourism Enterprise Management and she will be participating in an oral presentation --she is part of a panel and she is still in the group she would have been in Tourism Enterprise Management. So there's a bit of connectivity between the two courses. The real difference is that she is undertaking desk top research and she will be submitting that work. It also keeps her in sync with the intentions of Tourism Enterprise Management and doesn't have me, from a very personal perspective, stretching my head around another course content that isn't related to the other. This is especially seeing we brought it on at the last minute to support her. So I think that flexibility is really important, this course doesn't get accounted in my workload. Having a course of one is not a sustainable element but I think it does show flexibility to be able to enhance student's experiences and make them rewarding ones basically. We had a meeting on Wednesday and she was reflecting that she is learning a lot. Her eyes have opened up a lot. (*Gayle Jennings*, Week 6: 18 April 2008)

> The student is doing really well. She's at the stage where she has identified nine indices in her report. She has an overview of what the indices are about and where they come from. Who are the stakeholders? Then in her report she has decided that she will give a snapshot visual of what the indices might look like followed by her critique regarding strengths and weaknesses of each indices. I think she is moving along really well. She was quite excited by it because she can see straight away transferability into her future work in the industry. I have received her draft for feedback and it looks really good. She will be handing her document in week thirteen. (*Gayle Jennings*, Week 11: 22 May 2008)

Summary overview of indices studied

The review of indices incorporated:

1. *The UN Development Index (UNDI)* has its roots in Agenda 21 as a national development tool for developing countries. UNDI included 14 themes include Poverty; governance; health; education, demographics, natural hazards, atmosphere, land; oceans/seas/coasts; freshwater; biodiversity; economic development; global economic partnerships and consumption. These indices were evaluated under social, economic, environmental and institutional realms. The UN Millennium goals were developed from this framework, and although many issues stated within the index can adversely affect tourism the index itself does not appear to be easily transferable to the tourism industry.

See: United Nations. (2007). *Indicators of sustainable development: guidelines and methodologies*. (3rd ed). NY: United Nations.

2. *The Global Corporate Citizen Leadership Challenge (GCCLC)* was initiated by more than forty World Economic Forum (WEF) Chief Executive Officers, CEOs, from a variety of industries. While it is easily transferable to the tourism industry the emphasis is more on the need for corporate social responsibility (CSR) and accountability. It also appears to be targeted towards large scale corporate executives. Timelines are not provided for implementation rather emphasis is on on-going processes.

See: World Economic Forum. (2002). *Global corporate citizenship: the leadership challenge for CEOs and boards*. The Prince of Wales International Business Leaders Forum.

3. The Environmental Sustainability Index (ESI) originated from collaboration between Yale and Columbia Universities, the World Economic Forum and the European Commission. The Environmental Sustainability Index's main objectives focus on reduction of environmental stressors linked to human health; promotion of ecosystem vitality and effective resource management. Based on empirical data sets, the framework and statistical evaluation could be difficult for non specialists to interpret. Additionally, there is evidence of gaps in data and indicator sets.

See: Esty, D., Kim, C., Srebotnjak, T., Levy, M., de Sherbinin, A., & Mara, V. (2008). *Environmental Performance Index*. US: Yale Centre for Environmental law & Policy.

4. *The Genuine Progress Index (GPI)* was a product of a not-for-profit (NFP) organisation called Redefining Progress. In 1995, this NFP developed the GPI in response to inadequacies in GDP calculations relating to sustainability. The Genuine Progress Index adopts a triple bottom line accounting system, which incorporates a sociological approach. The Index is able to be transferred between sectors and government echelons. However, there appears a lack of operating information techniques.

See: Talberth, J., Cobb, C., & Slattery, N. (20006). *The genuine progress indicator 2006: a tool for sustainable development*. Oakland, CA: Redefining Progress.

5. *The Dashboard of Sustainability (DoS)* was developed as an online prototype by the International Institute for Sustainable Development. The interactive tool is accessible to and usable by experts, media, policy-makers and the general public.

See: International Institute of Sustainable Development. JRC & Jesinghaus, J. (2008). *Dashboard sustainability*. http://www/esl.jrc.it.dc.index.htm.

6. *The GEO Resource Book* was developed by the United Nations Environment Programme (UNEP) and the International Institute for sustainable Development (IISD) to provide a manual for professionals developing integrated environment assessments. GEO does not, however, involve socio-cultural or economic sustainability issues or involve accreditation.

See: United Nationals Environment Program & HSD. (2007). *GEO resource book: a raining manual on integrated environmental assessment and reporting*. Nairobi, Kenya: Division of early warning and assessment.

7. *ISO 14001* has its basis in the British Standards Institute BS 7750. The standard is purported to be the first environment management standard. This ISO is framed for use by small and medium sized business, specific emphasis is environmental impacts and incorporates a wide range of indicators.

See: http://www.iso.org/iso/home.htm.

8. *The Built Tourism Product Sustainability Framework (BTPSE)* was developed by a student in 3302HSL Project course and includes many attributes derived from the indices above with the main goal to be transferable, adaptable, relevant as well as to incorporate a quadruple bottom line accounting system that is geared for products, sites and services whilst adhering to United Nations' standards.

Student reflections

The student reflecting on the appraisal of indices was surprised how many Sustainable Development Indices (SDIs) existed and that she was able to obtain a fair overview of the issues and challenges related to these indices. Her perspective is that "Sustainable Development business" needs to move beyond "conceptual and utopian" aspirations to practical and accessible modalities. The student felt well pleased with her development of understanding and critiques of the indices with which she had engaged. She was also candid in her positive affirmation of the benefit her framework would make towards the industry sector she had chosen. The student intends to refine it further in the future.

Convenor comments

The student applied critical thinking and research reflexivity throughout the course. We held weekly dialogue sessions to consider critical thinking issues that had arisen in the week as well as to continually scope and frame her project. This meant limiting the breadth and depth of her project in order to achieve a completed project in 13 weeks. The student demonstrated initiative with the development of her own indices.

Overall project reflections on outcomes and outputs

Knowledge

Students' initial understanding of sustainability emphasised 'environmental' aspects that were related to 'energy conservation', 'water management', 'waste management' and the words 'protect' or 'conserve', along with 'pristine' , 'original' and 'undamaged'. Human action-based processes focussed on 'maintaining' 'managing' and 'carrying capacity'. Temporal elements were noted with references to 'ongoing' or 'future' component. Only one third noted social components of sustainability: 'resident community', 'culture' and 'society' and 'economic'. The baseline definitions demonstrated that for students 'sustainability' appeared to be a set of categories rather than a holistic concept.

Table 3: Baseline knowledge of sustainability across three courses

Theme	7109HSL 1st Baseline % Indication	7109HSL 2nd Baseline % Indication	3119HSL 1st Baseline % Indication	3119HSL 2nd Baseline % Indication	3202HSL 1st Baseline % Indication	3202HSL 2nd Baseline % Indication
Environment	14		25	13	23	19
Ongoing/Future	27	11	11	20	10	20
Protect/Conserve	6	6	10	3	3	2
Undamaged/Pristine	3		6	2	2	8
Energy Conservation		17	5	2	8	
Education		11	4	17		
Maintain	3		4	4	3	
Steady State/ Enhance			3			
Culture			3		3	
Managing / Responsible	6	16	3	4	6	10
Resource management	17	26	12	3	9	2
Carrying Capacity			3			
Tourist Experience			2		2	
Residents /Community	2		2		4	4
Society	14	6	2	13	6	11
Economic	6	6	3	9	7	19
Wildlife			2			
Adaptancy Platform			1	2		
Difficult implementation			1		1	2
CSR					2	1
Political					2	
Attractions					3	
Climate Change/Global Warming	3			2		
Raw Score Indicators	109	35	251	46	120	79

In the course, 7109HSL, students' comprehension of sustainability was more focused in the latter assessment, particularly around the necessity for consideration of the future, a need for education and personal and management responsibility in managing resources.

In 3119HSL, there appeared to be a greater reflection associated with the Brundtland Report definition as well as more comprehensive responses. A significant change appeared in the understandings of the future resource availability in regard to sustainability as well as marked increases in the need to education for and about sustainability in addition to social and economic aspects of sustainability.

In 3202HSL, while there were different numbers of participants in the first and final examination of student's understandings of sustainability, there was a marked increase in awareness of the economic and social aspects of sustainability. Also a greater proportion of students focused on managing or responsible action and the need for future availability of resources.

Student feedback

Students were critically reflexive of their own learning and across the courses a number of students indicated that the challenges that they met shifted them from surface learning to deep learning via the action learning and profession-based learning engagements.

Students appear to have a deeper knowledge of sustainability after the semester. Specific areas of greater consideration included inter-generational equity and critical benchmarks, as well as the realisation that sustainability was not related to steady-state, unchanging or minimising negative impacts. Additionally, sustainability allows an improvement and enhancement in social, economic and environmental aspects particularly with Ecotourism.

Formal and informal feedback from students revealed an enjoyment and engagement with the practical components involving tourism enterprise site visits with industry. General engagement levels were reflected, for example in one course, by extremely high levels of interaction from students in an end of semester poster session even though this session was not assessable or compulsory.

Industry Feedback

At an industry focused climate change seminar (Thursday 29th May, 2008 at the Gold Coast Convention Centre), dialogue between one of the project team members and representatives from Tourism Queensland occurred. Representatives commented on the number of SMSE attending ecotourism accreditation workshops and how the SME operators were keen to increase their knowledge regarding ecotourism accreditation practices.

Processes

- In the process of doing the action research, reflection throughout the iterative cycles seemed to be very relevant as it ensured constant monitoring and adjustment of "classroom praxis", teaching styles in accordance with action learning principles. Additionally, reflection on action served to confirm prior reflective learning that occurred at the 'site' of the action.

- The different ways the course convenors managed interactions between students and industry offered added learning by being able to compare and contrast between those course offerings within GBS.

- As a team we have not only considered the pedagogical aspects of teaching and learning sustainability, our praxis has also been sustainability focused. From an economic aspect funds have been used sparingly (and we don't mean "mean"!!) to ensure that quality and value has been provided for the DEWHA funding. All paper materials have been kept to a minimum and those resources that were used have been recycled. Also as a community of practice, a cultural/social network has developed between project team members and with other interested GBS peers and colleagues.

- The process of having meetings to discuss course and assessment design (within the project focus), was a positive outcome by enhancing idea generation and embodying critical reflections of other team members. This practice tends to be under utilised in university environments. The practice of dialogue between staff with regard to this has now been developed between project team members. Such praxis will be modelled and demonstrated by project team members to generate other similar fora to support continuance of such engagements into the future both formally and informally.

- Student learning also encompassed research-based learning via action research and action learning processes.

- Enhanced engagement and connectivity between industry and praxis.

Outcomes

These included:

1. Increased project team awareness of practical methods of making processes fundamental to sustainability more structured and formal.

2. Thinking developed from the involvement and reflective practice within this project also adds into the ideas and development of other courses – for example, even though environmental sustainability concepts are only a very small part of the course *Information Systems for the Services Industries*. This course was convened by co-researcher, Dr Glen Hornby. Critical thinking was introduced into tutorial discussion which was a change from usual computer-based pedagogy. Engagement with this project has assisted in refining and developing the 'critical thinking' elements of this course, which will add the critical thinking attributes of students as they go through the program.

3. Developing the capacity of staff involved in the project (through experiential learning) to positively enact change within the institution.

4. Development of action research methodology across the four courses.

5. Development of critical thinking skills and assessment in action research methodology in *Ecotourism.*

6. Focus on critical thinking across all courses as explicit learning/teaching engagements.

7. The inclusion of student assessment as feedback to industry partners meant that such assessment became a real life experience of professional review and critique. The added feature of the final assessment item by students being handed to the operator had the effect of making the students consider strategic communication strategies. The students had to think not only critically but also how the critical recommendation could be couched in language that would facilitate the uptake of the recommendations. The feedback provides industry with additional information to inform their decision-making processes. It also demonstrates a shift from surface learning tendencies by students to deep learning as a result of engaging with profession-based learning opportunities with industry partners.

8. A literature review of 'knowledge communities' was conducted to provide background reading to inform the pedagogical foundations, which were also informed by the work of Cambourne (2006). See http://www.aare.edu.au/04pap/kig04231.pdf

Student feedback

Student permission from students enrolled in 3119HSL Ecotourism has been obtained in order to share their findings with ARIES. These students had included in their final assessment an interpretation foci relating to what education for sustainability was within the question "Explain how interpretation could be considered a form of education for sustainability?"

Students in the course 3202HSL Tourism Enterprise Management overwhelmingly felt the involvement of industry operators on a weekly basis provided an invaluable learning tool by allowing application of theory learnt in class to the real world examples provided by these guest speakers sharing their experiences with the students. Students also considered the scorecards were an effective learning tool.

Industry feedback

Industry feedback in 3202HSL reflected a continued support for ongoing participation from industry as guest speakers as this was perceived as part of industry profession based learning responsibilities and a way to link theory in praxis for tourism students.

In Ecotourism (3119HSL), the operators that were involved found the process beneficial to their business and were grateful for the feedback. In one case the operator also used their involvement with the university as an avenue to positively promote the sustainability practices of the organisation.

Industry response from student contact in the course, 7109HSL Leisure Industries, was reported as a positive experience and reflected in expressions of desire for continuing engagement with the students and Griffith University. It also highlighted the broad interpretations of sustainability education required by industry, being aware that sustainability principles need to be closely aligned with business objectives if they are to succeed.

Education for Sustainability processes[7]: GBS team feedback

- *What is our role in a sustainable future?*

Not only do we have a role in facilitating people's way of conceptualising sustainability but we also have a duty to enable our students to be agents of change in a vision of a sustainable future. This project fulfils both requirements.

It also addresses the need to facilitate structural change. In a small but locally significant way, our involvement through the project has the capacity to shape the production of social, environmental and economic relationships that relate to sustainable futures in the tourism industry. Our role also serves to shape relationships for sustainable futures in the GBS. As noted before, within the GBS other complementary and reinforcing relationships already exist which are mutually supportive of these local initiatives.

- *What can we do to make a difference?*

The project can provide an example to students of how to enable the process of sustainability to be facilitated using participatory action research methodology. Therefore how we actually implement the ARIES approach is of great importance to student learning about the processes involved with facilitating improvement in sustainable practices.

- *What skills/knowledge do we need?*

One of the areas of need identified in this project was the capacity of the teacher to bring together process-orientated skills and knowledge that helped coordinate as many practices previously undertaken in separation. As teachers, we need to be able to be critical and reflective of our own teaching practices, not only of how they affect students and the industry we engage in, but also other teachers. As well as this, we need knowledge and skills to enable systemic change within our own institutions, and communicate these effectively to other team members.

- *How do we make a difference?*

There are a number of ways to make a difference. Some important ways identified were:

1. The ability and capacity of the teacher to choose a critical approach that focussed on the processes of sustainability was an important way to make a difference.
2. Given the effect of key teachers, the understanding and practice of sustainability of the staff involved in the project, we as teachers can have similar effects on our

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[7] Source: ARIES (2008). Key concepts, working document, p. 3

students. This depends on the level of involvement of the teaching staff with individuals in the classes we teach.

3. Recognising that reflections and changes to praxis may be slow with regard to action learning and sustainability. Not just in terms of appropriate time needed for 'the cycles' and the reflection that comes from un-harried space for contemplation but also from the very act of slowing down and reducing consumptive habits. If the slow movement principles were introduced there would invariably be changes to students' awareness of their praxis. This would accompany formal learning outcomes of sustainability.

▪ *Who has the power?*
It's not a question of "THE" power. If we believe Foucault the very point of resistance reveals power. Ensuring that critical approaches to education do not shy away from difficult topics/issues help reveal power and offers opportunities for critical exploration. Critically exploring the relationships between people, systems and physical elements expose sites of resistance and thus are potential sites to achieve systemic or structural change. The term "sites" refers to the interface between: students and the teacher; the operator and the students work; the operator and the teacher. Sites of resistance are multiple and manifold and may be identified, for example, in structural processes, such as, lead times to process changes to course outlines or implement new degree programs. They may also be identified in colleagues' attitudes to changes and/or students attitudes to sustainability as a value itself. To enable a critical approach, the teacher must acknowledge tension/resistance in the world, which also includes the relationships between students and teacher. Furthermore, systemic change bought on by a critical approach often results in changes in the power structures. Critical thinking and empowerment of students is one way in which this has began to occur through this project.

▪ *How can we influence?*
There are a number of ways we have had an influence. These include:

▪ Mentoring in positive ways has the effect of inspiring students to become change agents.
▪ Developing more complex ways of understanding issues/solutions. Problematising is one of the core concepts in university education
▪ Focus on the process of sustainability. Action research processes fit with "good" teaching practice and modes of enhancing sustainability.

▪ *How can we change our involvement?*
This project has enabled us to change our involvement by becoming actively engaged in systemic changes within the university for and about sustainability. Our involvement changed from a passive recipient of policy and cog in the systems to policy informers and developer of new systems. Our involvement has included, for example, participation in GBS Sustainability Retreats, GU learning/teaching grants, as well as participation in program planning, review and innovation. Industry participation in curricula development and design is managed via Advisory Boards and at the local course level through the project team's engagement with industry partners.

▪ *Can we design something better?*
Key here is what is "better"? The project used participatory action research approach as the method to implement change. Had the team used critical action research, then the critical part of this method encompasses inherent value judgements on what is better. In this case, the adoption of sustainability values, within which "better" is considered to be the adoption of systems that enhance sustainability. This moves pedagogy and andragogy towards value-based education, that is, education where curricula is based on moral and ethical values. The issue here is whose values and how those values were constructed and negotiated between convenors, students and industry. In this project, convenors variously introduced *EaS* and *EfS* in the initial phases of the semester as course foci.

We can continue to use reflection, critical thinking and communities of practice. However … finding time to act on what we know is better is difficult given differing value sets of

peoples and diverse backgrounds of students and convenors as well as industry providers. Some consideration in future should be made with regard to stating upfront in the course outlines and clearly indicating as part of assessment that students will need to look at recommendations and strategies for communication action learning findings to tour operators and tourism MSMEs as part of an action research cycles.

Outcomes as per the GBS Team Proposal

In summary, this project achieved the following:

1. Development and application of a practical learning based model of change for application by business, students and corporations.
2. Development of effective teaching programs that incorporated Industry partners to facilitate change in curriculum to underpin change across the business sector.
3. Improved capacity for sustainability within GBS and partner organisations.
4. Provision of input from business into GBS courses with feedback into these organisations' corporate policy and practice.
5. Provision of support and increased expertise of MSMEs regarding sustainability.
6. Establishment of a mutual learning environment with partner organisations.

The following additional outcome emerged in the course of the project:

7. Complementary contributions to sustainable praxis within the GBS included, for example, contributions to Griffith Business School "Green with Envy" newsletter by Rob Hales. The newsletter was a recommendation of the 2008 GBS Sustainability Retreat and a contribution. This output is related to Outcome 3 above.

As already noted in the project's *framework for research planning monitoring and evaluation,* all the above outcomes have been achieved to varying degrees as has been demonstrated in the various discourses presented in this project report, *Engendering and enhancing sustainability principles and practices for small tourism business enterprises*.

Conclusion

In the course of developing the outputs and outcomes for this project through action research processes, a grounded theory of engendering and enhancing sustainability principles and practices for MSMEs enterprises emerged. This theory is described in the following section.

## Grounded theory of engendering and enhancing sustainability

Engendering and enhancing sustainability principles and practices for MSMEs enterprises was a process which was supported by complementary internal and external fora and initiatives within Griffith University and Griffith Business School. These complementary change fora and initiatives provided a supportive learning and change environment to sustain individual, group and collective action learning processes amongst research project team members, students, industry as well as ARIES project team members and participating Business Schools.

The process of engendering and enhancing sustainability principles and practices was iterative in nature and predicated on continuous dialogue and reflexivity amongst all stakeholder groups. *Education about* and *for sustainability* in this action research process resulted in sustainability-based education. As a consequence of this education, not only did students learn about sustainability and interact with industry to translate theory into practice; they also reflected and realised their professional and personal roles with regard to engendering and enhancing sustainability. Relatedly, the students recognised and

articulated their roles as change agents for sustainable principles and practices as current and/or future tourism professionals. Industry partners were able to reflect and enhance their sustainability managerial and operational capacity, strategies and actions.

The following diagram reflects the model of change associated with the action learning and research processes involved in this project:

Figure 5: Stakeholder action learning/research processes
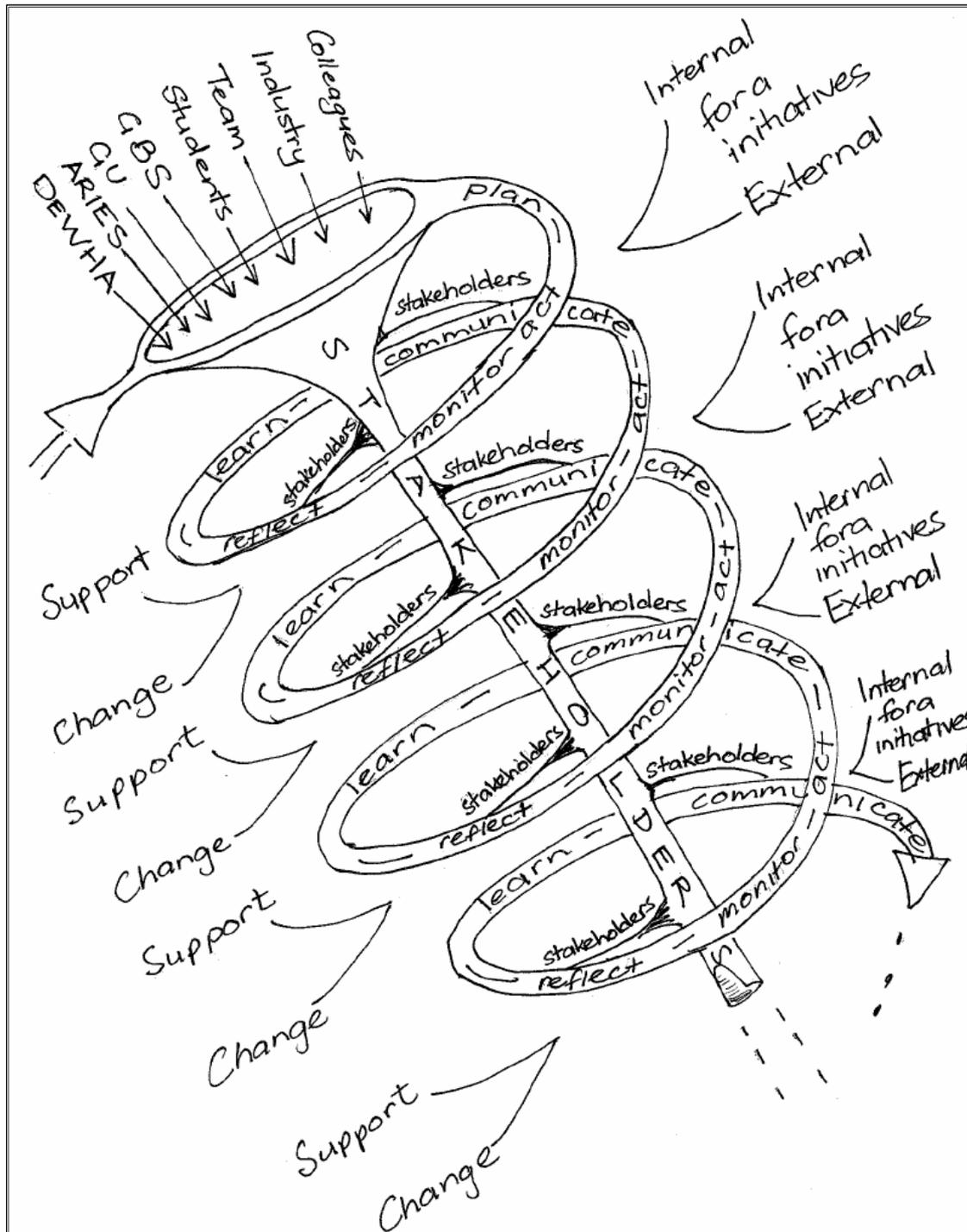
Recommendations

Recommendations about the process of action research/learning within the Griffith ARIES project are as follows:

- Project timelines for final reporting be such that they include all elements within a complete cycle of action research/learning so that student and industry involvement in the action research/learning cycle can be maximised. For example, project timelines for completion need to take into consideration differing end of semester dates between participating universities. This would enable timely inclusion of formal student, industry and project team evaluations as well as completion of internal projects including industry feedback within each of the courses.

- Strategies for student engagement be explored and detailed prior to course outline development by tailoring to experiential learning needs of each cohort. In this way, assessment items within courses can be included within complete action research/learning cycles. We recognise the challenge with this recommendation as students do not aggregate on campus into courses in a physical sense until Week 1.

- Processes to facilitate flexibility in course content, delivery and assessment to address changing circumstances in volatile business environments and the need for student learning based assessment require development at the local level and for this to be situation specific.

- Develop and/or engage communities of practice in a fluid learning environment of academe through non-official/informal group interactions associated with both professional and social development in order to serve to facilitate informal exchange of knowledge and experience and thereby influence praxis.

- The mix of students, industry and convenors in action research cycles links theory to praxis and re-enforces the effectiveness of communities of practice and profession-based learning as well as lifelong learning. Such connectivities should be continued and extended and managed within localised settings and networks as it is founded on "co-powerment".

- Change does occur through self-organising entities, which coalesce due to shared agendas that become collective actions as represented by complexity theory. With specific regard to this project, this in turn resulted in engendering and enhancing sustainable change regarding education *about* and *for* sustainability. The use of complexity theory is recommended as one of the strategies to engender change.

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