

SHARE-NET: Progress or Paradox

Jim Taylor

ABSTRACT

This paper is drawn from research that led to the development of Share-Net, an informal, participatory network with the purpose of developing environmental education resource materials for teachers and community groups. The research took the form of a case study that was located within the flow of events, emerging issues and problems within Share-Net. The research led to changing orientations to resource materials design, to research processes and indeed to environmental education.

PROGRESS AND PARADOX

Progress

It is often assumed that networks are desirable: they bring people together, they enable sharing of information, and through these exchanges it is hoped that people will become empowered. When 'top-down' approaches to change fail or become outdated, people turn to networks or facilitatory approaches, believing that this will lead to progress.

Paradox

Unfortunately, the idea of 'us' achieving our objectives by changing or affecting 'them', is still very evident in these latter, more politically correct, orientations. Can those who know (the powerful), cause (socially engineer or facilitate) change in others? Does good communication of information lead to desirable social change? Do frequent meetings and workshops contribute to our capacity to do things better? Can education take us beyond the 'us' and 'them' dialectic?

THE SHARE-NET STORY

How Share-Net came about

Share-Net had its beginnings in a period of disillusionment within the Wildlife Society and Natal Parks Board about the failure of a 'develop and disseminate' orientation to educational resource materials (O'Donoghue & Taylor, 1988). A workshop was then held

to address this problem and fifty participants from all over southern Africa who were interested in environmental education resource materials attended. Background papers had been circulated that outlined the weaknesses of 'develop and disseminate' approaches and all participants were encouraged to bring along materials on which they were currently working or to which they had access.

At the workshop, the materials were displayed and participants were given time to introduce themselves and their materials. As the workshop progressed, various plans for regional resource materials development were defined. Unlike many other workshops, the proceedings of the workshop consisted of a telephone directory of names and contact numbers. This mechanism helped people develop contacts for further co-operative projects. The Proceedings could, therefore, help promote contact and enable the work to proceed.

Local networking in KwaZulu Natal focussed on the needs in poorer schools and the development of supportive educational resource materials. These materials drew on resources that were in use at the Umgeni Valley Project. The demand for the new materials soon began to grow and the need to publish them more widely became evident. Steadily the policies of the network began to emerge from the research and experience¹. Examples of policy decisions included the use of funding from Shell to purchase a printing machine for producing

ongoing materials rather than relying on sponsorship for the distribution of materials. The materials could then be produced 'in-house' and sold on a cost recovery basis. Steadily, Share-Net activities grew and other projects were developed. The significance of sharing expertise and making information available copyright free in various adaptable formats, became another policy issue (McNaught, *et al.* 1992).

The importance of a focus for networking

As a network, Share-Net activity was focussed on environmental education resource materials. Participants could produce products because they had access to a printer and personal computers that were easy to use. Approaches were developed through experience, through the sharing of ideas as well as through an occasional 'reaching' for theoretical papers on curriculum development and materials production. Policies were developed out of grounded action rather than through orchestrated development theories. It is significant that it was not the transfer of information that led to growth and change, but the opportunity for all participants to invest their ideas, engage with the ideas of others, have their assumptions challenged and, where appropriate, change perspectives. It was the development of the educational materials, however, that provided the focus and products around which the learning engagements could take place.

Institutional tensions

With the development of increasing numbers of popular resource materials through co-operative projects within Share-Net, various tensions became apparent. These included institutional tensions where kudos was seen to be lost through co-operation and joint logos on publications. Furthermore, the development of materials looked easy - some projects were launched that raised expectations, but did not have the capacity or resources to follow through to

the final production of the material. A process of working together to make materials became objectified by some as action from which they were excluded. Occasionally, people who did not actively develop or make materials, felt left out! And yet, beyond this, steady action on and around materials grew, changed, and re-developed. A paper on "giving away the tools" (Taylor, 1993), encapsulated the importance of working together on tangible materials and sharing them widely with others, rather than simply communicating information. The water monitoring project is one of many examples of this (O'Donoghue, *et al.*, 1994).

THE RESEARCH PROCESS

The Share-Net project involves *People* (training support and development), *Places* (a number of independent, co-operating centres), and co-operatively developed *Publications* (low-cost materials that support school and community use). The research is interwoven within these three spheres of activity which included planning and the management of the project. Of course this has meant that the research process was within the action of the project and had to be designed to accommodate the daily reality of running the project (see for other examples, Lotz, 1995; Janse van Rensburg, 1995 and Paxton, 1994). As the research proceeded, various questions became apparent. These questions related to the development of the materials (e.g. How should they be developed?), the form of interaction with teachers and community workers (e.g. How should workshops be conducted?) and the economics of the project (e.g. Was it possible to run an economically viable project?). The research data was organised so as to best provide answers to these and other questions. Data was therefore clustered in three main streams, namely: resource materials developments, including a qualitative record of how each resource item was developed (time scale and co-operating individuals and organisations); Workshops, including a

record of workshops conducted, how, with whom and where; and economics, including income and expenditure, numbers sold and to whom.

THE MATERIALS DEVELOPMENT PROCESS

An analysis of the resource materials development processes revealed how important it is to avoid the trap of trying to apply either 'top-down' or 'grass-roots' approaches. A responsive orientation, often incorporating both 'top-down' and 'bottom-up' approaches (when appropriate), yet sensitive to each particular social context, tended to be more effective. Furthermore, the importance of a determined co-ordinator with the ability and technological capacity to bring the resource to completion is essential. Relatively cheap IBM-compatible computers running WordPerfect with laser printers were successfully used to originate or adapt the materials. A photo-copier was then used for low print runs (for trialling purposes), while print runs of more than one hundred copies were done on an off-set litho printing machine.

RESOURCE MATERIALS WORKSHOPS

As the project became better known, Share-Net participants were invited to share the resources and ideas through workshops and meetings with teachers, community workers or simply with members of the public. Over the years the presenters' orientation to workshops changed from a fairly well defined plan to an approach where participating teachers were invited to try out various materials with a view to adapting them for their own purposes. The capacity to respond to requests for workshops, or resource material support, became an important policy issue within the project (Taylor, 1995). Workshops were to become increasingly popular with over 5 000 participants attending workshops from the beginning of 1992 to the end of 1994. It is noteworthy that this responsive orientation

(running workshops on request) proved more successful than attempts to target a particular group for workshops or materials. This phenomenon overturned the conventional wisdom of 'us' targeting 'them', as teachers increasingly approached Share-Net for workshops and materials support!

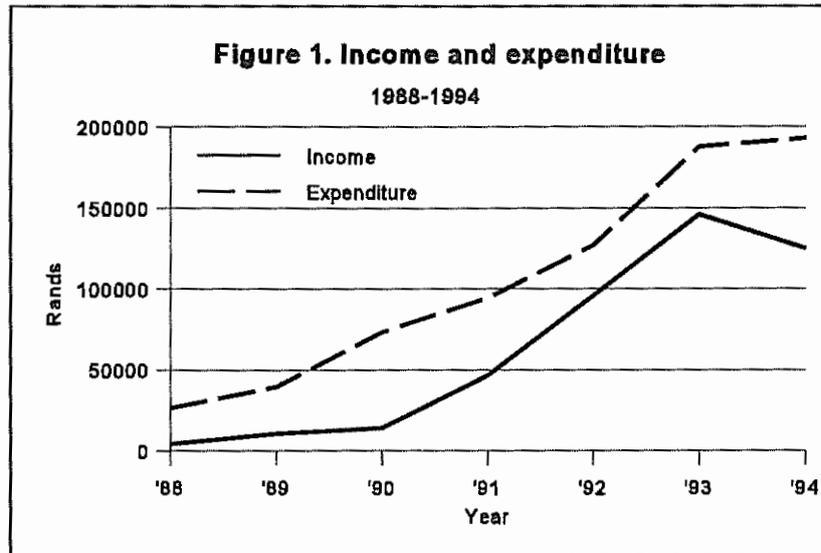
It is also interesting to note that people seldom adapted the materials themselves but rather adapted the way they could be used. The importance of participants playing a part in 're-inventing the wheel' and learning and growing through this, also became apparent.

ECONOMICS

Most materials are sold to teachers or community workers who wish to equip pupils or members of the public with resources that enable them to find out about environmental issues. A mail order service provides an essential back-up to the rich discussions at materials workshops. As the project has developed, the expenditure has obviously increased (Figure 1), however, income to the project has also increased significantly from R4 261 in 1988, to over R120 000 in 1994. This is a significant figure when it is considered that the average resource, or kit sold, costs R6.00!

CONCLUSIONS

The research revealed the weaknesses of conventional interventionist approaches to resource materials development and helped the researchers to complement these, or even replace them, when appropriate, with a revised orientation (Table 1). This revised orientation has been supported by a responsive, cost-recovery, resource materials support structure which is based at the Umgeni Valley Project in the KwaZulu Natal Midlands. Within the processes of acting, making and sharing of resource materials, the following specific outcomes became



apparent. These include the importance of:

1. Participatory approaches to the development of materials.
2. The opportunity for adaptation and localisation of materials.
3. Responsive or reflexive processes when developing resource materials rather than a participatory *or* top-down dialectic.
4. Co-operative relationships with funding organisations, rather than transfers of money from funder to funded.
5. Locating the economy of the project within the sales of goods or services rather than relying heavily on an outside sponsor to cover running costs (this often results in a project becoming responsive to the sponsor!).
6. A mail order service (for distributing water-monitoring kits, field-work booklets, simple pamphlets etc.) that supports courses and workshopping and enables people in remote areas to benefit without costly travel.
7. Finally, it is increasingly clear that if networking and co-operation is to come about, it is up to us, as individuals or organisations, to make it happen through action and the development of

resources. Strategising, or waiting for some umbrella organisation to make things happen, will not get us very far.

In summary these conclusions have helped us, as participants within Share-Net, to broaden our perspectives. This change is illustrated in Table 1.

As fellow participants within Share-Net, we therefore came to see the importance of environmental education as a refocussing orientation, capable of responding *reflexively* within the social context, rather than the blinkered maintenance of a clear instrumental and predetermined plan. This conclusion is of special significance within a network of co-operating individuals and organisations.

It has not, therefore, been a rational, planned process, that has resulted in the Share-Net network. Neither has it been a process of 'us', the project leaders, acting on, or facilitating 'them', the project recipients. Rather, it has been a process of working together in a responsive way. This has meant that although the activities have had a reflexive orientation (Beck, 1992), the outcomes have usually remained uncertain.

The investment of people's ideas in the project, however, and the engagement around conflicts of interest, as well as a revealing of assumptions and myths, have contributed to the change in all of us. This is of particular importance as we learn to cope better within the risks and uncertainties of our times.

ACKNOWLEDGMENTS

Many people contributed to the work of Share-Net. These include colleagues of the Wildlife Society, and co-researchers, including Rob O'Donoghue, Eureka Janse van Rensburg, Dinnie Nel and Pat Irwin.

Table 1. Broadening Perspectives

Arena of Action	Common Perspective	Developing perspective
Approach to EE	Targeted messages and information transfer, Facilitating change in others	Mutual 'doing' of projects and engaging around common problems and needs
Materials development	Top down or bottom up	Consultative and participatory processes related to the immediate context
Networks	Communicating and transferring knowledge	Working on focussed, tangible resources/activities
Research	Outside, independent	Grounded and engaged, within action.
Funding	Finances from funder to funded	Joint accountability and mutual problem solving with funder and participants.
Economy	Being paid for doing the work	Cost recovery for goods or services with ongoing economic potential.
Ideological orientation	Interventionist orientation	A responsive or reflexive orientation

Various funding organisations also contributed a great deal, both financially and with personal encouragement and enthusiasm. These include: Shell (Lora Rossler), Gold Fields (Willie Jacobz), WWF-SA (all staff) and the Mazda Wildlife Fund (Peter Frost). I am particularly grateful to the enthusiastic participants at workshops, to all the people who contributed to the compilation of materials, as well as to the FRD (Foundation for Research Development) for research support and to the Wildlife Society as a whole for the continuous support received.

REFERENCES

- Beck, U. 1992. *Risk Society: Towards a New Modernity*. Sage, London.
- Janse van Rensburg, E. 1995. *Environmental Education and Research in Southern Africa: A Landscape of Shifting Priorities*. Published Phd. Thesis. Rhodes University, Grahamstown.
- Lotz, H. 1995. *Resource materials development in environmental education: Exploring some of the myths and tensions in participatory resource development in the We Care Primary project*. Paper presented at EEASA '95 Conference, Kearsney, Durban.

McNaught, C., Raubenheimer, D., Keogh, M., O'Donoghue, R. & Taylor, J. 1992. Developing networks of grass-roots science curriculum action. *Research in Science Education*, 22, 291-298.

O'Donoghue, R. 1993. Clarifying environmental education: A search for clear action in southern Africa. *Southern African Journal of Environmental Education*, 13, 28-38.

O'Donoghue, R. & Taylor, J. 1988. Towards participant-centred resource development in environmental education. *Southern African Journal of Environmental Education*, (7), .

O'Donoghue, R., Nel, B. & Taylor, J. 1994. *The shaping of environment, science and technology education within the Share-Net project in southern Africa: A summary*. Paper presented at Science and Technology Education in a Demanding

Society Conference, Veldhoven, The Netherlands.

Paxton, L. 1994. *An investigation into the need for environmental information in South Africa: A case study of the Enviro-Facts project*. M.Ed. Thesis, Rhodes University, Grahamstown.

Taylor, J. 1993. Giving the tools of science away. *IUCN Newsletter*, (4), May. Gland, Switzerland.

Taylor, J. & O'Donoghue, R. 1989. Towards a co-operative network for environmental education. *Environmental Education Bulletin*. EEASA, Howick.

Taylor, J. 1995. *Share-Net: Case Studies in a Risk Society*. Foundation for Research and Development, Pretoria.

NOTES

- ¹ As time went by the difference between research and experience blurred. The importance of re-searching experiences through guiding questions became apparent.