EVALUATION OF ORGANIZATIONAL LEARNING INTERVENTION AND COMMUNITIES OF PRACTICE.

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There has been much written about organisational learning theory but some concerns about how to operationalise it. Indeed, the implementation of "organizational learning" and "knowledge management" in terms of human resources practices such as training and development is infrequently evaluated. Part of the problem is the difficulty of demonstrating relationships between the individual staff learning, team or group learning with commensurate change at the organisational level. Another concern is whether various approaches to human resources management have any impact on these linkages in promoting learning at these different levels in the organisational context. This study is about an evaluation of one of the newer forms of organizational learning intervention, viz: *communities of practice*.

This paper reports on an Australian national study into an organisation which has attempted to implement the communities of practice in the form of an internal group focusing on disseminating information about "best practice". In promoting organizational learning the organisation hired the presenter to evaluate the development of their attempt at knowledge management. This was a unique opportunity to explore the role of evaluation as one of the methods of organizational learning and its application to a new form of knowledge management.

Keywords: organizational learning, communities of practice, evaluation.

1. COMMUNITIES OF PRACTICE

In the current management literature the dominant model of organisational change is organizational learning theory (Argyris & Schon, 1978; Hampden-Turner, 1990, 1992; Senge, 1990). Managers are told there is a corporate international organizational learning race (Hampden-Turner, 1990, 1992). In order to survive the 1990's organisations were told they had to model themselves on the "learning organisation" concept (Senge, 1990). Along with the marketisation of the public sector (see Pollitt, 1993; Pollitt & Bouckaert, 2000), the pressures of competition have been interpreted as indicating that the public sector needs to exercise organizational culture change strategies but also the exercise of organizational learning (see Leeuw, Rist & Sonnichsen, 1994). However, there are many assumptions and difficulties in applying such organizational learning models, especially in the public sector, and Not-for-Profit organisations (see Leeuw, et al, 1994; Sharp, 1996a, 1996b, 1996c). Also there has been very little research on the relationship between organizational learning and evaluation. (Leeuw et al, 1994; Sharp, 1996a).

Indeed, there may be tangible signs of organizational learning in adaptive changes in policy and application of program evaluation results (Rist, 1994). When Governments encourage appropriateness as an evaluative criterion for program accountability (Sedgewick, 1994; Sharp, 1994b) and benchmarking (Sedgewick, 1995; Sharp, 1994a) these may be important tools in establishing the conditions for organizational learning (Rist, 1994). But these may not be the necessary, nor sufficient, indicators of organizational learning (Sharp, 1994c; 1996a). Other factors, such as changes in organizational culture or the existence of a supportive organizational culture (Sharp, 1996b) and appropriate human resource management and corporate memory management practices (Sharp, & Lewis, 1993; Sharp 1996c) may also be important in establishing that organizational learning can occur. While organisational learning can be seen as an aspect of an organization's culture, the concept of "the Learning Organisation" is an ideal type of organisational culture (Baulderstone, 1994) to which practices, attitudes and values involving program evaluation, as well as other systems development techniques, can make a significant contribution (Owen & Lambert, 1995).

Part of the problem is the difficulty of demonstrating relationships between the individual staff learning, team or group learning with commensurate change at the organisational or network level (cf Dixon, 1994; Kim, 1993). One attempt to develop an organisational link between individual learning, group learning, and organizational learning, has been the facilitation of *communities of practice* (Brown, & Duguid, 1991a, 1991b; Lave & Wenger, 1990). The 'communities of practice' model has been established in a range of specific service delivery areas and in private sector management (see Brown, & Duguid, 1991a, 1991b). The concept arose from the disparity between the "espoused" or official organisational procedures and actual practices of workers in organisations (Brown & Duguid, 1991a, 1991b). Indeed, Brown and Duguid (1991a, p. 2) asserted that:

"reliance on espoused practice ... can blind an organization's core to the actual, and usually valuable practices of its members It is the actual practices, however, that determine the success or failure of organizations."

One working definition of CoP is:

"Communities of Practice (CoPs) are groups of people in organizations that form to share what they know, to learn from one another regarding some aspects of their work and to provide a social context for that work." (Nichols, 2000, p.1)

The concept reinforces the view that knowledge can be created and enhanced through networking (Araujo, 1998).

Other contributors to the concept of "communities of practice", Lave and Wenger (1990, 1991), have developed the concept of "legitimate peripheral participation" (LPP) as an analytical tool to understand learning across different methods, and to analyse "communities of practice". They explain the usefulness of the LPP concepts as linking the implicit learning of individuals by their participation in groups and organisations. The LPP is like the ethnological concept of how the *etic* relates to the *emic* (see Guba & Lincoln, 1990; Lincoln & Guba, 1985; Pelto, 1970; Pike, 1954) which describes the *insider* view (*emic*) from the *outsider* view (*etic*).

According to Lave and Wenger (1990, 1991) learning, from the viewpoint of LPP, essentially involves the enculturation of becoming part of the group, and thinking as an "insider." As with the *emic* speakers of language, group members of CoP do not receive or even construct abstract, "objective," individual knowledge; rather, they are thought to learn to function in the community of learners and practitioners (Araujo, 1998), through implicit learning, which is akin to the concept of *tacit knowledge* developed by Polanyi (1962) and Nonaka (1991).

Lave and Wenger (1990, 1991) suggest that such learners acquire that particular community's subjective viewpoint and learn to "speak its language" (see also Brown, Collins, & Duguid 1989). In the community of practice the learners acquire informal craft practice, not just the explicit, formal "expert knowledge (Brown, & Duguid, 1991a, 1991b; Lave & Wenger, 1990, 1991).

However, there is already a degree of hype and fadism emanating from the emerging literature on CoPs. For example:

"It is not surprising that communities are central to successful knowledge management initiatives. ... The rise of formal communities of practice ... may reflect a sea of change [sic] in the evolution of modern management" (APQC, 2001, pp 6-7)

In this study we had the opportunity to evaluate a formal CoP, which was part of a deliberate strategy to facilitate knowledge management in a professional service delivery organisation. In the case study, the aim of the strategy was to identify, support and promote best practice through a range of professional practice groups networking across the whole organisation. The management of the organisation setup and funded a CoP Coordinator and a CoP network structure. The Coordinator recruited and selected, coordinated, budgeted for, initiated and disbanded CoPs. Each group within the CoP network consisted of a range of highly skilled practitioners currently working in the particular service delivery area or in business administration.

In order to take stock of the role of communities of practice and to facilitate development of knowledge management, top management of the service organisation commissioned the authors to conduct an evaluation after the initial three years of the CoP network.

2. THE HUMAN SERVICE ORGANISATION

The case study organisation, hereafter called 'The Service', provided a geographically diverse program for people who are disadvantaged, and in need of a range of services for them to achieve community outcomes, like employment and independence from government. The Service is a highly decentralised program which operates as a commercial business within the broad government services environment of 'consumer choice'.

Communities of Practice (CoP) were initiated a few years ago as part of a restructuring of the Service. The aim was to build on the knowledge and professional expertise held by the organisation, while at the same time sustaining career development of staff in a flattened organisation structure.

The focus of the change was on developing a consistent approach to human service that could compete in a free market of human service practice. This meant that an organisation wide approach to practice was needed with agreed standards and procedures implemented across the widely distributed offices and services. To achieve this it was necessary to sort out the best practice approaches to assessment and intervention. This was to be achieved in an organisation consisting of a wide range of professions, each of which valued their tradition and special perspective and their independence in dealing with client organisations and individual disadvantaged customers.

As part of the same process, other organisational changes occurred. The product orientation of a commercially focussed human service required a product and resources development team, to develop, package and circulate the new uniform approaches across the organisation. Organisational changes in the past had led to a number of experienced practitioners leaving the Service and there were high levels of staff turnover. This led to the need to ensure that there was a strong human resources focus and provision for ongoing recruitment and training.

At the same time communication had to be made more uniform. Electronic messaging and a national computer network replaced the myriad of paper based manuals. This placed a further need for training on The Service. Most of the service-delivery personnel came from human service professions that value face-to-face contact and are more "people oriented" than "machine oriented". Many of these were and still are relatively unfamiliar with, and somewhat resistant to, the use of WWW internet-based information technology (e.g. email discussion lists).

Communities of Practice therefore were developed in a climate of rapid change. The organisation in which they operated was in the process of rapid transformation with changing management personnel and roles. In the background, there was also a sense of threat perceived by helping professionals that unless a rapid commercialisation was achieved, that the government would seek such services in the open market and the

organisation could be disbanded leaving disadvantaged service recipients at the mercy of market forces.

2.1 Implications of the theory for The Service

The experience of this case study has closely mirrored that of reports of those who have taken the lead in the development of CoP and knowledge development (e.g. APQC, 2001; Wenger, 1999). There were many echoes in the literature which described well, some of the phenomena reported during interviews from the staff and management of the Service agency. But it also confirms the potential of these approaches to produce innovative opportunities, as were as uncertainty and tension. While much of the early literature focussed on technically based businesses, there is increasing analysis of the health and human services sector. International enthusiasm for CoP and the emergence of the Internet has meant that local or intra-organisational CoP can link to a range of other external CoP. The climate for further and more exciting developments was set for an exciting evaluation.

The other major theme of the literature is the need to develop organisational value systems and people oriented processes that complement activities such as CoP. Knowledge development may soon come to an end if there is nowhere for its outputs to go. There is a need to develop a mix of processes to deal with different types of task and to ensure that the structure is shaped in a way that allows testing of new proposals and theories and permits quick implementation of those that prove to be effective and efficient. It is clear that CoP cannot undertake all of the necessary tasks and that expecting certain tasks to be undertaken using a CoP process is likely to result in frustration and confusion.

3. THE EVALUATION BRIEF

3.1 Purpose

The purpose of CoPs can be described on two levels. The first is the public face of the groups and their overall aim. The second is their role in assisting the organisation to achieve the transformation to a uniform service entity.

The evaluation of Communities of Practice (CoP) was intended to determine the impact of the initiative since its inception in these two roles. To identify its strengths and weaknesses and to make recommendations concerning future directions that would optimise the capture and development of the knowledge capital of The Service and its employees.

A number of specific questions were to be addressed (the more relevant issues are selected here for the purposes of this paper):

- Whether the identified models are perceived by the service delivery group as "best practice";
- Whether the identified models of best practice are accessible to the group and via what means:
- Whether service delivery staff are supported in utilising best practice models;

- Whether the CoPs have contributed to maintaining currency of information in line with continuous improvement;
- Whether the CoPs are credibly perceived by the service delivery group;
- Whether the virtual reality model for CoPs contributes to their effectiveness?

In this report it is not possible to address all of these issues. We will highlight the main issues from the point of the learning from the evaluation.

5. EVALUATION METHODS

Because of the difficulties of the outsider "Evaluators" grasping the *emic* view, it was crucial for the evaluation methods to engage the individuals, groups and the CoP network, as well as the wider organisational linkages, to perceive their *emic* view. Thus the evaluation used a mix of methods; not just for triangulation (Patton, 1990), but also to attempt to appreciate the implicit knowledge of the CoP within the scope of the time available for the evaluation

5.1 Focus groups

Focus groups were conducted with several of the CoP; enough to scope the varieties of the CoPs in the Service. They were used to gain an overview of what different groups and individuals needed from CoPs, what they expected them to produce and whether what was wanted was produced, and whether it was accessible to the intended audiences. Each attendee at the focus group was asked to complete an individual questionnaire at the start of the group session and then encouraged to share their responses with others over a period of 1 to 1½ hours. Groups then followed the important issues and were asked to make recommendations for ways of improving the CoP concept and its application in their organisation.

5.2 Questionnaires

Questionnaires were posted on the Services' computer intranet (hereafter called the *ServiceNET*) and an article appeared in Service's staff newsletter, with endorsement from the top management encouraging staff to participate in the evaluation. The *ServiceNET* was used to provide an opportunity for all workers to respond initiate their own response. A small percentage of workers forwarded a completed questionnaire and a few more indicated that they would prefer to be interviewed by telephone.

5.3 Individual interviews

Four types of individual interviews were conducted:

• Face-to-face or individual telephone interviews were conducted with a sub-set of stakeholders, including senior, specialist functional and regional managers. These interviews were open-ended and unstructured.

- Telephone interviews were conducted with members who had finished their term on a CoP.
- Telephone interviews were conducted with those who responded to the ServiceNET information by indicating that they were prepared to be interviewed. These interviews generally followed the questionnaire, but where individuals had also supplied a written response or indicated that they intended the interviewer followed up on the major themes that each interviewee generated.
- In addition telephone interviews using the questionnaire were conducted to ensure that responses were received from all organisational levels in each state and from urban, rural and remote locations.

5.4 The sample and its limitations

Two approaches were taken to sampling the range of respondents:

- Diversity instead of representativeness. As the aim of the evaluation was not to determine what the whole organisation thinks of CoPs per se (but rather to determine the way in which CoPs were functioning after a few years and what influenced this), information was sought from the widest possible range of respondents and
- Snowball Sampling. Once key themes were identified, we followed up the lines of thinking by selecting and asking other stakeholders to be respondents. In this way we sought to find out whether that view might be more widely held or how varied were such opinions and ideas.

Although, this approach seemed sufficient for this evaluation, and it appealed to the top management (the clients for the evaluation), there are obviously limitations to this approach as an evaluation of the effectiveness of the concept of communities of practice. It was based on participant perceptions, as it was not possible to followup outcomes in service delivery or other objective measurement of effectiveness. It is also predicated on the assumption that staff are informed about the CoP, and understand the purpose of the evaluation, and are willing to take the initiative to participate. This strategy would be less valid if there was a high degree of unrest or disinterest in the CoP concept as practiced by the organisation.

5.5 CoP Performance Output

However, in order to validate some of the perceptions, and to put the issue into the perspective of efficiency of performance of CoP, we inquired as to the outputs of the CoPs. Such products as training manuals, library reading lists on relevant professional practice and research issues; and guidelines and procedures on relevant professional practice. Such guidelines and procedures and tools were intended to assist with professional practice and so published on the *ServiceNET*, so that these were accessible to every employee. Indeed, the evaluation found a more than sufficient contribution of the CoP in these terms.

6. RESULTS AND DISCUSSION

6.1 Overall functioning

There were a significant number of the problematic comments made during the evaluation about the elitism and extravagance of the CoP commitment from the Service. Apart from some teething problems and disparities in resourcing, it may be explained by the mixed understanding of the use of a CoP logic by the staff, while they were expecting products and resources that might usually be produced by a formal work group or project team.

6.2 Answers to the Main Evaluation Questions

6.2.1. Are the identified models perceived by the service delivery group as "best practice"?

Staff of the Service accepted the identified models as being of high quality and relevance. Staff recognised that there are constraints to what can be delivered given the resources available and the complex environment in which human service is attempted. Respondents were reluctant to make judgements on whether the whole range of CoP output presents *best* practice. Some identified areas where they believe other models could have been included and pointed to the tendency of The Service to focus on its *own* practice to the exclusion of other information. The perception then is one of sound quality and progress, but a desire to see broader and more rigorous evaluation of options.

6.2.2 Is service delivery staff supported in utilising best practice models?

CoPs had only a minor possibility of providing support for the use of best practice. This was a system wide issue for the Service. It is however clear that the material produced by CoPs had less penetration to practice than most of the respondents considered desirable. The question of how to link CoP developments to learning and development programs has not been satisfactorily addressed. There are also limitations to the use of best practice that are related to the background and level of knowledge of individual staff and the constraints on time and resources that were available. These structural issues were important in determining whether best practice was used but are outside of CoP control.

6.2.3 Does the virtual reality model for CoPs contribute to their effectiveness?

The virtual nature of CoPs was both a strength and a weakness. The strength lies in the facilitation of wider geographic and disciplinary involvement. Electronic communication and teleconferences encouraged frequent interchange between CoP members and the sharing of documents in a manner that permitted a high level of involvement with the production of the final output. The weakness lies in the limited capacity for virtual groups to quickly establish trust, to pick up on the all-important non-verbal cues that indicate sensitivity or discomfort or enthusiasm.

Similarly, the virtual network made the evaluation difficult to facilitate trust in accessing individuals for a face-to-face interviews. But access to the *ServiceNET* and

the CoP face-to-face meetings made it easy to appreciate the inner workings of the CoP.

The staff of The Service is people oriented. The issues dealt with by CoPs are complex and have no single best response. The capacity to meet face-to-face, while costly to support, is an essential part of the CoP process. The use of virtual strategies complements this foundation and permits the wider, but more peripheral involvement of people beyond the core group. It is an important part of an overall mix of functioning that makes a positive and significant contribution.

6.2.4 Have the strategies utilised by CoPs for disseminating information been effective?

The marketing of the CoP process and outputs has been limited. Physical accessibility on the intranet is a necessary but not sufficient means of dissemination. A wide range of more people oriented dissemination strategies is required. It has already been noted that fragmentation of roles and functions within The Service could be a barrier to the effectiveness of CoPs.

Unfortunately this evaluation was not able to delve into these wider management issues. But any such evaluation of organizational learning would need to investigate the wider integration of such organizational learning strategies as CoP in the context of human resources strategy generally.

6.2.5 Do staff perceive CoP participation as providing a career enhancing structure?

The professional structure of The Service is extremely flat. For many professional staff career enhancement can only be achieved by promotion to a management role or by leaving The Service.

Those who have participated in CoPs spoke positively about their individual learning, especially in 'big picture' processes. These skills are essential in a management role, so for a few CoPs may be career enhancing.

The CoP process does not yet have currency in other organisations. It may be seen as de-professionalising. Outside The Service career enhancement is still tightly within professional streams. There are no linkages between professional stream advancement and CoP processes. The development of these links is difficult because of the requirement of professional associations that senior professionals must supervise a member of that discipline, in order that the staff member might progress in professional standing and pay level. In the case of The Service there were no such supervisory silos. Also CoP involvement did not attract additional higher duties pay even though an advisory role is undertaken. In other organisations it may be difficult to convince recruiters that CoP work is equivalent to many senior functions in other organisations.

Under these conditions many professional staff interviewed did not perceive CoP participation as career enhancing. Respondents raised the issue of the need for development of high level performers. The consolidation and training work undertaken by CoPs have contributed to the foundation of development for entry level

workers. For those who already have advanced skills and knowledge, career enhancement may require that CoPs have a more dynamic role, and that these skills are more widely promoted and recognised among the relevant professional associations and other human service organisations in the market for these professionals.

7. LESSONS FOR EVALUATION PRACTICE

This formative evaluation consultancy was intended to provide feedback in the development of a unique organisational group based on the CoP concept in a professional service-oriented Government agency. In the process of the review of the literature and the examination of both the CoP group members and the ex-CoP members, we were able to form some insights into the processes which may be of interest to others outside the Service agency. However, it is not valid to generalise from the samples that were available for the study.

Broadly speaking the general evaluation strategy of assessing the readiness of the organisation for such an evaluation, was reinforced in this case. There was concern, bordering on resistance, among the top management from the beginning to a more rigorous or objective evaluation. They considered that the Service was not ready for such an approach. Our investigation supported that organisational diagnosis. Thus for this organisation the evaluation methods used were a trade off between sufficiency of design and the politics of the implementation of the CoP network. Part of the reason for the lack of perceived readiness was the initial mismatch between expectations of staff and management in defining the objectives and the scope of practice of the CoP groups. In evaluation of an organizational learning intervention there are likely to be some emergent intended, and unintended, outcomes. Indeed in this case the expectation was confirmed that there would be some difficulty associated with the changes in the objectives and the perceptions of the participants that the direction of the program were uncertain or contradictory.

Although such emerging practice requires emerging evaluation methods, implementing an evaluation of a network of groups that is constantly changing its composition, as well as its definition, under the influence of organisational and management change was a challenge. The concept of CoPs is ill-defined and emergent in the literature. In practice, in this service agency, the outcomes and impacts that a CoP might achieve were similarly ill-defined. Equally the outcomes were not solely and causally generated by the management's attempts to sustain the organisational learning intervention. CoP could not by themselves bring about value change in the organisation. While they model desired processes and are an important adjunct to other value change processes their impact would be limited unless parallel processes are available in the way in which the organisation undertakes its business. Communities of practice need to be built on groups that have day to day meaning for those who deliver The Service services. Active integration of CoPs is an important strategy to improve impact of service delivery. However, there is a need for more rigorous research and evaluation to fully investigate the factors affecting the integration of communities of practice in service quality improvement.

Perhaps a program logic model and greater degree of control over the design or the longevity of the evaluation may have assisted in this rigour.

From the experience of evaluation of the CoP in this agency, we found we needed to continually consider what the shape of evaluation was, and it was shaped in the following directions under these circumstances:

- □ Despite the evaluation practitioners being external to the organisation, fundamentally the evaluation was formative, and emergent and largely under the control of the organisation's management.
- □ The evaluation found the need to consider *unintended* as well as intended effects and therefore included a mixture of goal free and goal oriented techniques, and group vs individual data collection methods (eg. needs-based nominal group process; e.g. survey focused on CoP objectives).
- □ The methods must be sound and justifiable, but are unlikely to meet standards of rigour that are desired from an academic perspective due to lack of resources available and the feeling of threat or constraint that rigorous methods often engender. For example, an element of rigour in attempting to address unintended consequences was able to be injected on the run, when we were able to survey and interview some ex-CoP group members, in comparison the current group members.
- □ The inclusion of the prime decision-makers in the formative evaluation may be perceived by the rest of the staff as biasing the results of the evaluation. It was important to continually remind the staff participating in the study that the overall goal of evaluation was for the decision-makers and the organisation to have an opportunity of learning and problem solving.

Subsequent feedback from the management suggested that the process of the evaluation seemed rewarding to The Service management in dealing with the complex development of the CoP while coping with inevitable cut backs in a competitive environment.

In approaching an evaluation as part of an organizational learning process, evaluation practitioners may need to be reminded of the missive of Emery and Trist who pointed out long ago that:

"A main problem in the study of organizational change is that the environmental contexts in which organizations exist are themselves changing, at an increasing rate, and towards increasing complexity" (Emery & Trist, 1965, p.21).

In future one strategy for the better implementation of communities of practice as an organizational learning process might be to integrate ongoing internal evaluation in the process of CoP management. Of course this takes time and resources that organisations facing cut backs may not be able to adequately resource.

But attempting to use external cross-sectional (once-off) evaluation in an emergent organizational learning process may seem like trying to use a rear view mirror to improve hitting a moving target. Nevertheless having the light of an evaluation is better than attempting to hit the moving target in the dark.

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