Sustainability and Small to Medium Sized Enterprises - How to Engage Them

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Abstract   Small and medium sized enterprises (SMEs) have a major advantage over larger organisations in regard to addressing sustainability issues – their size means they are able to react very quickly to changes in the business environment. They are disadvantaged, however, by lack of information on marketplace changes that make sustainability an opportunity to innovate, and to inspire employees. While some SMEs are leaders in sustainable practices, others lack the sort of strategic mindset which views changes in the business environment as opportunities – seeing the tasks which require more change as an additional burden, rather than a source of potential advantage.

The National Centre for Sustainability has worked with a group of SMEs (with sponsorship through a Research Agreement with Sensis) in a series of workshop environments. Through this work a set of indicators was developed to measure their progress towards more sustainable practices. Key members of industry associations and government agencies were engaged in an advisory capacity to ensure that the work undertaken was relevant and innovative.

In addition, a comprehensive industry research study was undertaken to determine the key priorities for business and government relating to sustainability. This work provided insight into the needs and trends in sustainable practices in various sectors including manufacturing, service industry, education and government. The outcomes of the research have determined the need to develop flexible, adult centric and work-based learning models to educate for sustainability and create organisational change.

This paper explores the value of innovative and engaging educational practices to create an environment which is most conducive to facilitating the implementation of economic, environmental and social aspects of work practices.

Introduction

This paper explores the difficulty of meaningful engagement with small and medium sized enterprises (SMEs) and the challenges faced by those who wish to facilitate change, design educational tools and further the implementation of economic, environmental and social aspects of work practices with this diverse sector. The

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research undertaken provides insight into some of the approaches employed to encourage uptake of behavioural change for the SMEs engaged in the study.

SMEs are often difficult to define considering their size and diversity. For the purposes of this paper, the Australian Bureau of Statistics (ABS) definition of SMEs will be applied based primarily on number of employees which specifies small businesses as being between 1-20 employees and medium sized businesses between 20 – 200 employees.

It is estimated that there were 1,233,200 private sector small businesses in Australia during 2000-01, which represented 97% of all private sector businesses. These small businesses employed almost 3.6 million people, 49% of all private sector employment (ABS, 2002). In other countries, such as the UK, the percentage of firms, which employ 9 or fewer employees, may be as high as 99.8% with these firms considering their contribution to the economy as being high (Ecobody 2002). It is apparent from this that SMEs contribute significantly to the economic success of a country, but aggregated they undoubtedly have a significant impact on ecological systems as well as on the social fabric of a society. A study undertaken in the UK determined that 43% of the nation's wealth derived from SMEs and up to 60% of the nation's commercial waste was produced by this sector (Atkins, 2002).

The diversity of the SME sector also provides a challenge. The sector may include businesses which range from manufacturing through to the service industry – each of which provide their own sustainability challenges. Sadly, however, while issues around sustainability should be one of the more important business considerations facing small and medium sized enterprises (SMEs) today - many managers remain unaware of the key areas of environmental legislation that affect their companies. Many managers and business owners of SMEs are unable to name any environmental legislation or regulations which directly affect their company (Ecobody, 2002). In addition, many are convinced that greater green legislation would increase costs and place additional burdens on them, with a few believing that more business will be created.

The National Centre for Sustainability at Swinburne University of Technology in partnership and with sponsorship from Sensis, a subsidiary of Telstra, undertook to work with a group of 18 SMEs to develop a set of sustainability indicators as a basis for a sustainability self-assessment tool for SMEs. The research undertaken involved a range of SMEs including those from the following sectors: manufacturing, information technology, hairdressing, food industry, car repair, bakery, dry-cleaning, consultancy services, chemical manufacturing and a charity. The SMEs involved also ranged from micro (> 2 employees) to medium (>20 but< 200 employees).

The intention of the work was to educate and facilitate the SMEs in sustainability as well as develop a set of indicators which could be developed into a self-assessment software tool for easy use by SMEs. It was determined in the early stages of the work that a number of resources had been developed for SMEs both in Australia and internationally to assist them in moving towards more sustainable practices but most had failed to create change in the majority of SMEs (Revel & Rutherfoord, 2003). There is evidence that SMEs are able to demonstrate innovative practices and are responsive to rapid change due to their size and more flexible workforce. Our research indicated that although there was a strong belief that SMEs had some clear advantages over larger organisations, not all recognised that this ability to change quickly meant that movement in the external business environment might present opportunities that could be capitalised upon through innovative and strategic approaches.

Some of the barriers to uptake of behavioural change in SMEs ranged from a lack of understanding of their environmental impact through to lack of time and resources (Table 1).

TABLE 1: Barriers to implementing environmental and social change in SMEs

Characteristics of SME	Barriers to uptake	Implications
Environmental issues not seen as significant	Lack of understanding of environmental legislation	Not seen as essential to business survival
	Assumed little benefit in cost reduction	Cost savings not realised
	Risk management not considered	Open to litigation
Size of the business	Small numbers of staff with little or no expertise	Difficult to identify issues and solutions
	"Champion" if replaced may mean loss of knowledge and expertise	Loss of expertise
	Lack of resources/time	Insufficient staff to dedicate to environmental or social issues
	Close working relationship with owner or manager	Difficult to maintain anonymity if issues arise
Diversity of SMEs	Impacts and aspects of businesses are very diverse	Difficult to provide adequate and appropriate tools
Financial constraints	Expertise too expensive	Generic solutions implemented at lower costs
No management systems	Considered unnecessary	Lack of strategic positioning with no long term view

Having outlined a number of the barriers to environmental and social change for SMEs, it should also be remembered that not only do they differ in size and diversity, their interest in sustainability also varied. The SMEs who engaged with the project could be divided into four distinct groups.

They can be summarised (figure 1) as:

A. Those who were very willing to engage with the project and were in many respects excellent examples of "sustainable" businesses
B. Those who were strongly interested in becoming more sustainable but requiring assistance to understand how best to move forward
C. Those who were somewhat interested but as a result of barriers such as time, pressing matters relating to their financial bottom line and staffing/legal issues were not able to fully benefit from the process
D. Those who were reluctant to participate through lack of clear commitment to the issues raised such as reducing their environmental impacts, improving staff relations and working in a less autocratic way (Condon, 2003).
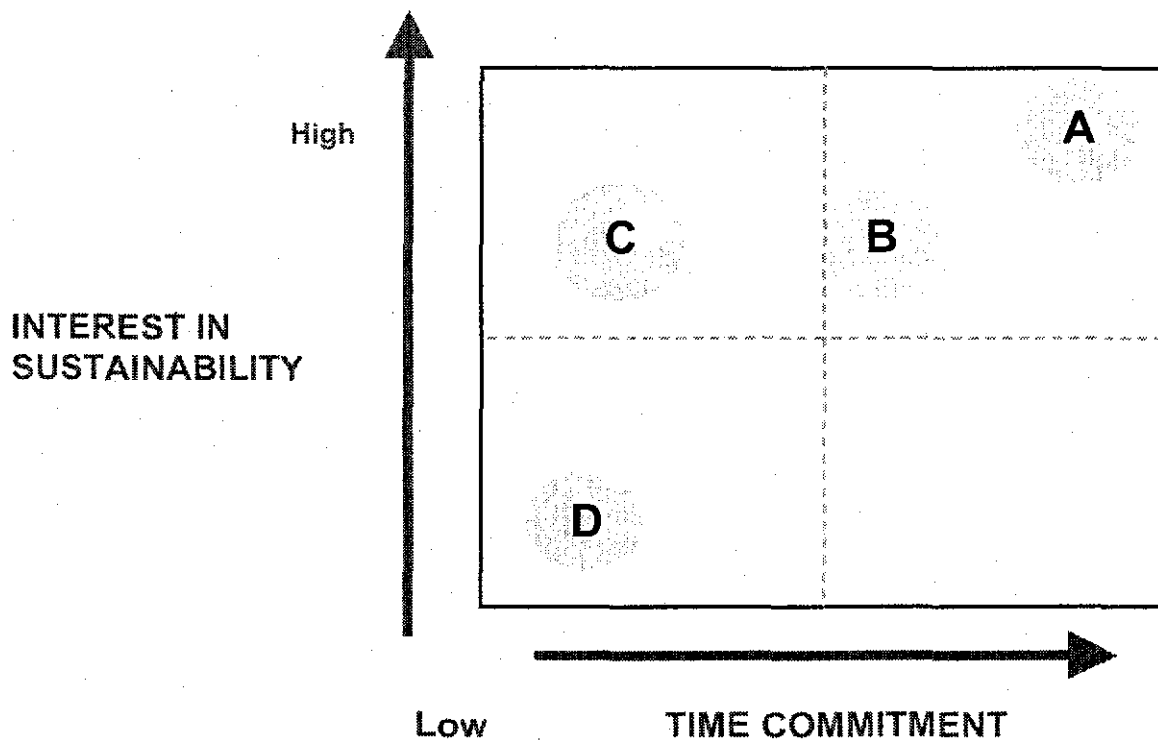
FIGURE 1: SMEs and their interest in sustainability

In addition to the action research undertaken sponsored by Sensis, the National Centre for Sustainability also established the level of interest in sustainability by SMEs through an electronic survey completed in July 2003. This survey determined that recruitment of suitable personnel with expertise in sustainability was an issue as well as a lack of resources and time. The response rate of 17% for the survey is calculated to represent a sampling error of 11.1% with 95% probability.

The survey determined that a lack of suitable people and poor image of the industry were the most common perceived reasons for recruitment difficulties. Some respondents
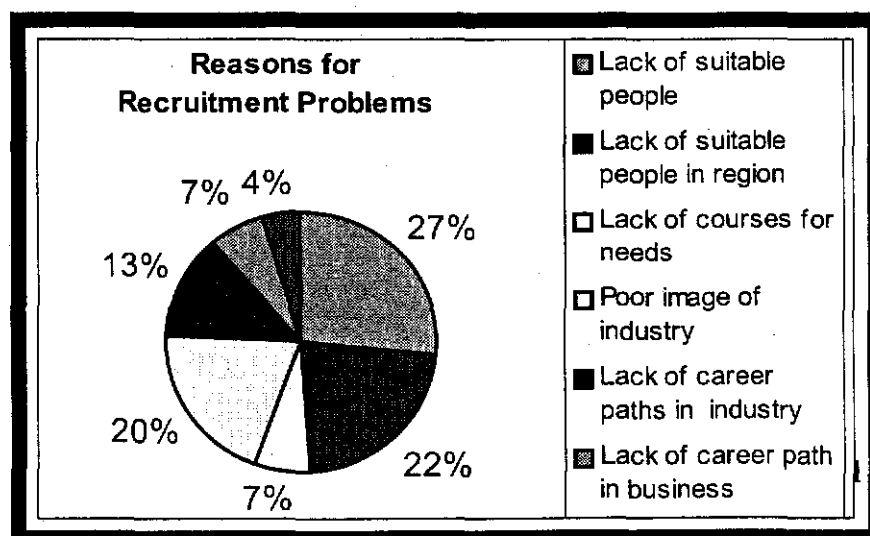

FIGURE 2: Recruitment issues

**Preferred training mode for organisation
Small organisation**

17%   26%

20%   11%

2%   15%   9%

- Self paced
- Programmed
- Off campus
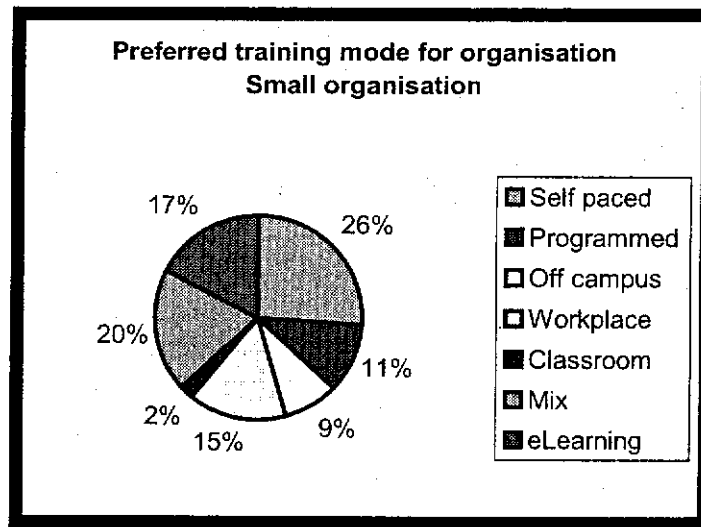- Workplace
- Classroom
- Mix
- eLearning

FIGURE 3: Small organisations preferred training

made special mention of difficulties in attracting people to work in country areas. The results of the survey indicate that the study area of environmental and social sustainability is still an emerging interest for many students and employees, and may not have the associated kudos which comes with business and IT courses (Figure 2).

The survey also determined that there are preferred methods of delivery for those employed by SMEs. Results demonstrate that the preferred option is self-paced or a mixture of self-paced and classroom activity (Figure 3).

Other interesting facts which emerged included the sources of information for training and education for SMEs. It emerged that SMEs most often rely on Industry Association and newsletters for information about training and education, though universities and TAFEs followed closely behind (Figure 4).
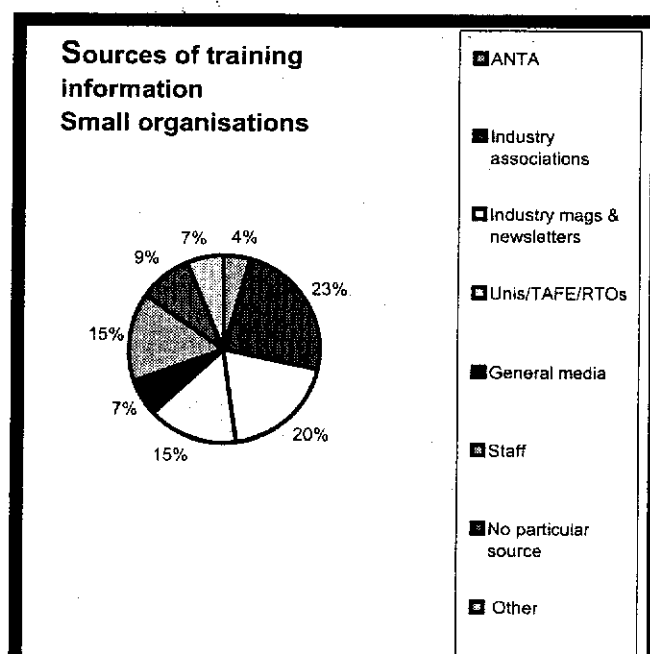
**Sources of training
information
Small organisations**

7%   4%
9%
23%
15%
7%
20%
15%

- ANTA
- Industry associations
- Industry mags & newsletters
- Unis/TAFE/RTOs
- General media
- Staff
- No particular source
- Other

FIGURE 4: Sources of training information

Our Methodology

SMEs want targeted, clear, concise information that takes the minimum amount of time and effort to access, understand and use. Far from being a problem of not enough information, SMEs complain of far too much untargeted, general information that requires extensive filtering and application. A major difficulty is in providing information that will be helpful in self-assessment and self-regulation. SMEs want information targeted specifically at their business to explicitly and concisely tell them what they can do to improve their business practices. They would prefer this information in the form of checklists, interactive software and rules. Some information dissemination modes for SME have included the mass media, television and the national and local press as well as trade magazines and newsletters. However, our research indicated that these sources of information for SMEs were used sporadically and did not facilitate longer-term behavioural change for the organisation.

Throughout the project adult learning principles were applied which included recognition of the need to develop an inclusive learning environment and grounding the learning in the experience of the participants. The principles first articulated by Knowles (1980) were considered relevant although additional research in the area of adult education contributed to the design of the program. Knowles developed the concept of adult learning principles suggesting that as people mature they move from dependent to self-directed learning, that they are keen to apply their newly acquired knowledge, that their experience adds to the value of learning and that they are motivated to learn by intrinsic factors (Knowles, 1980). Others such as Mezirow (1990, 1994) proposed that adults come to a learning environment with preconceived beliefs, values and often strongly held views or meaning structures. If there is a clear difference between meaning structures and their experience then it is likely that they will reject the concept or undergo a series of small transformational changes. Transformative learning Mezirow argues is central to adult learning (Mezirow,1994). Through this framework of andragogy, self-directed learning and transformative learning, the program for the SMEs was designed to maximise the learning experience.

The first step required the selection of and invitation to key personnel from the organisations targeted. This was undertaken on a personal basis often face-to-face or over the telephone. All SMEs approached (with the exception of one), readily agreed to participate and give up their time to be part of the project. They were asked to participate in 3 workshops each of 3 hours duration over a period of 5 months. In addition they were asked to set aside time for each to be visited by a member of the research team in their workplace and undertake to develop an action plan, with assistance, to reduce their environmental impacts. No financial costs were incurred by the SMEs other than their "time" contribution. The SMEs were also chosen on the basis of diversity. This was intended partly to ensure a wide variety of input into the development of the indicators but also to ensure that there would be little if any concerns about competition or commercial rivalry thereby providing a relatively safe environment for open discussion.

Research has been undertaken over the past few years in determining the barriers to change in individuals and communities towards better environmental practices (McKenzie-Mohr, 2000). McKenzie-Mohr's work on social marketing techniques has been widely used in the field of environmental behaviour change. This practical approach of identifying barriers and addressing them through incentives, prompts, pledges and commitments and experimenting through a pilot process before launching a broader campaign, has been shown to be very effective. The evaluations undertaken

by McKenzie-Mohr have demonstrated that extensive marketing campaigns and mass media are almost ineffectual in producing long-term behavioural change.

The workshops were designed around research findings of environmental psychologists to maximise the uptake of behavioural change (Blake, 1999; Gardner & Stern, 1996; McKenzie-Mohr, 2002). Gardner and Stern (1996) determined that the most effective behaviour change was driven by four main types of intervention:

- Appealing to values with the aim to change broad worldviews and beliefs;
- Education and information provision;
- Providing incentives either as monetary or recognition for good practice; and
- Establishing "community norms" or shared rules.

Their findings determined that the most effective behaviour change programs involved a combination of all four of the above.

Extensive research and numerous other theoretical frameworks have been developed to explain the chasm between the level of knowledge and environmental awareness and the uptake of pro-environmental behaviour (Kollmuss & Agyeman, 2002). Models developed included those of Blake (1999) who identified the attitude-behaviour gap as the value-action gap. The three barriers which were outlined were individuality, responsibility and practicality. Individual barriers are those barriers which are intrinsic in the nature of the person and are especially strong if environmental concerns are not strongly articulated. A number of our participants already had strong personal beliefs about reducing their environmental impacts whilst others were totally unconcerned or unaware of environmental impacts of their business. The notion of responsibility is around the concept of Locus of Control – it was for this reason that each of the participants were chosen for their ability to strongly influence their own organisations. Each participant was either the owner, corporate strategy manager or CEO. Practicality or the social or institutional barriers were considered significant for a number of the SMEs. These constraints included lack of time, money and intention.

Barriers to change were identified early on in the methodology. It was identified that the barriers were multiple which directed the researchers and facilitators to work individually with each SME to design a personalised action plan to promote pro-environmental behaviour. Through the individual action plans developed with each SME the most significant (and at the same time least impeding) environmental impacts were identified. Personal capabilities, contextual factors such as cost and experience, as well as personal values and attitudes also drove the more motivated SMEs to stretch themselves in the key initiatives outlined in their action plans supporting the work of Gardner and Stern (1996).

It was also recognised that the SMEs involved in the program would be influenced by the development of a high profile Advisory Group for the project which provided a strategic focus. As a result an Advisory Group was established which involved key members of industry associations, government agencies and local councils.

• *Plastics and Chemical Industries Association (PACIA)*	• *Australian Industry Group (AIG)*	• *EPA Victoria*
• *Victorian Employers Chamber of Commerce and Industry (VECCI)*	• *Department of Innovation, Industry and Regional Development (DIIRD)*	• *Sensis*
• *Manufacturing Learning Victoria (MLV)*	• *Business Enterprise Centre at Swinburne University*	• *CPA*

The workshop facilitators were also mindful of the inherent knowledge of adult learners, so interchange of information was a strong key to success. The following strategies were used in the outline of the program:

- appealing to values and concerns for the environment;
- providing informative resource material at each workshop;
- providing incentives such as the positive recognition from key organisations and government;
- personal assistance with workplace change;
- uncovering barriers to behaviours through interactive engagement;
- selecting which behaviour to promote to most effectively transform organisations;
- designing and committing to a plan to overcome the barriers to the selected behaviour;
- piloting the program to determine its effectiveness; and
- evaluating the process.

These strategies were designed from the research undertaken on pro-environmental behaviour and based on the work of Gardner and Stern (1996), McKenzie-Mohr (2002) and Blake (1999).

The support provided to the SMEs throughout the program included onsite visits, face-to-face personalised advice and help-line guidance. After the first workshop, each participant was asked to develop an action plan with one-to-one assistance from facilitators to target key environmental impacts of their business. Each business was then visited after the second workshop to assist them further with the development of their pro-environmental strategies. These visits consisted of a half day consultation which involved

- a site tour;
- examination of workplace practices;
- examination of environmental practices;
- discussions of difficulties being addresses in the action plan; and
- advice on how best to address the environmental impacts.

The close mentoring process was seen as essential to maintain motivation for those SMEs who were faced with barriers such as lack of time, expertise and knowledge of environmental issues applicable to their businesses. The camaraderie, which developed between the businesses, was also critical in maintaining enthusiasm. Larger and higher profile organisations in the program appeared to provide a level of credibility to the project and encouraged the smaller businesses to participate.

The Outcomes of the Research

The enthusiasm for the program was clearly demonstrated in the first workshop attendance. However, a drop off in attendance was seen in subsequent workshops when SMEs were asked to undertake "homework" to develop an action plan for reducing their environmental impacts. Increased support for the program was observed subsequently when visits were made to each workplace, where the researcher was able to more clearly understand the individual needs of each business. This response appears to indicate the need to provide a strong "mentoring" and supportive program for effective uptake of change with SMEs. This is not surprising since one of the greatest barriers to change determined earlier with the group was the lack of expertise and insufficient resources to support change. The "network" which developed as a result of the work is still loosely in place and also demonstrates the interest in peer support.

For some SMEs, issues relating to changing practices to support sustainability were seen as increasing demands or imposts which took time away from their essential business activities. A reluctance to see change as an opportunity that SMEs (with their small size and ability to respond quickly) might capitalise upon was recognised, but it was also seen as additional work. Research performed by Blake (1999) also indicated that the practical aspects of pro-environmental behaviour were a major barrier.

Some SMEs were reluctant to engage more openly with their staff, particularly those who had a large proportion of staff undertaking traineeship or large numbers who were casually employed. This is not uncommon and indicates the difficulties some SMEs have in retaining loyal employees in industries that have traditionally had high staff turnovers. The SMEs were asked to undertake a staff satisfaction survey as part of the process, but a number of them did not consider this to be a valuable exercise. This may reflect the fact that a number of SMEs are family run businesses where the interaction with staff is frequent and confidentiality could be an issue.

Many of the participants were highly supportive of social and environmental initiatives. Some, such as Yvette Karklins from Wharington International, were strongly committed to making sustainability central to their business, but struggled in winning over others in the firm to this vision, and had often struggled in finding a market for socially or environmentally responsible products. Others, such as Dave Sanders of Sound Logic, were firmly committed to responsible practices in the form of an active philanthropy and partnership program, but viewed this as fundamentally a matter of their own conviction, rather than a source of business advantage alone. Indeed, Dave Sanders' comments on this issue are highly indicative:

> We practice social responsibility because it is something I am very interested in and committed to, but we have never won a job on that basis, or any basis other than our ability to deliver a particular product or service at a particular price. Our commitment to social responsibility is viewed by our clients, and indeed by most of my employees, as a personal quirk of mine, rather than a fundamental of the business.

These intrinsic values motivating people like Dave and Yvette support the research findings of Maiteny (2002) where "emotional involvement and experience are central to sustained pro-environmental values and behaviour".

About 30% of the SMEs in the project saw sustainability initiatives as a key means of improving staff commitment or performance, or attracting or retaining more talented or diverse staff. However, a number revealed negative attitudes towards their workforce, and the ability of their staff to take on responsibility or contribute productively to developing process improvements or new business ideas. A few recognised the value of reducing costs through environmental initiatives although research has clearly demonstrated that costs savings can be made particularly in businesses with higher emissions (Hart & Ahuja, 1996).

For many larger corporates, action on sustainability issues has been driven primarily by the benefits that a track record of responsibility has been shown to have on the ability to attract and motivate talented staff. Whilst marketing and end consumer-level benefits have not always been significant in many areas, the impact of responsibility and reputation on employee productivity and ability to attract and retain talented staff has been viewed by many as critical. Recent research by the UK organisation *Business in the Community* has shown that corporate social responsibility and the ability to translate those values to individual employees, correlated directly to increase motivation, new ways of thinking and innovation, and enhanced customer experience. 81% of British employees, according to the research, agree that responsible

organisations are more likely to be creative and innovative. In the words of *Business in the Community* CEO Julia Cleverdon, the research served as "confirmation of how critical integration of responsible practices is, offering business the opportunity to leverage success through the way it attracts, retains and motivates staff" (Cleverdon, 2003). In this light, the reluctance of some SMEs to engage with their workforces on issues of sustainability could slow their progress toward more sustainable work practices.

Small and medium enterprises have a major advantage over larger organisations in regard to addressing sustainability issues – their size means they are able to react very quickly to changes in the business environment. They are disadvantaged, however, by lack of information on marketplace changes that make sustainability an opportunity to innovate, and to inspire employees. While some SMEs were leaders in sustainable practices, others lacked the sort of strategic mindset which views changes in the business environment as opportunities – seeing the tasks which require more change as an additional burden, rather than a source of potential advantage.

The project has been able to deliver a set of sustainability indicators which are specifically designed to be used by a wide sector of SMEs. These indicators were developed with the invaluable input of the SMEs and the Advisory Group involved with the project. Within the next 12 months it is anticipated that a self-assessment software tool will be developed which will be readily available to all SMEs to assist them in moving towards more sustainable practices.

Conclusion

The major issues for SMEs relate directly to their financial bottom line including competitiveness, marketing, customer satisfaction and avoidance of legal problems. In order to be able to actively engage SMEs, it is important to remember that the conventional methods of seminars, newsletters and the Internet are not as successful as on-site visits, face-to-face advice, networking, a help-line offering guidance and the development of meaningful relationships. This method of communication is also more time intensive but long-term behavioural change is unlikely to occur unless the appropriate methods are employed. In addition, if the barriers to change have not been addressed and the SME does not see clear benefits in addressing sustainability (such as regulations, financial incentives and customer demand), it is even less likely that they will engage in the change process. Working with SMEs continues to challenge educators and environmentalists and our research has indicated that this will continue unless sufficient support and advice is provided to facilitate long-term behavioural change towards more sustainable practices.

References

Atkins, W. S. (2002). NetRegs benchmarking Survey. A snapshot of environmental awareness and practice in small and medium sized enterprises (SMEs). Retrieved September 2004, from www.environment-agency.gov.uk/netregs.

Australian Bureau of Statistics (2002). 1321.0 Small Business in Australia 23/10/2002.

Blake, J. (1999). Overcoming the "value-action gap" in environmental policy: tensions between national policy and local experience, *Local Environment, 4*(3), 257-278.

Cleverdon, J. (2003). The Challenge of Corporate Social Responsibility. Business in the Community October 2003. Retrieved September 2004, from http://www.bitc.org.uk/go.rm?id=6005.

Condon L. (2003). Business Sustainability Indicators for SMEs Report, National Centre for Sustainability (unpublished).

Ecobody (2002). Awakening Calls, Waste & Environment Today. Retrieved September 2004, from http://www.ecobody.com/views6.html

Gardner, G. T., & Stern, P. C. (1996). *Environmental problems and human behavior.* Boston: Allyn and Bacon.

Hart, S. L., & Ahuja, G. (1996, March). Does It Pay to Be Green? An Empirical Examination of the Relationship Between Emission Reduction and Firm Performance. *Business Strategy and the Environment, 5*(1), 30-37.

Knowles, M. (1980). *The modern practice of adult education: from pedagogy to andragogy.* New York: Cambridge Books.

Kollmuss, A., & Agyeman, J. (2002). Mind the Gap: why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research, 8*(3), 239–260.

Maiteny, P. (2002). Mind in the Gap: summary of research exploring "inner" influences on pro-sustainability learning and behaviour. *Environmental Education Research, 8*(3), 299–306.

Mancuso, S. (2000). *Adult Learner-centered Institutions: Best Practices for the 21st Century.* Western Washington University, USA.

Mezinow, J. (1991). *Transformative Dimensions of Adult Learning.* San Francisco, CA: Jossey-Bass.

Mezinow, J. (date). Understanding Transformational Theory. *Adult Education Quarterly, 41*(4), 222–232.

McKenzie-Mohr, D. (2000). Promoting Sustainable Behavior: An Introduction to Community-Based Social Marketing. *Journal of Social Issues* (issue numbers)

Revell, A., & Rutherfoord, R. (2003). UK environmental policy and the small firm: broadening the focus *Business Strategy and the Environment, 12,* 26–35.