

Professional capacity and organizational change as measures of educational effectiveness: assessing the impact of postgraduate education in Development Policy and Management¹

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Abstract

We tend to measure educational performance by students' attainment in course work or examinations. In the case of professional education, the impact of the educational programme on the students' own capacities to enhance their work practices, and the wider organizational effects of the students' education and training, are also key 'products' of the educational process. This is particularly important with education for Development Policy and Management (DPAM), which is directly concerned with capacity-building. This article adopts a work-related approach to educational effectiveness and examines four professional programmes in DPAM, three in Southern Africa and one in the UK. Analysing the results of surveys and case studies, the article demonstrates how a positive learning experience is related to the application of learning at work. However the conditions for applying learning also depend strongly on organizational context, as do the wider, organizational, impacts of learning. The article presents a broad approach to assessing educational effectiveness in professional programmes which incorporates these factors.

1 Introduction

Educational effectiveness is usually related to learning outcomes for students and performance measured by attainment, perhaps compared with previous attainment levels. For example, in the UK, attainment is the basis of controversial league tables listing the performance of schools. Examination results are assumed to be the main measure of student performance and hence of educational effectiveness - a rather limited perspective on the nature of achievement. Test scores do not measure learners' abilities to apply their learning in contexts outside the educational institution.

In economic development literature, educational systems or programmes are regarded as effective to the extent that they provide human capital to meet productive needs. In its World Development Report 1998/99, *Knowledge for Development*, the World Bank states that 'to sustain economic growth and to compete in the global economy, countries must go beyond basic education' (1999, p.9), citing the showcase of Korea: 'by 1995 more than half of college-age adults were enrolled in college or university' (*ibid*). However, as pointed out by King (2002), the World Bank has now shifted its position further still, attributing Korea's

¹ Based on paper originally presented to UKFIET "Oxford" International Conference on Education and Development, 9th-11th September 2003. Theme: 'Measuring Education: Combining Quantity and Quality'. The research behind this paper was largely financed by the Education Department of the Department for International Development, with additional resources contributed by the four institutions whose programmes were studied. Many of the original ideas and the survey design were developed in conjunction with Sheila Tyler, Open University Business School. The following people were also members of the research team: Seife Ayele (OU); Peter Dzvimbo (ZOU); Patricia Kasiamhuru (SAPES Trust); Joyce Malaba (SAPES Trust); Pauline Manjengwa (ZOU); Florence Nazare (SAPES Trust); Herman Potgieter (UNISA SBL); Alan Woodley (OU).

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economic growth not just to enrolment in higher levels of formal education but more generally to 'Korea's success in acquiring and using knowledge' (World Bank, 2000, p.1, cited in King, 2002, p.311). Ashton and Sung (1997) demonstrated how, in the case of Singapore, education and training did not automatically increase economic development, but only met the needs of industrial growth when integrated with work. The Singapore state adapted the German dual model of academic and vocational training: '... on-the-job and off-the-job elements in training needed to be integrated if the training was to provide the quality of learning experience and the depth of skills required for companies to compete effectively in world markets' (*ibid*, p.212).

Enrolment, retention and certification at tertiary level are thus only one part of educational effectiveness in terms of systems and programmes. Levin and Kelley (1997), in a study of a Toyota plant in the United States, found that commitment, being able to work in teams and interpersonal skills were of greater significance to the employers than educational levels and test scores. They argue that complementary inputs are essential to get the best out of the workforce at whatever level of education. They conclude from their study that the firm has a key role in providing the right environment to use and build on the education, knowledge and experience of its staff. In this way, any level of education can be made effective.

Similar principles apply to educational effectiveness in a range of professional arenas. How education is applied depends on organizational context and inputs, not on the educational programme alone. As stated by Brown *et al.*, 'academic qualifications...convey information about the individual's ability and motivation to jump through the appropriate test and examination hoops, rather than students' potential to work in teams or about their social and personal skills' (Brown *et al.*, 1997, p.10). Educational effectiveness thus also means improved decision-making, management and leadership within the organizations where students work as professionals, as well as within society generally.

This article develops an approach to assessing educational effectiveness in this broad sense in the specific context of Development Policy and Management (DPAM). It uses empirical research on four part-time postgraduate programmes in DPAM in Southern Africa and the UK, including three distance learning programmes. We ask how educational programmes can build the capacities of organizational 'change agents' as well as the knowledge and skills of the students as individuals. This conception of effectiveness goes beyond course and qualification performance to consider how the interaction between students, programmes of study and students' organizations might lead to tangible applications of knowledge that contribute to organizational capacity-building and change. Thus effectiveness is a function not only of programme quality and content but also of context (the institutional and organizational arenas that support the programme and the students), and of the characteristics of the students.

In the next section of this paper, we outline the conceptual framework of the study. In Section 3 we explain the methodology and its limitations, while Section 4 analyses different dimensions of the learning processes identified in our framework. Section 5 provides some final reflections.

2 A conceptual framework

What role can educational programmes play in a process which goes beyond the mastering of specific content to encompassing broad arenas of skill development and capacity for application? Recent reflection on work-related learning from the Open University provides

some insights. In addressing how higher education fosters skills such as the willingness to learn, self-management, communication, action planning, networking, team-working etc., Knight and Yorke [no date, p.2] underline the need to 'consider the crucial significance of the design of systems or environments that favour complex learning'. Such environments include the social settings of work and 'the workgroups and communities in which learning happens' (ibid.). Harvey and Slaughter [no date, p.4] also argue that 'the workplace must be suitably enriched for the student to engage with the knowledge processes and crucially be able to transfer knowledge from one place to another, i.e. workplace to academic and vice versa, and the key to this lies in the middle ground constituted by the learning material.'

The effectiveness of distance education programmes in professional fields is generally attributed to their design around principles of experiential learning and reflection (Kolb, 1984; Schön, 1983), together with the requirement that students apply course concepts and skill areas to their own workplace in assignments. Learning is seen as: 'an active process in which meanings are constructed by the learner as they interact with and internalise the substance of the teaching they encounter' (Baker et al, 1996, p.102). Students are seen as building on and transforming existing knowledge and skills, '[integrating] new and old knowledge in ways that demonstrate a personal grasp and an ability to apply their knowledge to new contexts' (ibid.). These ideas imply an active engagement between teachers and students, which, in distance learning, means that course design needs to be highly interactive and, in applied fields, needs to enable students to reflect on and, when appropriate or possible, change current practice (i.e. become reflective practitioners).

These issues are of particular concern in the development arena. Development can be seen as an historical process of change, as a vision or desirable state of society, or as purposive behaviour to achieve what are seen as developmental goals; development management has corresponding connotations (Thomas, 1996, 1999). The third view (purposive behaviour to achieve developmental goals) is the one that directly concerns us, even though it can be overly instrumental. An increasing number of postgraduate educational programmes aim at building the capacities needed to achieve developmental goals, particularly in relation to policy and management in governmental and non-governmental organizations as well as commercial enterprises. Their effectiveness is related both to how well they build individual students' capacities and to potential impacts on organizations.

Lynton and Pareek (2000) compare a linear conception of learning with 'training for transformation' as a more interactive and complex process involving several kinds of opportunity for practice and reinforcement, including a positive organizational environment: 'Putting an individual's competence to use depends on a number of people and on additional resources. It calls for the encouragement and support of a receptive organization' (ibid, p.33). Thus the organizational embeddedness of processes and impacts of education and training is of concern to educationalists and trainers as well as employers. Likewise Argyris and Schön (1996) have theorised from an organizational perspective how individual action can impact on organizational learning, in terms of the 'mismatch between expected and actual results of action'. This mismatch results in feedback loops that can lead to different kinds of modified behaviour (single and double loop learning), which may become organizational learning if 'embedded in the images of organization held by its members' minds and/or in the epistemological artefacts (the maps, memories, and programs) embedded in the organizational environment' (ibid, p.16).

We have used these ideas to model an action learning framework as a combination of individual and organizational learning cycles (Figure 1).

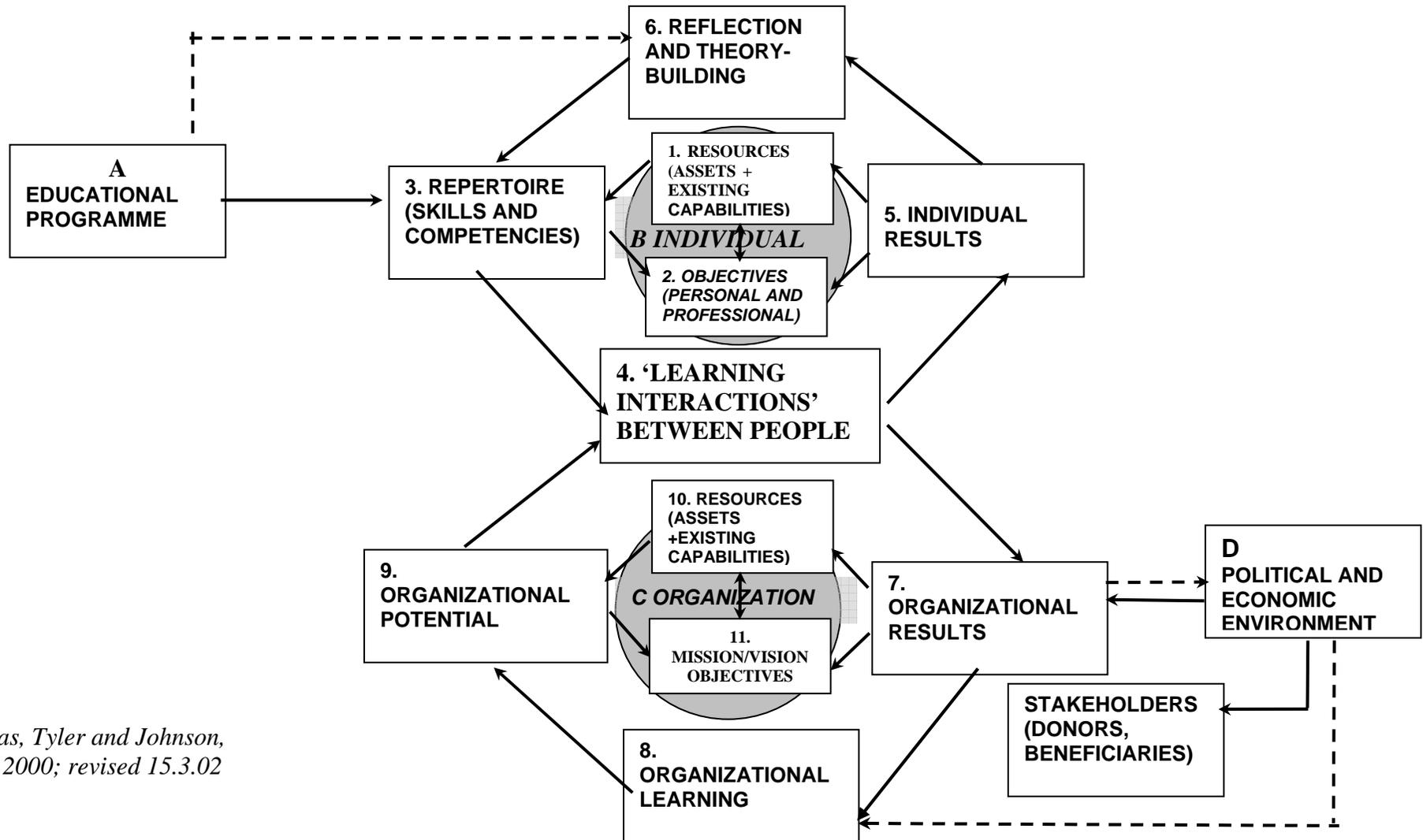
The individual learning cycle (B) portrays ongoing learning in terms of building up skills and competencies in a work context. Box 3 represents a person's 'repertoire' of existing skills at any time (see Baker et al, 1996, above). The individual chooses to use particular skills in interactions with other people in the organization (Box 4), giving rise to results for the individual (Box 5), possibly involving the kinds of mismatch mentioned by Argyris and Schön above. The individual then reflects on what happened (Box 6) and builds or modifies their own personal 'theory-in-use', i.e. the way they explain and understand things privately. This could mean reinforcing the way the individual thinks things work, or adapting or even transforming their understanding. This in turn leads to the individual further developing the skills and competencies in their repertoire (round the cycle back to Box 3), possibly rejecting or changing certain ways of doing things if they lead consistently to poor results, while refining and continually improving those that work well. This cycle is affected by the individual's own personal resources and objectives (Boxes 1 and 2).

The cycle for organizational learning and capacity building (C) can be explained in a similar way. Here, results for the organization are important, and collective reflection on those results may lead to organizational learning. One can also recognise the organizational impact of students' learning through the extent to which it becomes embedded in organizational 'images' and practice. In a development organization, practice will impact on the political and economic environment (D), hopefully in the form of successful interventions to promote development. At the same time, the political and economic environment will constrain what the organization can achieve and also provide feedback which can be used in the process of organizational learning.

The two cycles are of course linked. Individuals interact with the activities and processes of their organizations on an everyday basis, including potentially on issues and applications arising from their studies. We call these 'learning interactions', and suggest that their quality helps determine the impact of the programmes in terms of increased capabilities in development policy and management. These 'learning interactions' also relate codified knowledge (represented by course materials and curriculum) and tacit knowledge (participants' theories-in-use, routines and pre-existing portfolios of techniques).

As for the educational programme (A), following the thrust of Baker et al, it has two main roles: adding possibilities to the repertoire for testing in real situations; and suggesting frameworks and concepts to assist in the process of reflection.

Figure 1 *An action learning framework for 'capacity building' process*



Thomas, Tyler and Johnson,
20.12.2000; revised 15.3.02

3 Methodology of the study

A research team drawn from the Open University (OU) and three institutions in Southern Africa investigated the following Masters programmes run by the partner institutions:

- Policy Studies (Southern Africa Political Economy Series (SAPES) Trust, Zimbabwe; a block release, regional programme)
- Business Administration (University of South Africa (UNISA), School of Business Leadership - distance learning)
- Development Management (Zimbabwe Open University (ZOU), in partnership with the OU - distance learning)
- Development Management (Open University (OU) - distance learning – global programme).

The team used a ‘combined methods’ approach (Thomas and Johnson, 2002). A survey elicited general characteristics and relationships, while case studies examined how learning was applied, through what mechanisms and under what conditions. Questionnaires for students and line managers were co-designed by the partners. Each institution administered questionnaires to its own students, asking them to pass on questionnaires to their line managers. Researchers from SAPES Trust, UNISA and the OU analysed the data comparatively and globally (see results in Johnson and Thomas, 2002 and 2003), based on responses from 354 students over the four programmes. More than half the respondents were OU Development Management students, overall a more heterogeneous group in terms of educational and professional background than those on the other programmes. This was taken into account in the analysis (for example, the near 14% of OU students who were not apparently in work at the time of the study were excluded from statistical analyses relating learning to work practices and organizational impact).

We also produced 18 case studies of students and their organizations, using a question guide agreed by the partners supplemented where possible with line manager interviews and data such as student assignments. The cases were chosen ‘by repute’ (Thomas, 1998) - that is, because students were known to have tried to apply their learning. As argued by Yin (1994), this should not be regarded as ‘biasing’ the data. Rather, it deliberately focused on examples which enabled us to investigate the conditions and mechanisms of applying learning, with whatever degree of organizational effect.

Of particular interest in the learning-application process were (i) what social settings made application possible, and (ii) how application occurred. In relation to the latter, we counter-posed the idea of a linear process of knowledge transfer, where individuals absorb knowledge from the educational programme and then apply it, with the one portrayed in our framework (Figure 1): action learning, with individual organizational learning cycles intersecting in ‘learning interactions’. In practice we might expect both linear and action learning to occur. However, this process of ‘contrastive inference’ helped to determine which of the two views provided the better explanation for the effectiveness of educational programmes in DPAM.

In the next section, we look at factors in each of the elements (A), (B) and (C) of Figure 1 in turn, investigating first how they directly impact the next element and then how they affect the ‘learning interactions’ and hence indirectly help bring about effective individual and organizational learning. We were not able to investigate the socio-economic context (D) in any detail, although we noted how large external changes often drive organizational change.

4 Educational effectiveness in capacity-building for DPAM

4.1 The programmes of study

The four programmes come from very different institutions. UNISA is one of the world's oldest distance learning institutions, with a history stretching back to the early years of the twentieth century. For many years it played a quite conservative role as an institution of *apartheid*. There have been many changes in UNISA in the new South Africa, and the School of Business Leadership, which is a relatively new unit, plays an important role in terms of training a new multi-racial generation of managers. Established in 1971, the OU is a relatively recent distance learning institution compared with UNISA. It has had a particular focus on 'supported open learning' and the transformatory power of learning, using 'behavioural objectives' to design its courses in such a way that what students did with their learning was the basis of assessment. In recent years it has set up a number of international partnerships and its Global Programme in Development Management is available on a worldwide basis.

Both SAPES Trust and ZOU are much newer institutions. The former is not primarily an educational institution: the Masters in Regional Policy Studies is a particular creation of educationalists who saw the potential for a programme that aimed at increasing the capacities of local professionals by combining theoretical perspectives with analysis of practical policy issues. ZOU has been created out of a distance education unit in the University of Zimbabwe, using a similar philosophy to that of the OU, and now reaches thousands of students. It worked for some years in partnership with the OU to teach Development Management in Zimbabwe, but has had to discontinue the programme because of limited resources and the need to address other urgent priorities.

The four programmes have considerable similarities. They all combine theory with practical skills, using the participants' own experience as well as case studies as sources of empirical materials for analysis and reflection. They seek to develop participants' problem-solving, critical and evaluative skills by presenting conceptual frameworks and contextual information for them to apply to practical situations. They all conclude with a dissertation or project module (optional in the case of UNISA) in which students tackle a research topic or organizational problem which directly concerns them. In all cases, assignments, projects and dissertations provide key mechanisms for ensuring interactive learning as well as for assessment. Apart from this, the main source of 'learning interactions' for the three distance learning programmes was the interaction between printed (or audio or video) learning materials and the individual students' experience. By contrast, the SAPES students' main 'learning interactions' were face-to-face group interactions.

Effective education is likely to involve a positive learning experience. The majority of students reported favourably on enjoyment of courses, quality of content and teaching/learning support, and relevance of content. There was less satisfaction with the *amount* of teaching/learning support, which might be related to the part-time nature of the programmes. Regressions established that the amount of teaching was not significantly related to application of learning at work, whereas other types of satisfaction with the programmes had a significant influence. As we will see, relevance of content and opportunities to apply learning are particularly important.

The case studies provide many examples of learning interactions required by the educational programmes, most obviously student activities or assignments that required students to

engage with their organization. But there are also clear cases of direct application of knowledge or skills. More than one student suggested that ‘action learning’ and ‘linear transfer’ apply to different areas or topics, rather than being opposing explanations of the same process. Other students did see the two modes of learning as different ways of interpreting a complex process, but not necessarily as contradictory explanations. One ZOU student said that one course gave him ‘an absolutely intense period of reflection, a very stressful time’, but also that the process was ‘linear – like a restaurant menu, you can take what you want.’

4.2 The individual student’s learning and use of learning

As we have suggested, learning and use of learning are functions of student characteristics as well as programmes of study. An underlying factor affecting programme effectiveness is students’ motivation. Our results show an average of 74% of respondents taking the programmes for personal development and 80% for professional development. A much lower percentage (46%) wanted to improve career prospects in their current organizations, while only 23% wanted to change their careers. A large proportion of the students were working in values-based professions which are often not as well-paid as the private sector and involve long hours and frequent absences from home. Thirty-four percent were working in NGOs, 20% in the public sector and 18% in private companies. The remainder worked in parastatals, donor agencies, inter-governmental organizations, community organizations or were self-employed (probably as consultants). Most of the respondents were aged 30 and over, and most had worked in the same organization for longer than 5 years (30% for more than 10). The combination of professional commitment, concern for development and existing professional experience makes for a very positive base on which to enhance knowledge and skills. It may also result in a particular type of learner.

Our study borrowed from Entwistle’s categorization of learners (Entwistle, 1994), which suggests three approaches to learning: deep (reflective), strategic (goal-oriented) and surface (instrumental, with limited engagement). We used a number of simple statements to check students’ own learning behaviours, and also asked students to categorise themselves as a single type of learner. The majority of students (62% of 353 responses) categorised themselves as deep learners, with 26% strategic and 12% surface. However analysis of disaggregated variables for types of learning also shows that students adopt a range of practices. They are not simply one thing or the other.

One might expect approaches to study and approaches to work to have some correlation with each other. We did indeed find a significant relationship between deep and strategic approaches to study and ‘positive’ approaches to work (again measured through a number of simple statements). Does this then suggest that deep learners apply their learning more at work than other types of learner? Although 75% of those who described themselves as deep learners said they applied their learning quite a lot or a great deal, so did 70% of those describing themselves as strategic learners and 58% of ‘surface’ learners. This rather low variation in extent of application perhaps supports the view that students adopt a range of learning practices.

According to Baker et al, effective learning involves personal transformation. Between 68 and 86% of respondents thought they were more reflective, more confident, put forward more ideas, made more decisions, and took more responsibility. These data were corroborated by line managers. When asked how the programmes had helped them personally, the majority of students responded favourably to such outcomes as mental stimulation, personal growth,

assistance with professional development, information about and application of ideas and practices, new conceptual frameworks, challenge of assumptions, identification of strengths and weaknesses.

The case studies detailed more closely how students had been changed by programmes. The changes identified tended to be of a general nature. They included increases in confidence, being able to take a strategic view, adopting new management styles, being able to build on previous experience and being better able to cope with change. Changes based on the application of specific tools or knowledge were often seen as subordinate or contributing to these general improvements. However, some students mentioned specific areas such as regional and other planning, negotiation, gender and policy analysis, where they had learnt skills and techniques on particular courses and applied them.

4.3 Organizational learning, capacity building and change

We have suggested that interactions between students and other staff in an organization could lead to organizational learning. Where this happens, we would also say that the educational programme is being effective, whilst recognising that many other factors and processes contribute to organizational change.

The majority of students surveyed thought they had made contributions to their organizations as a result of their studies. These mostly occurred through students either putting forward ideas at meetings or explaining specific techniques to others. Students also tended to share their knowledge, mostly with other colleagues, in other organizations as well as their own, but also with their bosses and senior management as well as those who reported to them. These data were again supported by line manager responses.

Analysis of the survey results underlined the key role of sharing and working together in bringing about change both within and across organizations. This is particularly important in development, where there is considerable fragmentation of effort and outcomes. Another key influence was the organizational environment in terms of its openness and possibilities for students to apply their learning. While these are not surprising results in themselves, they suggest that establishing and enabling learning communities or communities of practice (Wenger, 1998, 2002) may well enhance the effectiveness of applied studies in terms of their wider impact, as well as supporting individual students in their learning.

Examining the case studies to see what kinds of organizational change had resulted and what mechanisms underpinned them, we find that individual students or groups of students played quite different roles in different cases. Much depended on their position in the organization and the changes which the organization was already undergoing.

Perhaps the most important contextual factors involved large external changes driving organizational change, which reflected the differences involved in working in different countries. These included privatization of state organizations, post-apartheid racial balancing, the impact of AIDS, and food security crises. In other cases there was planned change already in train: new country programmes, localization of offices, staff development and internal capacity building, and a merger in one case. In many cases, change combined both categories. Thus organizations were forced to respond to external changes but were trying to plan their response. Each student's position in his or her organization combined with the character of ongoing change to determine how much potential there was for that student to use their learning to influence that change.

Within these constraints, the most important forms of organizational change were:

(i) *Change in small organizations where the director is a student.* In these cases it can be difficult to distinguish between students' own performance in their job as director and the organizational changes which they were in a position to implement.

(ii) *Constrained change within a large organization.* Particularly within bureaucratic organizations, individuals are very unlikely to be able to effect wide-ranging changes. If they are head of department or other organizational unit, they can extend changes in how they do their own job to *how* things are done within their own unit.

(iii) *Planned improvement in organizational capacity to deliver change.* In several cases, organizations were planning change and included developing staff competencies by supporting them on appropriate programmes of study. Students thus had a peer group (or community of practice) to refer to.

Some cases featured particular changes in approach, new concepts or frameworks for new organizational policies, and changes in organizational culture (for example to a more open and consultative type of management). The open, reflective approach to learning promoted in all these programmes seems to be linked to a shift towards consultation, multi-culturalism and team-working.

Very often organizational change was occurring already and students' learning served to give them confidence and helps them to cope. There was not necessarily any question of students proactively causing change. Indeed, it is quite consistent with the framework for the effects of a particular programme to be quite marginal in a longer-term process of organizational change. As noted by Knight and Yorke (no date, p.3), 'some learning...takes years'.

5 Rethinking educational effectiveness

The above discussion and evidence have progressively broadened both the meaning of educational effectiveness and its determinants, as applied to the case of postgraduate educational programmes in DPAM. This broadening has occurred in three stages, corresponding to the first three elements of our framework as represented in Figure 1.

First, we considered the educational programmes themselves, and factors in the design of such programmes which make them effective in terms of student attainment. There can never be a complete match between curriculum and the learning needs of students. Concentrating on facilitating 'learning interactions' allows students to bring reflection on real experiences into the educational programme itself. Some consideration should be given to alternatives to assist the learning of students in differing organizational contexts.

Second, we considered individual students' learning in terms of an action learning cycle. Here educational effectiveness can be assessed in terms of the extent of application of learning at work and better actual performance. Motivation and learning styles may affect both learning and application. And once again the possibility of improved performance is constrained by the opportunities available in different organizational contexts.

Third, we looked at organizational capacity building also in terms of an action learning cycle. In this case educational effectiveness can be assessed in terms of change brought about at the organizational level through the application of learning from an educational programme. However, organizations are not unitary and there is no simple measure of organizational 'attainment' analogous to the concept as applied to individuals. Development typically occurs

in a context of conflicting values and interests, and there may be no agreement as to whether a particular organizational change is positive in a developmental sense. There are different types of organizational change that may result from the application of learning, including changes in management style and organizational culture, as well as more straightforward increases in organizational capacity to carry out certain tasks.

Both the context of external change and the specifics of a student's situation within an organization affect the type of organizational change that can be brought about. In some cases, organizational change may be a good measure of the impact of learning and hence of the effectiveness of the educational programme. However, lack of such change, or lack of clear impact on ongoing change, may not necessarily indicate a lack of learning and ineffectiveness. Rather, it may result from particular organizational contexts and constraints. It is as important to consider capacity built up generally in the professional body from which students are drawn as to assess the impact of educational programmes in DPAM in terms of the organizational change induced.

To sum up, conceptions of educational effectiveness in the field of postgraduate education for DPAM need to be broadened from student attainment to include individual capabilities, individual performance at work, organizational change, and capacities generally in the body of development professionals. The conditions for effective educational programmes in this area include curriculum relevance, embedding 'learning interactions' into course design, good motivation and appropriate learning styles of individual students, support from employers, and opportunity to carry out applications of new learning.

These conditions are however somewhat restrictive. One problem is the implication that effectiveness means becoming better able to carry out agreed organizational tasks. This corresponds to the third of the three views of development put forward in Section 2 above, namely development as 'purposive behaviour to achieve ... developmental goals'. Although this is indeed the view which has underpinned this investigation, it should be noted that 'developmental goals' are rarely fully agreed. We should also note the comment in Section 2 above that this view can be 'overly instrumental'. We should remember the alternative view of development as a vision or desirable state of society, which may not correspond to the present state. Thus in practice development is often about acting as a 'change agent' and challenging accepted modes of organizational behaviour. Communities of practice or learning communities of students that transcend organizations may lead to even more creative applications of learning and transformation.

References

- Argyris, C. and Schön, D.A. (1996) *Organizational Learning II. Theory, Method and Practice*, Mass. USA: Addison-Wesley.
- Ashton, D.N. and Sung, J. (1997) 'Education, Skill Formation, and Economic Development: the Singaporean Approach', in Halsey, A.H., H. Lauder, P. Brown, A. Stuart Wells (eds.) *Education. Culture, Economy and Society*, Oxford/New York: OUP.
- Baker, C., Tomlinson, N., Cole, S., Stevens, V., George, J., Howell, A., Thorpe, M. (1996) *Supporting Open Learners (SOL) Reader*, The Open University.
- Entwistle, N. (1994) *Teaching and the Quality of Learning*, London: CVCP/SRHE.
- Harvey, M. and Slaughter, T. (no date) 'Exploring the knowledge processes involved in meaningful work-based learning', mimeo.
- Johnson, H. and Thomas, A. (2002) 'Development managers, development organizations and programmes of study to promote capacity-building: analysing the learning process'.

- Paper for the Annual Conference of the Development Studies Association, *Sustainable Development: Rio plus 10*, Natural Resources Institute, University of Greenwich, London, UK, November 9th.
- Johnson, J. and Thomas, A. (2003) *Education for Development Policy and Management: Impacts on Individual and Organizational Capacity-building*. Synthesis Report for Department for International Development, October.
- King, K. (2002) 'Banking on knowledge: the new knowledge projects of the World Bank', *Compare*, 32(3), pp.311-326.
- Knight, P. and Yorke, M. (no date) 'Work-related learning and the first cycle of higher education', mimeo.
- Kolb, D. (1984) *Experiential Learning*, London: Prentice Hall.
- Levin, H.M. and Kelley, C. (1994, 1997) 'Can Education Do It Alone?' *Economics of Education Review*, 13, pp.97-108, reprinted in Halsey, A.H., H. Lauder, P. Brown, A. Stuart Wells (eds.) *Education. Culture, Economy and Society*, Oxford/New York: OUP.
- Lynton, R.P. and Pareek, U. (2000) *Training for Organizational Transformation. Part 1 For Policy-Makers and Change Managers*, New Delhi/Thousand Oaks/London: Sage.
- Schön, D. (1983) *The Reflective Practitioner*, New York: Basic Books.
- Thomas, A. (1996) 'What is development management?' *Journal of International Development*, 8(1), pp. 95-110.
- Thomas, A. (1998) 'Challenging Cases', in A. Thomas, J. Chataway & M. Wuyts (eds) *Finding out Fast: Investigative Skills for Policy and Development*, London: Sage (in association with The Open University), pp.307-332.
- Thomas, A. (1999) 'What makes good development management?' *Development in Practice*, 9(1&2).
- Thomas, A. and Johnson, H. (2002) 'Not only reinforcing but also different stories: Combining case studies and survey to investigate how postgraduate programmes can build capacity for development policy and management', Paper for *Combined Methods Conference*, Centre for Development Studies, Swansea, 1-2 July.
- Wenger, E. (1998) *Communities of Practice. Learning, Meaning, and Identity*, Cambridge: CUP.
- Wenger, E., McDermott, R. and Snyder, W. M. (2002) *Cultivating Communities of Practice. A Guide to Managing Knowledge*, Boston, Mass., Harvard Business School Press.
- World Bank (1999) *Knowledge for Development: World Development Report 1998/99*, Washington: World Bank.
- World Bank (2000) *Knowledge for All*, Washington: World Bank.
- Yin, R. (1994) *Case Study Research: Design and Methods*, 2nd edition, Thousand Oaks, CA: Sage.