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Bridging to the future: What works?

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This paper discusses three levels of 'what works' in enabling education – namely, current and successful engagement, transition and future participation, and managing uncertainties. It points to the importance of high quality programs that get the students involved with learning, effectively preparing them for further study and providing the necessary survival skills for an essentially unknown and technology-driven future.

Tertiary education in our current world is a significant pathway into employment and its consequent societal benefits. Bridging/enabling education works to make these benefits accessible to people who are undoubtedly talented but who do not have the specific skills and credentials for entry to further study and the workforce. Frequently, those accessing enabling education are also members of minority

groups, under-represented groups and those who have experienced significant deprivation. Creating access to tertiary education through enabling programs subscribes to the goals of social justice, contributes to expanding the talent available for social and economic development as well as influencing individual life chances. These are the goals and commitments enabling educators share and the consequent responsibilities are the focus of this paper.

With the hopes and aspirations of individuals, our communities and the society raised by the provision of enabling education, ensuring that it 'works' must occupy a significant place in the design and management of programs. Analysing 'what works' operates on three levels. The first of these is the current and successful engagement in education of those who join enabling programs. The second level is the successful transition to and participation in the destination program or workplace, and the third lies in preparation for survival and better in our rapidly changing world of technology-driven change. For the first two, this paper offers frameworks for analysis; for the third, this paper can offer speculation on the essentially unknowable future and some strategies for managing the attendant uncertainties.

Current and successful engagement

The New Zealand-based literature on bridging is relatively new although its contextual value is significant. There is a larger body of work available internationally that provides studies that may assist in identifying approaches for consideration in the development of an effective bridging program in New Zealand. However, it is noted that there has been some criticism (Benseman, Sutton & Lander 2005; O'Hear & MacDonald 2001) about the quality of research in the bridging, developmental, access literature. In this study the concept of the 'student cycle' (Anderson 2002a) is used as a framework for identifying elements and issues for consideration. What follows is

a review of the cycle with reference to literature that may inform its implementation.

Recruitment

The 2002 New Zealand study into barriers to participation in tertiary education for Pasifika students identifies lack of usable information as a factor in poor recruitment. Usable information was identified as coming from peers and mentors (Anae *et al.* 2002). Community networks have contributed significantly to the success of Wananga in recruitment of students into community-based bridging programs (McKegg 2003). In the international literature, Wonacott (2001) summarises the available research to identify process elements in recruitment. He describes recruitment as a multi-step process including inexpensive but eye-catching promotional materials, prompt response to initial contacts, information sessions and prompt, personal follow up. The importance of students making a proactive choice to participate in study is noted as a factor in the retention literature (see below for a summary). This has its origin, in part, in the recruitment process where the student's decision-making process begins.

First contact and orientation

The nature of first contacts and the quality of orientation are seen as the first steps towards retention and persistence. These activities provide the student with initial experiences of the ethos and intentions of the program. If this early work is effective, the students gain some sense of connection with the program that may lead to productive participation. The body of literature found in the 'first year experience' thread (see proceedings of First Year Experience conferences in New Zealand and Australia, 2001-2006) emphasises the importance of using personal contact and friendly informative orientation to make the links for students between their personal aspirations and program effects. Tinto (2002) proposes that persistence in study has its origins in academic and social

engagement and this is crucial in the first days of contact with the program.

Diagnostic processes, program placements and design

In a major study into the elements of successful developmental programs, Boylan, Bliss, & Bonham (1997) identified prior assessment and developmentally determined placements as correlated with student success in their courses. While small programs must rely on individual programming to respond to needs identified in front-end assessments, larger programs can offer a range of levels within subjects. Thus, the student's first experiences of learning on the bridging program are calibrated to current learning needs and maximum opportunity for student success.

Teaching and learning

The single most important aspect of developing an effective teaching and learning environment for bridging students is the presence of trained people who can develop materials and practices informed by current knowledge, research findings, theory development and professional decision-making within their program context (Anderson 2002b, Benseman *et al.* 2005, Boylan 1999).

Effective bridging educators will maintain currency with new developments and adapt them to the needs of their context. Developments such as the work on situated learning described by Haggis (2003), for example, will be part of their everyday professional debates.

Given the multicultural nature of many New Zealand bridging programs (Benseman & Russ 2001), capacity to function in a diverse learning context along with ability to support the aspirations of students from various cultures is identified as an element of success (Nakhid 2003, Anae *et al.* 2002).

Smittle's (2001 & 2003) six principles of effective teaching in developmental (bridging) education exemplifies summaries of research literature, which support the development of strong practice. She lists teacher commitment, command of content, awareness of non-cognitive issues, open and responsive style, high expectations and ongoing professional development and evaluation as her key characteristics of teachers who have an impact in the classroom.

There is very little research (and almost none in the New Zealand environment) to inform debates about the teacher – student interface in tertiary education. This is problematic given the strength of the relationship identified between teaching and student success (see Smittle noted above). Volumes of research have been carried out in early childhood, primary and secondary settings and this is usefully indicative. However, the lack of attention to tertiary teaching sits alongside the absence of requirements for teaching qualifications in the New Zealand tertiary sector and particularly at the foundation level where teaching skill is crucial.

While retention is discussed below under pastoral care, it is an issue that traverses all elements of a program and is an issue across most of the student cycle (Evans 2000). It is considered here in response to the findings from research that prompt thinking about the effectiveness of a student's engagement with the program and most particularly with the teaching and learning aspects. Scott's (2003) review of retention, completion and progression in tertiary education in New Zealand identifies the extent of dropout in mainstream education and, while it does not address bridging education (or adult and community education), his review is indicative of retention as a key issue in New Zealand tertiary study. It can be inferred that this will be especially so in bridging as its students have the greatest mass of dropout predictors working against them.

Following the work of Tinto and the numerous challenges to it in the literature provides a thought-provoking progression from focusing

on attrition, to considering retention and on to more recent work on learning communities as frames for supporting student persistence in studies (Tierney 1999, Tinto 1975, 1982, 1993, 1997, 2002). This thread is firmly embedded in seeing the teaching and learning environment as the focal point of program responsibility for ensuring reasonable rates of retention.

The recent work by Yorke and Thomas (2003) in the United Kingdom supports the notion that this is at the very least a learning and teaching issue. They also include an emphasis on a positive and friendly 'climate', productive and early use of formative assessment and recognition of the social elements of the learning environment in their analysis of factors which may contribute to retention of minority and under-represented groups.

Assessment

While assessment is seen as integral to teaching and learning, it is treated separately here to give weight to the issues around integration and to acknowledge the peculiarities of assessment in the bridging context.

There is little research into the bridging context with regard to assessment, except for some work on assessment styles (Kull 1999, for example); however, reliance on the more generic literature is informative. That assessment is a critical activity for providing feedback to students and for teachers is well established, as is the importance of feedback in the learning process (Gee 2003, for example). The bridging context, however, adds two dimensions to the assessment process. Bridging students need credentials that will carry them into further study in terms of meeting entry requirements for destinations programs and these credentials must be robust for this purpose. Further, bridging programs need to offer their students practice in the styles of assessment they will meet in their destination programs as part of their academic preparation. This implies careful

program design to ensure that assessment operates to support learning, to overcome apprehension not uncommon among students who have typically failed in previous experiences of education, and to ensure that students are fully prepared for the following programs including carrying appropriate credentials (Roueche, Roueche & Ely 2001).

Pastoral care

There is a substantial amount of research into the role of pastoral care in the retention (persistence) of students in tertiary studies (see Evans 2000 for a review). Various models identify external factors, that is, matters not directly related to the classroom and usually related to social and economic issues as significant in determining student persistence. While not suggesting that the quality of the learning environment is less important, the provision of pastoral care services is identified as a determining factor. This may be the provision of formal services such as counsellors, doctors and learning specialists, or it may be in the form of personal and social networks and connections aimed to support students as they balance outside pressures with the demands of study. Recent New Zealand studies have identified the link between academic and social support reporting that personal networks linked to study groups with the purpose of integrating academic and social support are effective (Anae *et al.* 2002). Further, Rolleston and Anderson (2004) note the contradictory statements made by students about the causes of their leaving. Students identified personal crises as the reason for leaving but at the same time commented on negative aspects of the programs they were in, including lecturers who were distant, content they could not understand and peers who were adversarial. This willingness to assume personal blame for dropout may mask levels of program responsibility and at the same time skew research data so that lecturers / program leaders go unchallenged in their assumption that socio-economic factors are paramount.

Transition and future participation

Preparation for transition, and transition

The work of Gee (1998) provides an interesting approach to transitions. His work in social literacies identifies aspects of teaching and learning that may be helpful in making it possible for bridging students to transit from the more familiar 'discourses' of home, workplace and recreational activity into tertiary education. His work puts emphasis on the development of social and academic skills through close association with expert participants in the destination discourse. He sees the teaching function as drawing parallels, similarities and differences among present and future discourses as a means to provide students with the skills of participation. He identifies 'meta understandings' of the process of transition in its social and economic context as vital to student-directed management of choices.

Participation and success in the destination program, workplace/further study outcomes

New Zealand data are available at the program level to demonstrate that bridging students whose educational backgrounds do not follow traditional trajectories can succeed in further and higher study (Coltman 2003, for example). New Zealand research is limited; the 'in progress' Voices from Manukau project which has tracked students from bridging programs into degree studies in teacher education has identified that results on the degree program and subsequent employment rates are equivalent to the cohort as a whole (Anderson *et al.* 2003). Internationally, there are studies to support this contention (Mills 1989; Osborne, Leopold &Ferrie 1997; McKenzie & Schweitzer 2001). The definition of success is a key point here. While passing assessments on the bridging program is important, a full interrogation of success will include acceptance on to destination programs, graduation from the destination program and employment

in the field of choice, and this work has not been done as frequently as would be expected (Kozercki 2002).

Managing uncertainties

The third element in analysing 'what works' addresses the uncertainties around the technological future, its unpredictability and its inevitability. While we are frequently wrong in our predictions regarding the future shape of society, the workplace and our personal lives, there is enough evidence to say that much of future change will be a consequence of change in technology and multiple flow-on effects. What, therefore, must we be doing in the design and management of our programs?

We can look at existing trends in the nature of the workplace and in the ways of working, and these lead us to think about what skills our graduates will need. This might mean we consider:

- identifiable shift to interactive and cognitive skills (fewer manual skills)
- cultural skills that are valued in a diversifying workforce serving a multicultural client base
- trends towards team work, decentralisation of authority, knowledge sharing among employees, workers responsibility for outcomes, and reduction in occupational boundaries
- fractioning of the workforce – casualisation/part time/multiple shifts drive the need for skills of cooperation/negotiation/administration/management.

The kinds of literacies around technology that might be needed are equally unpredictable with applications changing on an exponential curve. This might lead us to teach for creativity and adaptability, and digital and technological content and skills, robotics, nanotechnology as well as ethics, politics and sociology – alongside the traditional

skills of reading, writing, arithmetic, logical thinking, art, history, science and understanding the writings and ideas from the past.

So what we teach may be the skills that have served, but also the creativity, adaptability, team work, independence and self-direction to make sure our students can be responsive to the future and its attendant changes.

In summary, therefore, 'what works' is:
- high quality programs that engage students with learning
- high quality programs that act as effective pathways into further study and/or the workplace
- high quality programs that prepare students for the everyday life that will exist in a world where participation in and the management of technology-driven change is paramount.

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