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System dynamics, quality assurance and the teaching portfolio: a case study

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Abstract: *This paper describes a teaching portfolio development project conducted in Charles Sturt University, in which teaching portfolios were promoted as a basis for (a) pro-active engagement in quality enhancement at the individual and group level and (b) professional discourse on concept and attitude change relating to quality in teaching and learning among project participants. The project's thesis was 'that consistent, pro-active, system-wide involvement in quality maintenance and enhancement, and in the discourse that accompanies it, provides a base for improved organisational and divisional quality assurance'. It proposed the Teaching Portfolio as a principal means of achieving this involvement. The project was an initial attempt to discover whether the provision of generous support for the development of teaching portfolios at the individual level* ***and*** *at the level of the group (i.e. the teaching team, the school, the faculty) can magnify this effect such that the activities being recorded, and the records themselves, become a natural subject for public discourse across the institution.*

Keywords: *teaching portfolio; academic development; culture change; concept and attitude change; organisational development; systems thinking; quality enhancement; quality assurance.*

Introduction

> It is the *mutual constraints*, operating between the parts of the system, that limit the range of behaviours available to the system as a whole - and thus give rise to its "emergent" (or synergistic) properties.
>
> (Newell & Wasson, 2002, p. 7)

The origins of this study lie in a series of teaching portfolio workshops offered at Charles Sturt University in June 2001 as part of a University-wide academic staff development programme. Teaching portfolios are associated with a distinctive range of behaviours, including:

- active involvement by academics in quality enhancement in teaching and learning
- evaluation and reflection in teaching and learning as a professional discipline for academics
- engagement by academics in researched professional discourse about what best helps students learn
- the provision of sound and substantial evidence of quality in teaching and learning in support of applications for advancement.

There is a perception that these behaviours seldom emerge naturally or spontaneously within the Australian higher education system. Newell and Wasson's (2002) observation that systems have parts; that parts have properties; that properties enable interactions; that interactions cause constraints; and that constraints give rise to emergent behaviours, prompts the suggestion:

- that the behaviours that *do* emerge within the Australian higher education system – or within any university perceived as a system – are shaped by mutual constraints operating between the system's parts, and
- that the constraints operating within our higher education system militate against the emergence of the behaviours listed above.

The university as a system

When undertaking our teaching portfolio initiative we visualised the university as a system. We acknowledged that systems can both *contain* and *be* subsystems. Further, we visualised the system, each of its subsystems, *and* our initiative, as having characteristics of all six kinds of system as outlined, for example, by Blanchard and Fabrycky (1998) - i.e.:

- physical components
- conceptual underpinnings (definable with reference to the separateness or inter-relatedness of the physical components)
- structures (definable *without* reference to activities)
- activities (definable *with* reference to structures)
- a measure of permeability by contextual/environmental influences (observable in changes to the system's/sub-system's characteristics)
- a measure of impermeability by contextual/environmental factors (observable in characteristics that remained unchanged regardless of circumstances).

In Newell and Wasson's terms, we saw each individual teacher, each teaching group or team, each section, department, school or faculty, and each of the university's numerous campuses - each with its attendant conceptual underpinnings, structures, activities and measures of permeability or impermeability - as a 'part' of our 'system', with each 'part' influencing the dynamic of the system in its own way.

The teaching portfolio and the university as a system

Teaching portfolios have been part of the probation and promotion process within Charles Sturt University (CSU) for many years. In 2001 teaching portfolio workshops were conducted on four of the university's campuses. *Primary* emphasis in these workshops was placed on the promotion of reflective practice through the creation and use of teaching portfolios.

Secondary emphasis was reserved for the development of the ability to distil an 'extract' from their portfolio for use in probation or promotion applications. The response to the workshops *as events* was extremely positive. Their effectiveness in the long term was not assessed.

A conscious decision was made to offer a new series of workshops in 2002 about the creation and use of teaching portfolios. These workshops were targeted at new academic staff, although longer-serving staff could also attend. This workshop programme ran in parallel to the Tertiary Teaching Colloquium for new academic staff. Both programmes, the workshops and the colloquium, were supported by a specially developed resource in the form of a CD-ROM called 'The Learning and Teaching Toolkit'. Support for attendance of academic staff at both programmes was actively sought from Heads of School.

In 2002 as in 2001, the approach blended the perspectives of the action researcher and the reflective practitioner. In 2002, however, there was a heightened awareness of learning organisations and their systemic practices as the context in which teaching portfolio workshops were offered.

The project's six original parts and an emergent seventh.

The project was designed to provide participating academic staff with a six-month programme of support for the creation and use of their teaching portfolios. The project was originally intended to have six parts, as follows:

Workshops:

1 Initial teaching portfolio workshops of four hours duration held in early 2002 on three campuses, Bathurst, Wagga Wagga and Albury, with participants traveling to these venues from Goulburn and Dubbo.

Post-workshop interactions:

2 A follow-up email consultation and advisory service, and a moderated email discussion facility provided by one of the researchers.
3 Periodic newsletters circulated as email attachments to project participants on all five participating campuses, providing further support and information, and an up-date of participants' progress.
4 A seven-item email questionnaire sent out twice to all research participants regarding issues relating to the way participants have articulated their concept of teaching.
5. Portfolio clinics held five months after the workshops, to provide participants with an opportunity to workshop developed portions of their portfolio for analysis and discussion.
6. Individual discussions between participants and one of the researchers before and after the clinics.

The project, however, had a life of its own. A seventh part grew up beside the other six. The researchers sought the opportunity to discuss the project with University leaders. The discussion sparked an interest among the leaders in the idea of teaching portfolios as instruments of organizational quality assurance. This interest led to a series of information sessions in which academic leaders were exposed to the logic underlying the workshops their staff members were attending - and to some of the workshop content. The idea behind these information sessions was to shed light on what academic leaders might do to promote the

creation and use of teaching portfolios, and the quality-oriented, reflective behaviours they brought in their train.

The information sessions, like the workshops themselves, were well received *as events*. Interest was high, and one head of school asked the researchers to help him and his staff to develop a team-teaching portfolio. The head of a neighbouring school (physically close, but with a distinctively different academic orientation) sought permission to join the initiative as a voluntary, interested critical friend.

This spin-off project offered the researchers a microcosmic test field; a 'subsystem' in which the behaviours associated with the creation and use of a teaching portfolio *were* openly associated with the subsystem's health. The chief advantage of this spin-off project is that the desired behaviours were:

- modelled and supported by the heads of two schools and thereby openly associated with the potential for benefit beyond the initiating school;
- supported by tailored workshops on team development, team teaching, and the creation and use of a team-teaching portfolio;
- increasingly enacted by members of the initiating school in their analysis of the school's *raison d'être*, the *raison d'être* of one of its principal methods of teaching (laboratory classes), and ways of modifying that method of teaching.

The tailored workshops were perceived as initiating a process rather than as mere events. They provided context-sensitive exposure to "leadership and management within… teaching teams" as explored by Martin, Prosser, Benjamin, Trigwell and Ramsden (1996, p.498); "the management of team teaching groups operating within uncertain and ever-changing organisational frameworks" as explored by Woodbine (1996, p.960); and the "emancipatory" nature of action research in organisations as outlined by McNiff and Whitehead (2000, p.130). Their main focus, however, was the same as that in the teaching portfolio workshops offered to the university at large. The workshops led into a series of self-facilitated school working-party meetings that were also perceived by the team members as parts of a process they understood rather than as mere events with minimal connection to their daily life.

This spin-off project is ongoing. The "parts of the subsystem" continue to exert mutual constraints on each other; but these parts - i.e., the school's

- physical components (plant, equipment, human & material resources etc.);
- conceptual underpinnings (understandings of teaching and learning etc.);
- structures;
- activities;
- degree of permeability by contextual/environmental influences;
- degree of impermeability by contextual/environmental factors;

are being systematically discussed, and possibilities for change and improvement are being mooted.

The workshops and their objectives

The minimum objective of the teaching portfolio workshops and the post-workshop interactions was to encourage and assist workshop participants to make progress toward the development of a portfolio (i.e. an ordered collection of 'evidence' of the nature and quality of their teaching), and to be ready, willing and able to:

a. reflect on the portfolio's contents;
b. identify, in light of their reflections, what constitute strengths in their teaching, what aspects of their teaching might benefit from change, what change they think is warranted, and what standard they use when making these decisions;
c. draw an extract (i.e., a succinct summary) from the portfolio's contents suitable for submission during a probation review or other process involving acknowledgement of merit.

The workshops were, to some extent, influenced by the arguments of Whitehead (1993), in that they were designed to inform participants of a variety of established concepts and theories of teaching as a provocation to derive living (i.e., informed, context-sensitive, personally meaningful) concepts and theories of their own. However, it became increasingly evident that, while the generation and application of living concepts and theories of teaching was integral to an emergent relationship between the workshop facilitators and the individual workshop participants, it was not integral in the same way or to the same extent to the participants' relationship with their employing institution.

Post-workshop interactions with participants

The researchers' objective in the post-workshop interactions was actively to support staff in the development of their portfolios and to derive from participants their answers to the questions below. Feedback was gathered twice by questionnaire: once, shortly after the workshop and a second time, three months later, to allow students to register changes of perspective and developments in their portfolio. The feedback re-enforced and confirmed information gathered through email correspondence and conversations with workshop participants before, during and after the clinics. This feedback is summarized below.

Question 1: Describe the concept of teaching you brought with you into the initial portfolio workshop you attended.

> *Some of those who responded to this prompt indicated that they saw teaching variously as a collaborative endeavour, a contract of engagement, a participative activity, different from the transmission of facts and knowledge: "As teachers we need to engage and guide the learner, to challenge learners to think, to understand the student cohort, to be well prepared and to care about student outcomes". Respondents indicated that they thought teachers were there to provide guidance for students and assist them to develop the 'tools' that they need to complete the course, overlaying our own practical, hands-on experience that can be valuable in the teacher-student interchange. Their consensus was that teaching should assist students to develop the tools that they will need to complete their education and take responsibility for future studies. It was observed that "teaching is something that informs continuously". Others, almost 45% of those canvassed, indicated that they had brought no developed concepts to the workshop as their teaching experience was too limited.*

Question 2: Which part of the workshop, the workshop materials or the newsletter material sent after the workshop most effectively challenged or confirmed this concept?

> *Those who responded to this question indicated that they appreciated the framework provided by the workshop which allowed them to systematically analyse their teaching approaches; particularly the "distillation" theme of the workshop that caused them to consider what works in their teaching, and what doesn't work, "keeping the good oil,*

and turning over the not so good oil"; being exposed to alternative ways of teaching, and seeing how teaching in an informal manner could be enhanced by the use of other teaching instruments. They found the CD-ROM on learning and teaching distributed to those of us new to teaching early in the semester valuable in that it extended the relevance of the portfolio workshops, enabling us to explore issues relating to our teaching, and providing links to specific examples of issues to consider, such as reflective practice.

Question 3: How has your original concept changed or become further developed of what constitutes 'good teaching' since the portfolio workshop?

Those who responded to this question indicated that their concept of good teaching had come to include the ability to focus on key areas and develop these rather than taking a fragmented, ad hoc approach. They were more prepared to take risks, to consider many avenues to achieve outcomes. Teaching had become more complex: "there are more dimensions with layers within each". For some, the idea of good teaching had come to include the development of a systematic approach to appraising what they do and why. Several were challenged to begin to develop skills in aspects of their practice, such as large group lecturing and to engage in discussion with experienced colleagues, even peer review of their own teaching.

Question 4: How far have you progressed in the building of your portfolio, and in your ability to use it as a basis for reflection on the nature and scope of your own teaching practice?

Some had made little progress in the building of a portfolio, finding obstacles such as the need to embed a regular process for the collection and distillation of a portfolio into an already over-filled professional life, the difficulty of organizing the materials already collected, a lack of certainty as to what type of evidence is suitable, a lack of time and too many deadlines. A few had started the formal documentation, set goals, and considered models of teaching to help form a basis for reflection on the nature and scope of our teaching practices.

Question 5: Has your ability to put your concept of 'teaching' or 'good teaching' into words changed? If so, what most helped this change to occur?

Some respondents were still experiencing difficulty in clarifying their concept of teaching, but a few claimed to be "more aware of aspects of teaching that we need to pay attention to". Some claimed that probationary requirements or the need to submit promotion applications had been more significant than the workshop or the researchers' programme of support in causing them to think about teaching in a more formal way, become aware of their own practices, develop an awareness, read and use the resources provided, network with others, or adopt a framework of 'reflective practice'.

Question 6: How ready are you to distill an extract from your portfolio, suitable for submission during a probation review, or other process relating to acknowledgment of merit? What most helped you to reach this stage of readiness?

Most did not feel ready to begin to distil an extract from their portfolios, partly because their portfolios still did not contain enough information to substantiate a distillation. Those who felt able to undertake this task were doing so because they felt

more confident as a result of having gone through the workshops, collecting and distilling materials, and being forced to write that abstract or distillation for a probationary review interview. Some had started to draft extracts, place information under headings suggested by the workshop materials, share information with colleagues, use devices like Harvard One Minute evaluations to collect feedback from students, make notes on what worked and what did not.

Question 7: In the culture or environment of this university, what impeded or facilitated the assimilation of 'teaching portfolio creation and use' as a professional practice?

It was observed that many things impede staff from engaging in the practice of creating a portfolio: the culture in the school that does not see the development of a portfolio as a valid task; excessive workload; lack of time; lack of recognition of action research, reflective practice and associated behaviours; attendance at workshops on topics like this not being counted as part of academic workload; excessive pressure to secure research funding, produce research outcomes, and meet administrative responsibilities; a lack of confidence that teaching is regarded as a serious and important element in promotion; a lack of discussion about the development of portfolios within individual schools.

Things that helped us in the beginning to create a portfolio were the workshops that provided information on what to collect and store, how to distill that information and the personal and professional benefits of doing so.

Discussion

Our concern throughout this project was to promote teaching portfolios and their associated behaviours (action research, reflective practice, and open discussion as means of quality enhancement *and* assurance). Like Schön (1983) we saw action research as the province and the breeding ground of the reflective practitioner. The action researcher's perspective, as represented by more than three decades of published material and an alphabetic list of authors from Atweh to Zuber-Skerritt, tends to focus on the nature and logic of the iterative plan-act-review cycle as applied in the individual teacher's own teaching. Schön's (1990) drive, however, was to broaden the focus to include the individual teacher (an atomic part of the system) and the system as a whole. He wished to increase the likelihood of reflective practice becoming a pervasive characteristic of organisational life by educating the reflective practitioner to that end. Some authors, such as McNiff (1993, 1997), McNiff and Whitehead (2000), re-enforce this concept and write of action research and reflective practice as keys to the good health of learning organizations, especially where the practices are both modelled and actively supported by organisational leaders.

Other authors, such as Kaplan and Norton (1996, 2001), Newell and Wasson (2002), Senge (1999), have been more concerned to explore the concept as it applies outside educational institutions. Their drive has been to encourage organisations to promote, by example *and* precept, the practitioner's reflective understanding of:

- their own work and how to monitor and adjust its quality;
- the system of which their work is a part;
- how their work and the organizational context impinge on each other to both good and ill effect;
- what can be done about the impingement.

For the most part, their audience has been corporate and industrial; but the implications of their works for institutions of higher education are not difficult to see. In offering teaching portfolio workshops, universities encourage teachers to monitor and adjust the quality of their teaching and to make a record of the procedure and its consequences; but these behaviours are not widely or publicly associated with the organisation's health. By default they continue to be associated with (and in some cases, *only* with) individuals' not-strongly-held hopes of an increased chance of success in the promotion stakes.

Conclusions

With respect to the project:

1. While a small percentage of workshop participants maintained, throughout the period of the project, an active interest in the development and use of a teaching portfolio, the overall effect of the workshops and the sustained programme of support was minimal.

2. Further review of (a) the workshop and the ensuing programme of support, and (b) the power of a small centrally based research team, to effect significant behavioural change across a university (in this case a multi-campus university), is essential to ensure appropriate attribution of responsibilities for the limited effect.

3. The health of the spin-off single-school project is to be monitored, with an eye to discovering whether projects on the scale of the subsystem, where academic leaders embody and support the reflective, quality-oriented behaviours in question, have a better chance of success than university- or system-wide projects.

With respect to improving effect of the workshops:

4. Given the sense of satisfaction voiced by all who participated in the 'clinics', it would seem appropriate for future programmes of this nature to allocate more time to these sessions. It is proposed that clinics should be designed to utilize more experienced staff as mentors and peer reviewers, without the intimacy and the small scale of the clinics being altered; in part to replicate momentarily the microcosmic field achieved over a longer–term in the spin-off, single-school project.

5. A partial improvement might be achieved by strengthening the links between portfolios and the major events in an academic's professional life, such as probationary reviews. Another improvement might come from focusing the already-limited resources of centralized academic development support on the university's sub-systems, in the case of Charles Sturt University, on individual schools. This echoes Adams and Rytmeister (2000, p. 27) who, in writing about the challenges of academic development for new academics, argued that professional development should concentrate its efforts more consistently at the local level, "in the context of the day-to-day work experience of new academics".

Overall:

6. To have more than a fleeting impact on individual workshop participants, the promotion of action research, reflective practice, open discussion and communal improvement of the quality of teaching and learning requires a stronger culture of personal, practical, informed support *at all levels* in the university; the natural emergence of these behaviours needs to be publicly and credibly identified with the

state of the organisation's health, and the constraints which impede the emergence of these behaviours need to be systemically addressed.

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