



STUDENT MENTORING

Promoting high
achievement
and low attrition in
education and training

AUSTIN BOND



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ISBN 0 87397 535 9

TD/TNC 58.04

Published by NCVER

ACN 007 967 311

252 Kensington Road, Leabrook, SA 5068

PO Box 115, Kensington Park, SA 5068, Australia

www.ncver.edu.au



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Acknowledgements

THIS PROJECT HAS been undertaken as part of the national vocational education and training research and evaluation program managed by the National Research and Evaluation Committee, National Centre for Vocational Education Research. It commenced in early 1998 and has been managed by the Western Australian Academy of Performing Arts in conjunction with a project reference group established to provide guidance and advice to the research team.

The Western Australian Academy of Performing Arts is indebted to a wide range of organisations who have contributed to this project, to consultants Karen de Tysson of Corporate-Synthesis, Diann Feldman of Feldman and Associates and in particular to the Project Reference Group:

- Austin Bond Co-ordinator of Academic Programs, WA Academy of Performing Arts
- Michael Campanelli Head of Art Therapy, WA Academy of Performing Arts
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- Duncan Ord Dean, School of Dramatic Arts, WA Academy of Performing Arts

Executive summary

THIS REPORT CONSIDERS how mentoring and mentor-like schemes can be developed by educational providers for the benefit of student learning. There is a growing body of evidence from both organisers and participants of mentoring programs that links mentoring activity with positive student outcomes. A series of case examples have been drawn from a mixture of local experience, formal reports and World Wide Web material to provide instances where mentoring programs have been used to advantage in educational settings.

The report emphasises the social context and motivational dimensions of the learning process. Through a review of the literature and a reflective analysis of the case examples, the report attempts to contribute to a better understanding of the following hypotheses:

- Mentoring models are appropriate to the needs of students within the current educational environment.
- Mentoring models can be successfully applied to the education sector.
- The introduction of a mentoring framework in an educational institution will enhance students' performance outcomes and reduce attrition.

The current interest in mentoring schemes almost certainly stems from a belief that students, through a rich variety of personal and educational experiences, learn best through observing, doing, commenting and questioning, rather than simply listening. There is much support in the literature for the view that mentoring can be successfully used in the education and training sector to reduce student attrition and improve student outcomes. By enlisting experienced personnel to provide acculturation to academic life through both formal and informal mentoring programs, institutions can improve the campus climate and ensure a high-quality academic experience for their students.

Mentoring philosophy emphasises that for training to be effective it must be approached from a caring and challenging perspective. Learners are encouraged to use the frameworks, processes, strategies and models provided in a multidimensional way. Through mentoring, organisations can enrich their environments so that learners can develop and become more effective.

This new model of education calls for changing roles among students, teachers and colleges of learning. Technology is a key transforming element, offering unlimited new ways of learning and providing new ways for those involved to interact.

The study has highlighted a design for a better learning environment that focusses on the social and individual contexts of learning. It has reinforced notions that:

- Mentoring is about relationships (both *structural* and *personal*—a rich environment will have both), and so is learning.
- For formal mentoring to be successful, informal mentoring must be integrated into the social fabric of the organisation at all levels.
- Successful mentoring requires an investment in time and resources, as well as a focus on an improved social and learning environment.
- Successful mentoring focusses on the growth of the individual within the learning environment.

- Students appear to perceive a need for formalised mentoring programs, and stand to benefit in various ways from their introduction. There is evidence that suggests that students participating in mentoring programs achieve better and study longer.

1 Introduction

As educational institutions move to mass education systems, the emphasis of the curriculum is shifting from institutionally resourced teaching to student-driven learning activities. On the one hand, students are expected to know more, perform better and interact with a broader range of skills and technologies than ever before. On the other hand, access to resources is becoming more limited as these institutions cope with the demands of doing more with less, downsizing and redefining 'core business'. Mechanisms to maintain quality of outcome need to be established.

Mentoring is therefore proposed to encourage high achievement and reduce attrition by systematically supporting and guiding the professional growth, socialisation and development of students. It has been used successfully in the corporate sector to promote a more inclusive workforce culture, raise individual performance and improve the performance profiles of under-represented societal groups. It is proposed as a model which can be applied equally well to the education and training of outstanding students, to students from minority groups and to students who have been identified as 'at risk'.

What is mentoring?

At the most elementary level, mentoring involves people engaged in an interactive process in order to provide the mentee¹ with greater insight into the formal and informal aspects of the organisation in which they operate. In the conventional sense, mentors assume, or are given, responsibility for another's learning and general development. They are wise and experienced counsellors who take talented people under their wing, protecting them and nurturing their growth.

The term 'mentor' has a long history, expressed as early as 800 BC in Homer's writing *The Odyssey*. It is a term that embraces friendship, counselling, remediation and intellectual nourishment. Traditionally, it is a one-on-one process designed to assist and enlighten students, enabling and empowering them to extend their learning and personal development through a supportive, mentor-mentee relationship.

Over time, the concept has expanded to include situations in which both formal and informal processes are significant. When educators discuss mentoring, they can refer to a variety of different activities such as peer support groups, community alliances, mentoring circles and spot mentoring (ANTA 1996). Fundamental to each of these activities is the facilitation of change through encouragement, support, belief in others' potential, pushing, challenging, questioning, guiding, listening, advising, training, providing opportunities and alternative views, opening doors, leading by example, inspiring a vision, empowering and being non-judgemental.

Mentoring is not necessarily an exclusive relationship with one person over many years. During the course of a lifetime, it is possible to encounter many different mentors related to different aspects of our lives—physical, mental, emotional, financial and spiritual. These may be brief encounters or lifelong relationships,

¹ The term 'mentee' is a new word in the literature on mentoring, used to describe the second partner in the mentor relationship. The word is used in place of terms such as 'pupil', 'student', 'disciple' and 'protégé'. These terms are somewhat restrictive, implying both a one-way flow of information, as in the relationship between a master and servant, and a perceived hierarchy in the social order.

carried out informally as part of a friendship, or formally as part of a structured program.² In these situations, age is less relevant than the skills and experience of the participants (Garrick & Alexander 1994).

Recent interest in mentoring

The most widespread use of mentoring within the education sector can be traced to the United States of America, where 'planned', 'structured', or 'formal' mentoring programs were introduced during the 1980s, in conjunction with concerns over the progress and attrition of minority students. Through this mechanism, which has survived in many of these institutions to the present day, colleges and universities in the United States have intensified their efforts to retain high-risk students who fail because of rejection, cultural isolation, confusion about academic goals, frustration with bureaucratic environments and academic cultures deeply imbedded with Western white male values (Wunsch 1994a, p. 2). A decade later, there is strong evidence of similar programs being developed in the Australian education sector (Rafferty 1997). More recently, mentoring has been used to support structural and cultural change within the Australian corporate sector, where it has proven to be successful as:

- a mechanism for promoting the optimum use of staff through the dissemination of informal knowledge, cultural knowledge and skills associated with management practice
- a human resource strategy to assist the orientation, assimilation and career development of employees in the workforce (example 1 provides a short account of the Women in Leadership Program at Edith Cowan University, targeted at improving the participation of women in its workforce).

Example 1: Women in Leadership Program: Edith Cowan University

The Women in Leadership Program was introduced at Edith Cowan University in 1991. The project is based on a conceptual framework that recognises the importance of the self and its connection to the organisation. It aims to develop and use the leadership potential which is frequently lying dormant in its workforce for the benefit of both the individual and the organisation. Four activities are offered as part of the project: a public lecture series, an annual international conference, collegial (mentor) programs and workshops/seminars.

The project is unique in that it equips individuals with processes to deal with organisational issues as well as identifying individual skill strengths and areas for future development. Its primary objectives are to increase the participation of women in the organisation's internal decision-making processes, and to enhance leadership skills through a system of interactive workshops and peer support. Four assumptions underpin the program:

1. Significant challenges are being faced by Australian industry as a result of economic globalisation, technology, work restructuring and changes occurring to the composition of the workforce.
2. Australia draws on the expertise of only 50 per cent of its human resources at management level—women remain the country's largest untapped labour market resource.
3. Australia's competitiveness in world markets is being increasingly affected by gender issues at management level.
4. Organisations need to develop managers with the leadership capacity to facilitate a cultural shift if they hope to draw effectively on the skills of their female employees.

The program represents a highly effective and innovative response to the changes that have been taking place over the past decade in the management and organisation of public and private-sector corporations.

² Karen de Tysson, Corporate-Synthesis, training consultant, international speaker and expert on mentoring.

Mentoring occurs naturally in most organisations. Particularly within the arts, formal and informal mentoring programs are commonly used as a means of supporting the professional and creative growth of artists. Many government organisations take an active role in mentoring young artists; for example, in South Australia, the Premier's Mentorship Awards have been created as part of a package of initiatives to support emerging artists (Artstate 1998).

There have always been networks associated with artists—networks which include associates, colleagues, patrons and mentors. While these networks are usually informal, a lot of learning occurs there . . . (Vernon 1997, p. 8)

ANTA (1996) cites various examples of mentoring programs being used effectively in professional development programs in large corporate-sector organisations such as QBE Insurance (Sydney), the NSW Office of Small Business, the Tasmanian Department of Justice and the ICI Chemical Plant. Evaluations of these programs have found that there are positive benefits for both mentors and mentees, with qualitative and quantitative measurements showing improvement against expected outcomes.

Similar claims are made where mentoring has been used in the education sector. A benchmarking program undertaken by the Western Australian Academy of Performing Arts (1996) with a range of internationally renowned performing arts institutions has found that, within these centres of excellence, the collective skill, wisdom, energy and knowledge of both the staff and the students contribute substantially to the learning environment. Programs in these environments are based around a philosophy of mutual respect and trust between students and staff, in an atmosphere which is supportive, open and encouraging. In an environment that has much in common with the traditions of Oxford University, students and faculty live and work in an intimate and closely supervised setting. Through association, students mingle and have good access to their teachers, learning the skills and the knowledge to be imparted through what is essentially a mentor-apprenticeship system. The educational program is focussed as much on the formal curriculum as it is on the informal tradition of imparting knowledge by association with an active professional community of artists, and cultivates:

- shared commitment
- enthusiasm and dedication
- professional ethics, style and 'culture'
- awareness, sensitivity, empathy and skills in criticism

The educational program is focussed as much on the formal curriculum as it is on the informal tradition of imparting knowledge by association with an active professional community of artists.

There is nothing new about mentoring in education. Although some academics will argue this position, particularly in view of the relationship between faculty member and student, Wunsch (1994a) suggests that mentoring has not always taken place in systematic and productive ways and that, for many women and minority students, mentoring does not take place at all. Wunsch believes that more attention needs to be given to planned, rather than informal, mentoring systems which are placed in the wider context of the institution's mission and goals, building a relationship between individual and institutional vitality.

My proposition is that it is time to re-think mentoring in higher education, to construct a more holistic and organic model, to place it squarely in the context of the educational culture, and to confront the disconnection between individual and institutional goals. (Wunsch 1994b, p. 10)

The need for holistic support services

In a survey of TAFE institutions in Australia, Rafferty (1997, p. 2) reported that many of the institutions contacted reported no formal or structured mentoring programs, whilst at the same time describing various informal practices. The effect of these practices on the outcome for students has not been clearly articulated or quantified, and very little attention is given to developing systematic approaches to structuring and organising the informal practices of the institution as part of holistic services for students. Indeed, the evidence would suggest that, in today's environment of corporate managerialism, marketisation and deregulation of education, student services and learner support have suffered substantial budget reductions, often being

One-fifth of students rate learning support services as important . . . [however] the level of resources allocated to learner support is declining.

relegated to the 'non-core' areas of educational business. This has occurred despite client surveys indicating that one-fifth of students rate learning support services as important, and a significant increase (21.8 per cent) in the number of module failures in Australian vocational education and training in the period 1996–97 (Anderson 1998). Anderson (1998) further suggests that, although service providers are expected to cater for larger numbers of students (including a growing proportion who can be classified as 'disadvantaged'), the level of resources allocated to learner support is declining. Although the number of staff and students from minority groups in higher education is still disproportionately low, the national vocational education and training (VET) strategy (ANTA 1998b) makes few explicit references to the need for student services and learner support.

It would appear therefore that there is still much to be learned. In a consensus document representing the views of participants at a meeting in Washington DC in June 1990, jointly sponsored by the American Association of University Professors and the National Education Association (NEA), the meeting concluded that:

. . . recruitment of minorities to colleges and universities is only the first step. Once minority students and faculty are on campus, hurdles continue to impede their chances for success. In many instances, the minority students' pre-college educational experience has not prepared them to live independently away from the home environment or to meet the challenges at the 'majority institutions'. There are too few minority faculty and staff to serve as role models, there is inadequate support for minority social and cultural life, and there are recurrent instances of racially motivated conflict and violence on campus. Minority faculty often face discrimination in salary, tenure and promotion decisions. Other generic circumstances which tend to marginalize education and, thereby, minimize student involvement in a culture of learning especially impact minority students. These include excessive reliance on part-time faculty, part-time students, and large classes.

The strategies outlined in the NEA joint statement suggest that a much wider range of mentoring activities, beginning even in early childhood, would enhance the participation and achievement of minority groups in higher education. As these strategies are implemented, a secondary benefit would be a general reinvigoration of academic life in which increased diversity and community are joined in scholarly achievement.

Assessment of mentoring programs

Currently, there is little direct evidence that links mentoring programs to improvements in teaching and learning in educational environments.

... definitive empirical evidence about the activity of mentoring—particularly in academic settings—is lacking. Some research suggests that it is a vague process with no measurable outcomes. Other research lists step by step procedures and argues that it is a 'necessary part of successful growth in any walk of life'.

(Stalker 1994, p. 361)

This document will move some way towards redressing this gap by evaluating and extending this developing area for institutions wishing to improve performance outcomes and reduce student attrition. It should be noted, however, that more rigorous statistical analyses, longitudinal studies and formal evaluative research are required in order to gather sufficient empirical evidence to test hypotheses and draw conclusions. Indeed, this may in itself be a difficult proposition. In the context of a lifetime of learning, what are the outcomes against which a mentoring program can be measured, and how will they manifest themselves during the student's life? Is it possible to relate short-term outcomes (such as module success rate) to longer term competencies which materialise over time? Addressing a more fundamental issue, Zelditch (1997) suggests that mentoring is an ambiguous term, involving many different forms and structures which are sometimes conflicting. The absence of a consensus on the definition of the term stymies efforts to identify important unanswered questions and synthesise empirical findings into a coherent body of knowledge (Healy 1997, p. 10). These are difficult issues which must be dealt with by further research. However, despite a lack of objectivity at this stage, there is a growing body of evidence reflected in this document from both organisers and participants of mentoring programs that links mentoring activity with positive student outcomes.

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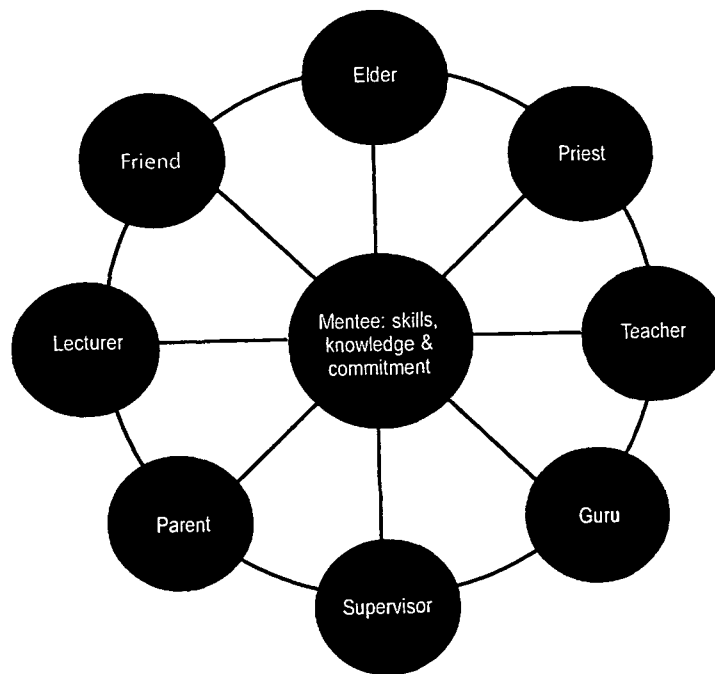
2 Background

DESPITE ITS LONG HISTORY, mentoring is a term that has defied simple definition. Webster's dictionary describes a mentor as 'a trusted counsellor or guide'. In more specific terms, a mentor has been defined as:

... a deliberate pairing of a more skilled or experienced person with a lesser skilled or experienced one, with the agreed-upon goal of having the lesser skilled person grow and develop specific competencies. (ANTA 1996, p. 1)

In some respects, however, these definitions are unnecessarily restrictive. Terms such as 'teaching', 'coaching', 'advising', 'training', 'directing' and 'protecting' are among those frequently associated with mentoring. There are no doubt many more terms that also apply to those who support, pass on information and care about the receiver. These people, loosely defined as 'mentors', engage in a productive relationship with the mentee based on equal amounts of interest, participation and effort on both sides. Traditional role models from the broader social environment include (see figure 1):

Figure 1: Traditional role models for the 'mentor'



Elder A wise member of the extended family. Bound by cultural and family tradition. Respected. Accessible only to those for which the hierarchy allows.

Priest A religious leader. Bound by certain doctrines and religious beliefs. Able to guide those who choose to accept and be guided by such values as a basis for their own.

<i>Teacher</i>	An education specialist. Defined by specific areas of learning and obliged to give valued judgements (assessments) in response to a student's work or contribution.
<i>Guru</i>	A wise person. Widely respected. Able to be heard and followed without necessarily engaging in personal contact with the learner. Advice giver. Talker.
<i>Supervisor</i>	An overseer of an employee's tasks, development and position in the workplace. Responsible to management at a higher level. Must report the situation as they evaluate it to be. Employee is guided, supported and then ultimately judged for evaluation.
<i>Parent</i>	A giver of information to their offspring. Bound by a sense of personal and direct responsibility, plus past experience. Often affected by the outcome of their information giving.
<i>Lecturer</i>	An educator. A giver of information, often impersonal. Approachable, but bound by restrictions of time, institutional responsibilities and hierarchy.
<i>Friend/peer</i>	A challenger and information giver but, equally, an information receiver. Depth of knowledge is less than an older and more experienced mentor could supply.

The role of the mentor

The last decade of the century brings a conjunction of forces which are having dramatic impact on important aspects of the workplace. These forces include continuous change in the technology of work, the capacity of nations to participate in a global economy, and concern for efficiency and the dismantling of middle-management in public and private enterprise . . . In all of these developments, a new actor moves, or returns, to centre stage, a person who is described variously as mentor, coach or preceptor—one who is critical to success in the workplace of the 1990s. (Caldwell & Carter 1993, p. 1)

Particularly during one's formative years, it is likely that guidance and support will be drawn from a variety of 'helpers', or mentors, not necessarily restricted to the types identified above. Bernard (1996, p. 28) draws upon research conducted in Europe and the United States to distinguish between three different roles these mentors play:

- a 'traditional mentor', who provides ongoing guidance and advice to help the learner develop a successful career
- a 'professional qualification' mentor, required by a professional association to guide a student through a period of study
- a 'vocational qualification' mentor, who generally assists a student through a program of study that has a series of finite ends or learning outcomes, offering career advice and support, setting challenges, encouraging and providing opportunities for reflection

The vocational qualification mentor is of particular interest in today's environment of workplace learning. Yoemans and Sampson (1993) report on the success of a national mentoring program introduced in England and Wales as a school-based training program for teacher training students.

The use of school teachers as the school-based experts to share in the training of the students has given rise to the re-introduction, after 100 years, of the mentor. The use of mentors in secondary schools has already started, with students spending more than 60 percent of their training in the classroom.

(Yoemans & Sampson 1993, Introduction)

Under this program, student teachers are placed, under the supervision of a mentor, in a professional environment, where they are:

... initiated into the traditions of a community of practitioners and the practice-world they inhabit, learning their conventions, languages, and appreciative systems, their repertoire of exemplars, systematic knowledge and patterns of knowing-in-action.

(Walker & Stott 1993, p. 77)

In Australia since the 1980s there has been increasing interest in mentoring programs, particularly those which develop a formal infrastructure of helpers who:

- support people working in a rapidly changing environment
 - ensure that their talents and skills are identified and fostered for the benefit of both the individual and the organisation
 - ensure that historically neglected groups are encouraged to develop their potential
 - make developmental experiences equally available to all employees
- (ANTA 1996, p. 5)

Most commonly, these programs have been introduced as a strategy to address imbalances in the workforce or to overcome learning difficulties, and generally have proven to be a cost-effective method of skills development. However, it is quite clear that mentoring does not need to be limited to these circumstances.

The uses of mentoring models in education

Nash and Treffinger (1986, p. 13) promote mentoring as a program that can develop the potential of students: the strengths and characteristics that can be recognised and nurtured to encourage creative productivity. They suggest that mentoring is a process that can be used both to remedy situations where difficulty has emerged and to prevent such situations from recurring. In addition, mentoring of students is a powerful tool for improving outcomes for all students. Whatever its purpose, mentoring is a tool which can be used more widely in the education and training environment.

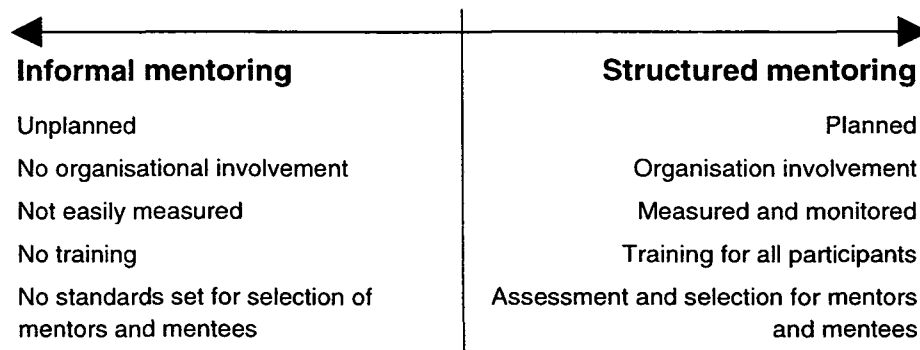
Mentoring systems can therefore be framed with a dual purpose. On the one hand, there is a practical and immediate need for education and training institutions in Australia to become more client oriented and to address attrition, particularly for under-represented and minority groups. On the other hand, if the education and training sector is to seriously contribute to the 'clever country' through more energised and able graduates, there is a challenge in the longer term to make the curriculum more relevant to industry and supportive of higher achievement. McKenzie (1995, p. 57) uses a continuum of mentoring practice—from informal to highly structured—to describe the rich variety of approaches available to the education and training sector (see figure 2).

Wunsch (1994a) argues that mentoring needs to be placed in an academic context where the emphasis is on creating a community that understands and supports students through their program of study. Although mentoring, especially for women and minorities, may well question the values and status quo of the institution, the institution can enhance its learning culture by attending to the quality of life among its students and faculty.

If we value the 'developmental culture' of an academic institution, the concerns of individuals for growth, change, advancement, recognition and support can be brought into harmony with the goals of the 'organisational culture' for stability, continuity and community. The twenty-first century will bring new challenges to higher education . . . Academic institutions must renew their responsibility to support the developmental needs of all their members. This commitment to support human growth is also part of institutional regeneration. An integrated, comprehensive model of personal and organisational development that includes mentoring for students, faculty, staff and administrators can make a significant contribution to the best use of human resources, community buildings and institutional vitality.

(Wunsch 1994a: Foreword)

Figure 2: Structured and informal mentoring



Reducing attrition

Research on student attrition in Australia highlights the negative effect the changing face of education has had on today's students. Exposed to mass delivery systems and independent learning programs, these students must pay more for their education and compete for resources with a larger pool of students from an increasing variety of backgrounds and lifestyles, in a period of diminishing resources. Evidence based on an analysis of withdrawal, non-completion and failure statistics suggests that this situation is not improving. Elsewhere in the world, students at risk of failure, withdrawal or non-completion are reported to include (Terrell & Hassell 1994, pp. 35–36):

1. first generation college students trying to adapt to the life of a student
2. students who must deal with differences between the cultures of home and college
3. students who face severe financial burdens
4. students who experience either blatant or subtle racism
5. students unprepared to take full responsibility for themselves and who are therefore vulnerable to uninformed decisions that carry negative consequences far into the future

McInnis and James (1995, p. x) conducted a rigorous investigation into the experiences of first-year undergraduate students in Australian universities:

The first on-campus students we surveyed were generally positive in outlook. Most students expect and enjoy the opportunity for intellectual challenge. They are generally sure of their reasons for attending university, and have a strong desire to do well. Most students have clear aims, a strong sense of purpose and are not, as is often supposed, narrowly vocational . . .

However, the survey found that many students had negative views of teaching, courses and university. For example:

- Barely half the students surveyed found their subjects interesting.
- Only 53 per cent of them thought academic staff were enthusiastic about the subjects they were teaching.
- Less than half thought that the teaching staff were good at explaining things.
- Only 41 per cent thought there was a positive attitude towards learning among their fellow students.
- Well over a quarter of the students worked in isolation from their peers and were not interested in extra-curricular activities.
- Around 30 per cent were negative enough during the first semester to seriously consider deferring.

A recent study of attrition at Edith Cowan University (1998) established that there are various reasons for withdrawal:

- Courses are not what they were advertised to be.
- Students experience information overload.
- They are worried about peer and staff expectations.
- They are not aware of their options.
- There is isolation and lack of course relevance.

**Recommendations
[to address causes of
attrition and non-
completion] included
the introduction of a
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mentoring system, a
peer mentoring
system, peer study
groups, course
counsellors and
semester leaders . . .**

The study endeavoured to create a profile of students at risk and underlying reasons for the level of attrition, to compile an inventory of successful student retention strategies that may be drawn upon by other institutions in the educational sector and recommend plans of action to improve retention rates. An earlier investigation (Allen, Tait & Young 1996) found that the social and academic experience within the first few weeks is crucial to students' successful adaptation to university life. Students were seen to experience such feelings as alienation, anxiety and loneliness. They were uncertain as to where to access help and felt intimidated about seeking assistance from experts. The recommendations arising from this report included the introduction of a buddy system, a staff mentoring system, a peer mentoring system, peer study groups, course counsellors and semester leaders. The education sector needs to address causes of attrition and non-completion and, where appropriate, formulate solutions to the problem.

Mentoring and the social environment

There is strong support for the view that mentoring systems have a positive effect on the learning context by creating communities which are collaborative rather than competitive. Mentoring systems can reduce the level of anxiety in students and increase intrinsic motivation. Colleges and universities are investigating the effect of collaborative approaches to learning, based on the assumption that:

. . . students learn best when they enter into a social-intellectual community with other students, faculty, and the community around them. A social-intellectual community brings students and faculty together in the quest for knowledge. It encourages the university community to collaborate on scholarly projects, discuss books and ideas, create reading and writing groups, develop new learning

technologies . . . and in other ways create sustained and sustaining relationships that are both academically based and personally satisfying. (Baum 1999)

McInnis and James (1995, pp. 118–119) report that there are two aspects to the learning climate that are relevant to attempts to improve teaching and learning in the first year: the extent to which students share positive study goals (academic application and orientation) and the extent to which the group shares broader social and background experiences (the social mix). They suggest that the lack of attention to the social climate of student learning in universities is perhaps due to an overemphasis on studies of teaching and learning that assume that learning is mainly about the interaction between the student and the subject matter in some kind of social vacuum.

The power of incidental learning in social settings has long been acknowledged in other spheres of education, yet remains seriously under-estimated in current thinking about course delivery in higher education . . . Giving attention to the social climate of learning means . . . actively structuring opportunities for students to communicate with one another—and with their teachers—about their academic work outside the classroom. Small, vocationally orientated courses have generally worked hard and successfully at this: the challenge for large generalist courses is to take on board the importance of developing a life outside the classroom that supports and reinforces academic goals. (McInnis & James 1995, pp. 118–119)

The challenge for large generalist courses is to take on board the importance of developing a life outside the classroom that supports and reinforces academic goals.

The authors go further to suggest that student satisfaction with their educational experience is influenced by the extent to which they think of themselves as students, feel integrated into the environment and have made social contacts; that is, the development of a sense of student identity is an important element in ongoing success and satisfaction (McInnis & James 1995, p. 132).

There is some support in the data for the view that successful learning and a positive view of the university experience does not occur in a social vacuum. We noted differences in academic performance between those students who interact with other students for study purposes, and those who do not . . . This may strike many as a somewhat banal observation, but we suggest that innovation aimed at enhancing teaching and learning . . . too readily overlooks the importance of the social context.

(McInnis & James 1995, p. 118)

The benefits of mentoring

There is growing conviction in Australia that mentoring models may provide a solution to high attrition and failure rates. Despite policies and various forms of financial and infrastructure support, participation of minority students is still low. In many instances, their pre-tertiary educational experience has not prepared them to meet the challenges of their educational programs. Mentoring must adapt to varied circumstances in order to contribute to the goal of broader participation in education by minority students.

Mentor programs have been found to be a cost-effective means of providing academic support and ensuring that developmental experiences are available equally to all students, especially those who are in the first year of their course (Rafferty 1997). Such programs are designed to assist students in their transition into a rapidly changing educational environment, ensuring that

Mentoring is claimed to be a ‘win-win-win’ situation—the mentor, the mentee and the institution all stand to benefit in different ways.

talents and skills are identified and fostered for the benefit of the individual and the organisation, through:

- enhancing participants' learning strategies and study skills
- giving students the opportunity to be involved in co-operative, small, group learning situations
- transforming passive students into questioning and autonomous learners
- providing a relaxed and non-threatening environment which is conducive to learning

Mentoring is claimed to be a 'win-win-win' situation: the mentor, the mentee and the institution all stand to benefit in different ways. The following is a summary of information drawn from various sources that describe the positive benefits of mentoring to the parties involved.

Benefits to the mentor

- increasing confidence and personal satisfaction through a deeper understanding of self and others
- developing and demonstrating additional management skills
- developing deeper learning associations with colleagues
- a stronger sense of leadership and an improved understanding of barriers experienced at different levels
- revitalised interest in work and a heightened sense of self worth
- improved management and people skills
- developing greater job satisfaction and commitment to the profession
- an opportunity to mix with a cross-section of students and staff and to form friendships
- encouraging the development of generic skills such as communication, listening, organising and interpersonal skills

Benefits to the mentee

- remediation, through working directly to address specific needs
- greater insights into the organisation and its culture and ethos
- encouragement, assistance, guidance and career planning
- personal growth
- encouragement of independent learning
- improved self-confidence
- identifying professional development opportunities that will contribute to individual development
- increasing personal and professional networks
- increasing knowledge, skills and expertise in a structured way
- providing access to role models based on individual needs
- developing confidence and self-esteem
- more effective guidance to access resources
- improved feedback and solutions to perceived obstacles
- peer support
- encouraging the development of generic skills such as communication, listening, organising and interpersonal skills

Benefits to the organisation

- increased productivity, lower attrition
- a means of identifying and supporting students 'at risk'
- a valuable source of feedback from students
- increased staff and student motivation
- reduced turnover; retention of motivated and talented individuals who do not 'fit'
- a more efficient flow of information within the organisation
- improved customer service
- resolving and prevention of problems that would otherwise burden the organisation
- shared values and teamwork between colleagues
- more appropriate, cost-effective skills development through mentor-guided training
- increased organisational commitment and understanding
- advancement of minority groups through the organisation
- encouraging the development of a learning organisation culture through teamwork and by sharing values, experiences, skills and knowledge
- encouraging creative approaches and group work
- breakdown of cultural barriers, creating an effective learning community

What is learning?

The emphasis in the vocational education and training sector, particularly evident in recent planning statements from the Australian National Training Authority (ANTA), is on *increasing* the provision and level of education and vocational skills training. It is worth reflecting for a moment on how this may be achieved. It is probable that the higher attrition rates experienced in recent years are due in part to an increasing level of expectation on the part of industry and the education sector, without their having any appreciation of the learning difficulties involved.

To discuss training in industry without considering the learning process is meaningless. And yet, after reviewing the literature on the two processes, one can easily get the impression that they are only remotely related.

(Bass & Vaughan 1996, p. vii)

Learning is such a common activity that it is naturally taken for granted—partly because it is so common and partly because its abstract nature as an inferred process defies simple definition. Although it is not appropriate here to delve deeply into the psychology of learning, at least one point should be considered. Bass and Vaughan (1996, pp. 18–19) describe traditional learning theory based around four basic concepts:

- the *drive*, which energises the individual to respond
- the *stimulus*, which cues the response
- the *response* elicited
- the *reinforcer*, which increases the likelihood that the individual will make the same response again if the same stimulus and drive recur

Would it be wrong to suggest that modern education has limited its activities to the more tangible aspects of the learning process—the stimulus (the curriculum), the response (the competency demonstrated by the student) and the reinforcer (the

Learning is primarily about the healthy exchange of information between people.

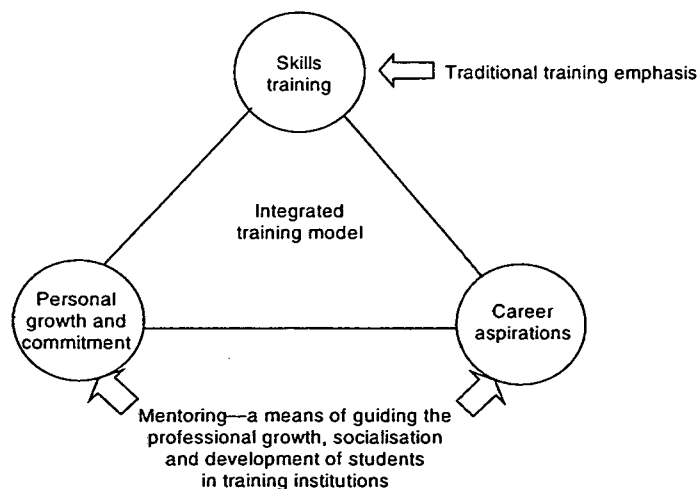
assessment/qualification), and neglected the more intangible aspects of the learning process such as the drive that motivates learning? Will more training result in more learning if the learner is not inspired to learn?

Bass and Vaughan remind us of the important distinction between classical and instrumental conditioning. In classical conditioning, the organism is relatively passive. Learning occurs automatically and, in a sense, in spite of the organism. In instrumental conditioning, however, the organism is active, operating within an environment where behaviour is instrumental in obtaining a reward or reinforcement. The manner in which the environment is perceived is therefore extremely important. In instrumental conditioning, the organism's perception of the stimuli determines what is learned. Perceptions are influenced by needs, desires and past learning. Person A sees the world differently from the way Person B sees it, and both may have perceptions that are fairly distant from reality. Individual conditions call one person to attend to stimuli differently from another as a result of their different interests or sets—they may be habitual or they may be momentary. If a trainer's goal is to influence other people's behaviour, they must first seek to understand their perceptions in order to create the most favourable circumstances for change. The belief that 'everyone is working for the same goals' has long been disproved. At best, assumptions about other people's perceptions and motivations are often incomplete.

Mentoring and learning

From the literature available, it would appear that mentoring has much to do with the preparedness of individuals—their perceptions, stimulus and drive—for learning. The learner must be ready for the task at hand. Results from student surveys conducted at the Western Australian Academy of Performing Arts reinforce this view, identifying at least three major components that influence 'readiness for learning'—maturation; experiential background and motivational level.³ Experience indicates that effort expended on 'preparing' students for learning—developing their vision, ambition and career focus—is not wasted. Figure 3 depicts a need which students have identified through this project, to *repersonalise* aspects of the education and training curriculum in order for it to deal equally with the skills training, personal growth, commitment and career aspirations of each student.

Figure 3: Repersonalising the education curriculum



³ Or, as described by an experienced member of staff with a slightly different perspective, there are three 'Ts' of learning—temperament, talent and technique.

An integrated training model that focusses on each student's professional growth, socialisation and personal development requires a more comprehensive approach to education delivery than is traditionally available in most education and training settings—an approach based on students receiving the right kind of support, at the right moment.

An alternative, but much less frequently used, model of mentoring suggests structural relationships which are based on lateral, multiple connections rather than hierarchical dyads. Within the academic setting, this model accepts lateral faculty–faculty, student–student and administrator–administration relationships. It also presents mentoring as usefully undertaken through networks, career co-operatives, written materials and multiple helping relationships with subordinates as well as peers. (Stalker 1994, p. 363)

Multiple relationships of the kind suggested above require an environment which is rich in both educational experience and personal support. More than one person may be involved, in various ways, in the educational process. Learning is primarily about the healthy exchange of information between people.

Fostering open communication—mentors, proteges, parents, teachers, and school administrators all seem to feel more satisfied if they can express their concerns to others. If communication is open, problems and difficulties can be anticipated or dealt with before they become major and insurmountable. (Haeger & Feldhusen 1989, p. 25)

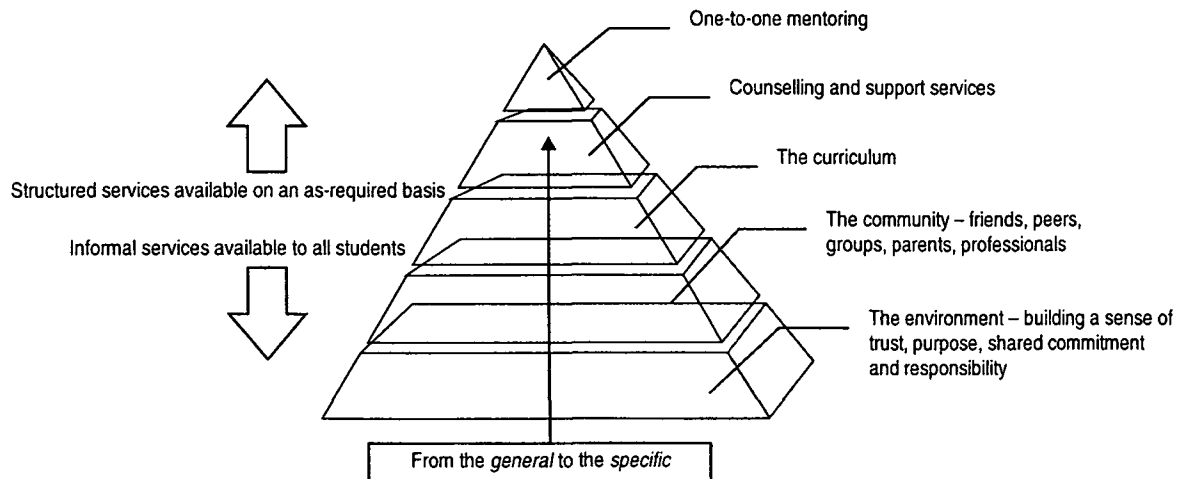
In an ideal world, it is possible to see value in a broader definition of education—one which extends beyond the traditional 'classroom', taking advantage of the rich learning experiences available in the environment, the profession and the wider community.

... mentorships become a viable means of extending classroom instruction into the community. Thus, instruction and learning becomes much more dynamic than is possible within the confines of the school alone. (Haeger & Feldhusen 1989, p. 4)

Each person can provide different kinds and levels of support to the mentee. These relationships provide solid foundational support for the learning to take place. From this, individuals may grow. Figure 5 expands upon McKenzie's (1995) mentoring continuum to draw further upon the informal support mechanisms that exist within the educational community.

There is evidence to suggest that recent mentoring programs have made an impact on the education and training sector in Australia using a conjunction of these 'information providers', traditionally excluded from the institutional learning environment. Vernon (1997) describes various mentoring initiatives in TAFE NSW, where elders, community arts organisers and local artists have become involved in teaching arts and cultural practices programs to indigenous Australians, as well as in film, television and business programs for women. There are many more examples in Australia in which educational institutions are piloting both formal and informal mentoring projects within discrete organisational units. This is particularly true in the arts.

Figure 5: Expanding the education support environment



Concluding comments

There is much support in the literature for the view that mentoring can be successfully used in the education and training sector to reduce student attrition and improve student outcomes. Terrell and Hassell (1994) report that mentoring appears to play an increasingly important role in meeting the needs of students. By enlisting experienced personnel to provide acculturation to academic life through both formal and informal mentoring programs, institutions have sought to improve the campus climate and ensure that students have a high-quality academic experience. The current interest in mentoring and work-based training programs almost certainly stems from a belief that students, through a rich variety of personal and educational experiences, learn best through observing, doing, commenting and questioning, rather than simply by listening.

3 Case examples

THIS CHAPTER⁴ WILL look more specifically at examples where mentoring practice has been used for practical benefit in structured learning environments in both the corporate and the education sectors. These programs have not generally been established with the objective of gathering empirical evidence to support claims for specific achievement, although it should be noted that in the examples drawn from the United States, which have been operating over a longer period, such evidence is more forthcoming. At this stage of its introduction into Australia, mentoring is more a faith than a science, initiated by those whose values orient them towards the development of the whole person. This view is somewhat at odds with the prevailing view in the VET sector—that education and training are about developing competence in specific skills, as required by industry. Time and research will provide the answers. However, in the meantime, readers are encouraged to reflect on the practice and experiences described in this chapter and draw their own conclusions.

One-to-one mentoring

Edith Cowan University, Perth, Western Australia

The activity

Springboard is a career and personal development program which is practical and accessible⁵. It focusses on networking, assertiveness and managing images. The emphasis is on empowering women to set and achieve work or personal goals, gain confidence, communicate effectively through assertiveness, and become responsible for planning their own professional future. Springboard's innovative self-paced learning technique requires participants to commit to applying their own time and effort in exploring a whole range of new possibilities. Springboard uses a process with five ingredients:

- a self-pace workbook
- three one-day workshops which augment and develop material in the workbook
- provision of support networks
- provision of mentors
- role models

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⁴ Material in this section has been drawn from the sources indicated in each example. The examples are not presented in any particular order. It should be noted, however, that the statements and the views expressed do not necessarily represent the views of the organisations.

⁵ Springboard is facilitated at Edith Cowan University by Feldman and Associates. Managing Director Diann Feldman is an accredited Springboard trainer. She has adapted the program for Australia from the one originally devised in England. Diann has introduced Springboard to some 1000 women through public and inhouse programs, and has worked with over 100 organisations Australia-wide.

Outcomes

The aim is that women will become more confident, assertive individuals who are far more flexible, productive, responsible and accountable. The program is evaluated in several ways. First, the three-month program is evaluated by participants upon completion. Second, facilitators provide ongoing evaluative discussions with participants during the three-month process. Finally, a full evaluation report is provided to participating organisations upon completion of all programs.

Springboard focusses strongly on encouraging women to learn from each other in a friendly and supportive environment. The program fosters change and growth by providing a practical way to look at the obstacles that women face. Springboard shows women how to take responsibility for personal success by learning to deal confidently and assertively with themselves and others.

The format of the program encourages networking, so that the learning process is long term. Workbook activities encourage the development of a personal resource bank which alerts women to their skills, knowledge, experience and qualities—key components to helping them formulate a career plan.

According to the evaluation results, Springboard works well because the ingredients provide enough diversity for both organisational objectives and personal needs to be met. The varied program enables learners to access the learning environment in a way that suits their particular learning style.

Additional examples

Various examples of one-to-one mentoring programs can be found in both the education and the corporate sectors. Such programs include many 'women in leadership' programs at universities in Australia, as well as:

- the Women in Arts Management Mentoring Project—a project run by the Arts Industry Training Advisory Board and co-ordinated by Robin Bishop and Associates to assist women in the arts industry to develop the skills and strategies required to allow them to move to more senior management positions.
- the Women in Film and Television (WIFT) Mentor Scheme—a non-profit organisation promoting women in the film, video and multimedia industries. WIFT NSW is a founding member of WIFT Australia, the national voice of State WIFT organisations throughout Australia, and linked also to other Women in Film organisations throughout the world.
- the Women in Business Program, run by the Department of State and Regional Development (NSW)—a program developed to increase business women's access to skills to assist them to survive and prosper in their businesses. A similar program (the Aboriginal Business Link Program) is run for Aboriginal people trading in a variety of business activities throughout New South Wales.

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Peer tutoring

Torrens Valley Institute of TAFE,
Adelaide, South Australia

The activity

Peer tutoring was established by the learning support unit at Torrens Valley Institute of TAFE for students, primarily in technical areas, who need assistance in the course of their learning. Torrens Valley Institute of TAFE is an open learning college, enrolling mostly part-time students who are often in full-time

employment. Up to 50 students per year access the peer tutoring program. These students can approach the learning support unit independently to seek assistance, or they may be referred to the unit by the academic staff.

The peer tutoring program is operated by a range of tutors who are usually drawn from the student body. These tutors are trained by the learning support unit. Their services are paid for through funds provided from the student services team through a grant from the Institute Council and sometimes from the academic departments concerned. The program was established because of an identified need. It was seen to operate effectively in other institutions. The program operates along the following lines:

1. Students request assistance.
2. Students receive a learning contract and an allocation of hours with a peer mentor based on the nature of their difficulty.
3. Students contact their peer mentor and arrange their meetings.
4. The program is reviewed at an early stage by the learning support lecturer, who interviews both the student and the peer mentor, and the learning contract is reassessed.
5. The learning outcomes are achieved, the contract concludes and the model disengages.

Outcomes

There are both direct and indirect benefits associated with a peer tutoring program. The direct benefits are evident in improved pass rates, increased student confidence and overall higher retention rates. Students respond to the opportunity to ask questions as the need arises, and benefit from the one-on-one learning situation. Indirect benefits are associated more with each student's personal attributes—they feel more empowered and confident that they can learn what they have difficulty in knowing or doing. Success breeds further success. Mentored students often later become mentors themselves.

There are benefits also for the peer mentors, who find that the teaching of skills reinforces their own knowledge. They learn to work as part of a team and where necessary to become politely assertive. The experience is also good for their curriculum vitae. Often these students become more involved in other aspects of the student body. New friendships form.

This peer mentoring program works in many ways like a mentor circle. Students requiring assistance have a broad selection of peers with advanced skills upon whom they may call. These students are trained in dealing with learning difficulties. The experience has been that these programs are not 'empty holes that consume ever-increasing amounts of resources'. Students naturally disengage from the program when their needs have been met. In fact, many students find that they don't use the full allocation of time.

Additional examples

A comprehensive document on peer tutoring in post-secondary education in Australia has been produced by the Student Services Committee established by the National TAFE Chief Executive's Committee in 1992 as part of a national project funded by the Australian National Training Authority. The document reviews peer mentoring models in Australia and overseas, and makes some astute observations regarding the advantages of peer support. The report identifies five specific models:

- informal, interactive methods used within classes
- a formal structure within a course
- a formal structure where a student may tutor a group
- students from one institution tutoring in another
- students acting as tutors for others at the same or a lower level in the same institution

Benefits derived through peer support programs for both the tutor and the 'tutee' are well documented in this report (Rafferty 1997, pp. 7–9).

More information

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Staff–student mentoring

California Institute of the Arts,
Valencia, United States

The activity

The material for the first part of this section has been taken directly from the California Institute of the Arts' *Institute policies and procedures 1995–96*, pp. 25A–26A.

The Institute considers each student to be unique, with individual needs and goals. Although the curricula of the schools have structure and sequence, we believe that achievement of individual artistic goals by students requires close interaction with, and guidance from, an artist–teacher who is aware of these needs and goals.

To provide this individual guidance, we have established a system called 'mentoring'. The Institute considers the mentor's role to be critical in the development of the student's artistic and educational progress. The mentor has the general responsibility for advising the student on how best to utilise the organised program of the Institute and this includes implementing policies which affect the student's standing, particularly the review and evaluation processes leading to graduation.

Each student entering the Institute is assigned to a faculty mentor from the school in which the student enrolls. The mentor is responsible for guiding the student through the academic and artistic program in a way which is most effective for the student's development. If necessary, the student may subsequently change mentors using a Change of Status form obtained from the mentee's school or the Registrar.

The mentoring evaluation process should include constructive criticism to inform students of any possible deficiency or impediment in their academic studies and/or artistic production.

In carrying out these responsibilities:

1. *The mentor meets with the student during the Fall semester to fill out the Mentee's Fall Progress Report.*
2. *The mentor works with the student at the beginning of registration to set up a program of study. For the Critical Studies portion of this program, faculty from the School of Critical Studies will advise the student.*
3. *The mentor approves the course program each semester to assure, among other things, that the degree or certificate requirements and other standards of the Institute are met.*

4. *The mentor serves as the primary channel of communication between the student and the faculty, representing the student's interests in faculty meetings and communicating to the student results of faculty decisions and actions.*
5. *The mentor is responsible for seeing that adequate supervision and evaluation is provided for field study contracts. This may include independent study projects.*
6. *The mentor is responsible for recommending advancement of the student or any adjustment in the student's year level.*
7. *The mentor prepares the annual Mentor's Report on the mentee no later than the third Thursday after graduation. This report describes the student's development and progress in the program, becomes part of the student's record and serves as the basis for decisions on advancement.*
8. *The mentor makes a recommendation on the student's qualification for graduation. This recommendation plays a major role in the faculty's consideration of whether the student is qualified to graduate.*
9. *The mentor consults with the dean and/or program faculty on the student's progress and on issues related to the student's progress.*

Each school may develop other requirements and mentoring procedures, supplementary to those listed above, in response to special needs.

The subject material for the next part of the section has been taken directly from the California Institute of the Arts' 1995–96 *Student handbook: School of Art*, pp. 24–25.

Role of your mentor

Your mentor is, or should be, your main point of contact with CalArts. He/she is your contact and your advocate. Be sure to keep in close touch. Meet with your mentor at least two times a semester. Your first contact with your mentor will probably occur at registration when he/she helps you to arrange your program for the coming term. He/she will help you to ensure that your program incorporates Institute and School requirements . . .

Contact with your mentor does not stop at registration. He/she will be important to you almost every step of your way—and you are the one who must take the responsibility for ensuring that he/she knows about your work (and you) as you go along. Try to make regular contact. If you are new to CalArts, your mentor can help by acquainting you with services provided by other parts of the Institute.

Your mentor will also act on your behalf at critical points in your life at CalArts. Not only an artistic guide, he/she will also be involved in all of your 'official' acts. For instance, he/she will certify that your work is ready for exhibition so that you can reserve a gallery for your show.

Bureaucracy is close to a minimum at CalArts, but a few official procedures do exist. You will need your mentor's signature, if for instance you wish to record a change in your status . . . A mentor change is usually simple: get a Change of Status form from the School Secretary, obtain the approval and signature of the person whom you wish to be your new mentor, have your previous mentor sign the form (a means of notification to her or him only), and return the form to the Secretary.

Review procedures

All students in the School of Art are reviewed periodically during their residence at CalArts. These reviews give the student an opportunity to display a representative sampling of work for faculty appraisal, and enable the faculty and the student to make a more informed judgment regarding the student's progress.

Reviews also provide an opportunity to caution students who need to increase the scope, or quality, of their work in order to continue to make satisfactory progress towards the degree.

The Review Committees . . . consist of one faculty member from the program chosen by the student, the student's mentor, and one or more faculty members chosen by the school . . .

Additional example

Another example of a mentoring scheme which engages staff or other 'professionals' to help in the personal and career development of young students can be found in Australia, in the Indigenous Mentoring Scheme sponsored by the Indigenous Sport Unit of the Australian Sports Commission (AIS 1996).⁶ In this program, a mentor is an older Aboriginal sportsperson who can guide young aspiring sportspeople towards achieving their goals. Over 50 Aboriginal and Torres Strait Islander mentors have offered their services throughout Australia. Mentors meet with their regional group of sporting achievers twice a year, and will also make contact with them regularly by letter and telephone to check on their progress. Often the mentors will work with sportspeople involved in the same sport they have achieved in, but they will also work with children from other sports to help them wherever possible.

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Volunteer tutor scheme

Midland College of TAFE,
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The activity

The Read-Write-Now scheme (formerly the Volunteer Tutor Scheme), operating for over 21 years in Western Australia, offers free, one-to-one literacy and numeracy help to educationally disadvantaged students. The scheme makes use of voluntary tutors who undergo an initial training program before being matched with a student. Most volunteer tutors spend 1–2 hours with their student each week. The scheme operates with around

800 tutors across the State at any one time, and generally supports about 1000 students per year. Assistance is available at over 30 centres across the State, and every effort is made to place anyone requesting help. The tutors are managed in small local groups by voluntary co-ordinators, and the whole program is overseen by 2.2 equivalent full-time paid professional staff operating from Midland College of TAFE. The program is largely Commonwealth funded, and each voluntary community group receives a small sum each year to cover operating costs such as publicity and resources. Group-level co-ordinators meet with their tutors every three months to obtain feedback on all working tutor–student pairs.

The Read-Write-Now scheme is, by its very nature, innovative in its approach since no set curriculum is used. An individual learning plan is drawn up for each student, according to their needs and learning style.

Outcomes

The most obvious change that occurs for students in the Read-Write-Now scheme is improved self-esteem and self-confidence. These are essential qualities that must be present before any real learning can take place. Comments received from tutors and co-ordinators indicate the range of successes experienced by students in the scheme

⁶ The Australian Sports Commission, PO Box 176, Belconnen ACT (Tel: 61 2 6252 1210).

and the richness of opportunity a program such as this offers through its flexible and student-centred approach. There are many flow-on effects. Many participants in the scheme experience personal growth which allows them to join, often for the first time, in the life of their community. They want to 'break out of a self-perpetuating cycle' and need support and guidance in order to do so.

A thorough understanding of disadvantage, access and equity issues is central to the success of the Read-Write-Now scheme. During their training course, trainee tutors are actively encouraged to explore their own attitudes, beliefs and values in this complex situation.

Peer tutoring in the workplace

Tropical North Queensland Institute of TAFE and Red Dome Gold Mine (Niugini Mining Ltd), Cairns, Australia

The activity⁷

The peer tutoring program at Red Dome Gold Mine (ANTA 1998a) creates inhouse, easily accessible expertise in adult literacy training to service immediate and longer term company needs.

Communication training became a priority at Red Dome with the introduction of a workplace personal development program. The peer tutoring model is designed to address work-based literacy issues that are specific to workplace needs. The model makes use of an enterprise-based teacher (to identify and provide for the communication needs of the mine) and a range of peer tutors. The implementation process began with a systematic and thorough orientation phase. Volunteer tutors and students were interviewed to determine suitability and analyse needs. The enterprise-based teacher provided training to employees on a one-to-one basis and trained volunteers to be adult literacy tutors.

Outcomes

Peer tutoring is an enterprise-endorsed method of delivering training. The tutor and the protégé together define the training schedule and a program that will achieve the goals of the tutee. Anecdotal and qualitative evidence indicates that literacy training does have a positive impact on workplace effectiveness and efficiency, evident through:

- direct cost savings to the enterprise
Management reported overall improved work performance from trainees, and improved time efficiency.
- employee access to and acceptability of further training
For some trainees this program complemented other training programs in which they were involved.
- employee participation in teams and meetings
Trainees developed the confidence and skills to become more involved in work-based activities.
- employee promotion and job flexibility
- the value of training in terms of improvement of personal and interpersonal aspects of the workplace
Company morale noticeably improved and other employee-driven professional development initiatives were introduced.

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⁷ This project won the 1998 Best Practice 'Award for Client Responsiveness'.

The program's success was attributed to many factors. It was sensitive to the situations and particular needs of the workplace, accommodating the shift work and the diversity of needs. In turn, the workplace became more receptive to innovations, which were welcomed in a climate of mutual trust and respect between staff and management. The remote location of this site was also a contributing factor in the success of the program, as the fly in-fly out nature of the mine site maximised the opportunity for peer tutors to interact with their students, either in or out of work hours.

Most of the tutors had training experience and felt relatively at ease with the prospect of tutoring a work colleague. Suitable matching of the tutor and tutee was the first step towards a good working relationship. Being able to relate comfortably and well to others was considered by the participants to be the most important factor in a successful match. Each tutor-tutee relationship developed in different ways over varying timeframes, with some pairs continuing after the program had officially terminated.

Additional examples

A similar example of a workplace peer mentor program can be found in the Open Training and Education Network (TAFE NSW) (OTEN 1998), where students enrolled in a Local Government Certificate course make use of workplace mentors as they endeavour to acquire new skills. Issues of a 'here-and-now' nature in the workplace are discussed in a flexible learning infrastructure. A fundamental principle of the program is that students *stay in the workplace* to learn. The mentor-student relationship is based on the following:

- agreed boundaries
- learning is driven by the student
- the environment is trusting, open and honest
- the relationship is non-judgemental

The mentor-mentee relationship is reinforced within the curriculum with 'Talk to your mentor' captions listed at relevant points throughout the learning materials.

More information

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Mentoring in a Faculty of Agriculture

University of Western Australia, Perth

The activity

Mentoring in the Faculty of Agriculture (University of Western Australia) received a boost through a project funded by the Committee for the Advancement of University Teaching (CAUT), Developing Mentoring for Effective Learning in Agriculture (CAUT 1995). This project addressed the issue of enhancing the learning environment of students, with special attention to the needs of those about to enter the profession.

The program was developed in conjunction with the Australian Institute of Agricultural Sciences and worked at a number of levels to establish ongoing high-quality mentoring for agriculture students:

- *Students learning to be mentors*
Agriculture students practised mentoring skills with primary school children involved in the Primary Extension and Academic Challenge Program.

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- *First-year mentoring program*
First-year students were matched with student mentors from higher years. Students who had participated in the development of the mentoring program established a student committee to organise the first-year mentoring program.
- *Second-year mentoring program*
Second-year students were paired with a postgraduate student mentor in the faculty or the same discipline area.
- *Third-year students*
Students from the faculty were matched to professionals working in related occupational disciplines using a customised questionnaire.

The program is designed to run through an annual academic cycle, beginning with housekeeping and administration in January, through to evaluation in November. All mentors and students attend a training workshop at the beginning of the annual cycle.

The mentoring relationship involves:

- contact between the mentor and the student
- regular meetings
- discussion
- guidance, advice and support
- energy, enthusiasm, initiative and curiosity
- mutual respect and trust

Students are linked using a matching questionnaire (such as the Myer-Briggs Type Indicator) which looks for compatible personality types. Often, additional questions will determine work interests and goals.

Outcomes

The outcome of this program underpins all teaching and learning formats by providing students with skills in supporting others, and in gaining high-quality support for themselves. Through the support provided, increased enthusiasm is created among students for learning in any format. The skills and approaches learned by students in this project enhance the learning environment for all students by:

- encouraging co-operation and sharing of knowledge
- ensuring a high degree of relevance of content and approach
- facilitating more effective interactions between students and mentors in the profession
- promoting a better awareness of the process of mentoring among students

Participation in these activities assists in the development of valuable attitudes to learning within the student population, of synergy and integration that have not previously been possible. Table 1 summarises the benefits of such a scheme to the mentee and the mentor.

Table 1: Benefits to mentees and mentors of the Developing Mentoring for Effective Learning in Agriculture scheme

<i>Benefits to mentees</i>	<i>Benefits to mentors</i>
<ul style="list-style-type: none"> • the opportunity to discuss serious career options with an objective and successful professional • honest and constructive feedback which is not assessed or appraised • learning new skills and acquiring knowledge • the opportunity to learn how to communicate effectively • good career advice and commercial intelligence • the opportunity to network and 'get known' by professionals in the industry 	<ul style="list-style-type: none"> • the opportunity to 'give back' some of the benefits of knowledge and training • keeping in touch with educational advances, culture and teaching practices • networking with future fellow professionals • develop modern management skills • job satisfaction • insight into the student view of the world

This project addresses the need to change attitudes in the student group so that they take more responsibility for their own learning. It approaches mentoring on a very broad front, from learning to be 'mentored' to learning how to mentor. Continued evaluation of the attitudes of students in the faculty will assess the extent to which this process is evolving. There are clear indications, however, that students are showing initiative in promoting the faculty to prospective students, and by providing lunch-time seminars with a variety of speakers to increase the opportunities for groups of students to discuss and debate issues of relevance to their profession.

Additional examples

The practice of mentoring students through contact with professional associations can also be found in programs such as the MBA Corporate Mentoring Program at the Fisher College of Business, Ohio State University (Ohio State University 1996). Students are matched with successful executives for special one-to-one mentoring relationships. The goal of the program is to offer students the opportunity to be exposed to the business world; to visit a work place; to explore the tasks executives really do; to see and talk about specific career paths; to discuss what companies are looking for in employees and to understand the relevance of their academic studies to the profession.

Student peer mentoring programs are beginning to find their way into Australian education systems. Two such examples include:

- Royal Melbourne Institute of Technology, Bundoora—a student mentoring project for first-year undergraduate nursing students focussed towards developing, documenting and refining a student mentoring program as part of the curriculum aimed at identifying and addressing issues that interfere with successful student progress; and
- Edith Cowan University, Joondalup—a peer mentoring program as a means of providing academic support to first year psychology students. The program involves training competent second and third year students to assist inexperienced students in a collaborative learning experience. Peer facilitated study sessions assist both the mentor and the mentee in learning how to learn. Students who have participated in these programs report that learning takes place in a relaxed and informal atmosphere which is 'learner controlled' as opposed to 'teacher controlled'.

A similar program is also described by Chester College (a college of the University of Liverpool, England),⁸ where they attribute a unique and special feeling—an atmosphere—as an outcome of their peer mentoring program.

Successful peer mentoring programs are structured around two basic assumptions:

- Peers can help each other learn while forming life-long friendships.
- One of the best ways to learn is to teach others what you learn.

Mentored learning in flexible delivery programs

West Coast College of TAFE, Joondalup Campus, Perth, Western Australia (formerly North Metropolitan College of TAFE)

The activity

The Joondalup Campus of the West Coast College of TAFE is a college in the Western Australian Department of Training that specialises in flexible learning.⁹ The concept of 'flexible learning' at Joondalup means that:

- Skills formation options are flexible with respect to course structure, delivery mode, time and place.
- The curriculum is modularised.
- Entrance and exit are on demand rather than the traditional 'twice a year' enrolment pattern.
- Assessment is based on demonstrated competency, rather than being time served.

The Joondalup system caters for students on an individual basis, rather than expecting them to fit to a standard mould. However, they may come to the college at a young age, from a structured school environment, with no concept of flexible delivery and very few skills in time management and independent learning styles. A learner-centred approach has been adopted by the college. Study support for learners is provided by:

- a two-stage student induction
- individualised program advising
- group facilitation through workshop/tutorials
- specific delivery options

Student induction

All students are required to participate in a two-stage induction program. Stage 1 is about basic procedures of the campus and introduces the students to the concepts behind flexible delivery:

- the various processes and study support available
- how to set goals and manage time
- motivation
- self-esteem
- timetabling

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⁸ <http://chandra.chester.ac.uk/~rpiercy/mentor.htm>

⁹ Material has been drawn from North Metropolitan College of TAFE, Joondalup Campus, *Best Practice in on-campus flexible delivery*, an ANTA-funded Best Practice Project.

Stage 1 also includes an introduction to academic staff and the academic material. Stage 2 helps students discover more about the way they learn: it focusses on *learning how to learn*. Students are challenged to study intelligently by considering how best to use resources and processes in ways that suit their learning style.

Program advising

Program advising involves a 30-minute interview once every four to six weeks with lecturers who have been allocated to students from their course study area. During this session, students discuss their progress and set targets for the next month. The program adviser helps the student to monitor their progress and assists with issues of motivation, goal setting and time management. A computerised record of every session is maintained. Students obtain personalised assistance from these sessions and are helped to develop lifelong learning.

Group facilitation

Group facilitation is provided both by lecturers rostered on duty to assist students, and through non-compulsory workshop/tutorial sessions every three weeks. In addition, study-buddy systems are established and, through regular monitoring and evaluation, students are tracked through the system.

Specific delivery options

The Joondalup delivery model has evolved over time to provide specific modes of delivery tailored to particular cohorts of learners. These specific delivery modes are 'layered' over the core model of flexible, self-paced learning. Specific modes include:

- international delivery using distance learning and onsite techniques
- 'Kickstart'—a structured introduction to the campus for full-time learners (particularly school leavers) that moves to a flexible approach over 12–14 weeks
- workplace skills recognition—this mode provides workplace instruction, workshops and employer/teacher mentoring, and is used successfully to provide training to large corporations on site
- project-based, team learning—this mode is particularly suitable for delivery of information technology and multimedia training

Outcomes

The Joondalup flexible learning program has received very encouraging responses from students, employers and other stakeholders. There are various support strategies in place to empower students to take control of their learning. In June 1996 the college received a Certificate of Best Practice from the Australian National Training Authority, an acknowledgement of its exemplary systems for on-campus, flexible delivery. In 1998 the campus was awarded the Western Australian Training Excellence Award. The delivery models on campus have also influenced or been replicated in campus design in institutions in Victoria, New Zealand and Scotland.

With the move away from a teacher-centred approach at Joondalup came a dependence upon the staff's acting as a team, with an overlap of responsibilities and interaction between all staff: administrative, resource and program personnel. The boundaries have disappeared, and subject expertise given way to a stronger focus on the process of learning. There is constant change—continuous enrolment, weekly induction sessions, weekly exam sessions. A broad base of knowledge about issues and processes is necessary. There is a strong emphasis on teamwork—most of the activity on campus is achieved by teams of staff working co-operatively. A general meeting of all staff is held twice a month, while each study area conducts weekly meetings. Staff are encouraged to provide input into the development, implementation and improvement of processes. The campus has developed its

processes to international standards (ISO 9001) and received quality endorsement in 1998. Central to the quality approach are client feedback mechanisms and a 'quality council' on campus.

The sub-dean as mentor

Faculty of Arts, University of WA, Perth,
Western Australia

The activity

While the Faculty of Arts at the University of Western Australia does not have a formal mentoring scheme, there has developed over many years an impressive record of attention to the needs of students, in particular:

- to advise and guide students concerning the choice of units for their degree course and any changes of enrolment that may follow, and generally to provide thoughtful advice to students who encounter difficulties during the course of their studies
- to encourage the opportunity for informal learning and group support through weekly tutorials

The major factor in implementing this interest is the existence of a specific office, its incumbent known as the sub-dean. In some universities in Australia and abroad, this officer is, perhaps more aptly, named the dean of students. There is rarely any hint of 'sub' about the aura of a sub-dean.

The sub-dean is a member of the academic staff, chosen for a period of three years with an eye to the likelihood of their ability to gain the confidence of the students and to provide them with a sympathetic hearing. Less pleasant duties include making recommendations to the Board of Examiners in Arts for the exclusion of 'unsatisfactory' students for one or two years, and, on occasions, refusing student applications to vary regulations in their favour.

The greater part of the sub-dean's working day is taken up with student interviews. Record cards of these interviews are maintained on the computer along with the students' academic records. Files on every student are maintained. Technological developments have greatly improved the speed and ease of access to student histories. The sub-dean's familiarity with the progress of students and with their problems does much to obviate any unfavourable impact of impersonal administration. The sub-dean presents the Examination Register to the Board of Examiners at the end of the academic year, with recommendations based on their knowledge of the individual student from the academic record and from discussions over the course of the year about difficulties encountered. Not all student problems can be labelled 'academic', although they may indeed have academic repercussions. Students are liable to many unsought distractions. At times the sub-dean becomes a mentor to students with personal problems, able to recommend sources of support and help elsewhere in the university and beyond. Student welfare is given a high priority.

The sub-dean develops a familiarity with student opinion on courses and teaching and in this sense may be regarded as the ears of the faculty and a sounding board for projected developments in the degree structure and regulations. They provide an important bridge between the academic staff (who often seek advice on regulations and issues concerning their students) and the administration of the university. Having begun in the early 1960s as a part-time appointment, the sub-dean's function and significance has grown steadily

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over the years, and the Faculty of Arts has been an example to others in its management of student affairs.

Obviously not all students find their way to the door of the dean's office. However, all students when they are admitted to the university are interviewed either by the sub-dean or by one of twelve advisers carefully chosen by the sub-dean from the academic staff to discuss and guide the new students in the selection of their courses, with a view to their interests, abilities and aims for a future career. These advisers are able to answer questions about the university experience, the nature of the courses, the teaching methods and the services provided. The new students are encouraged to seek advice when they are in doubt or difficulty. The aim is not only to guide the individual to an enrolment that suits them, but also to give students a sense of joining a community that values its members.

The tutorial

Teachers, as we well know from our own experience, may become mentors to their students. This is not always so, depending as it does on the personality and the characteristics of the individual teacher. Lectures, however stimulating and interesting, put students in a passive situation. They have no opportunity to respond and to question; in short, there is no immediate communication between teacher and individual. In the Faculty of Arts at the University of Western Australia, a tradition of regular weekly tutorials for small groups of students (between eight and twelve) has survived the budget cuts. Here, the tutor, not necessarily a lecturer in the unit, leads the discussion and seeks the responses of the students. This weekly tutorial lies at the heart of the Arts degree, providing as it does an opportunity for the student to take part in a discussion of a set topic within the course, to argue opinions, to react to their reading and moreover to find friends, allies and supporters within their peer group. For first-year students, the social interaction of a tutorial is important to their individual development at university and helps to avoid the insecurity and possible alienation of a novel environment. The presence in the group of older students is a great advantage—the association can be both fruitful and supportive.

The benefit of the academic discussion under the guidance, but not the strict control, of the tutor does not need to be argued. Tutors are also available to discuss with the student their written work, and often these meetings extend beyond coursework to the general welfare of the individual. Although the group tutorial cannot match the Oxford system, where tutor and student meet weekly for a one-to-one session, it remains a form of mentoring, certainly, and has much to commend it.

Discussion

The experience of the Faculty of Arts at the University of Western Australia is consistent with discussion currently under way at Edith Cowan University, where strategies are being introduced to improve student satisfaction and reduce attrition, particularly among first-year students. For example, on the university's Bunbury campus, the social work program has an integrated process of pastoral care which begins at the point of enquiry and continues beyond graduation. Student representatives meet with staff fortnightly to air their problems and help monitor the program. Staff see entry into a supportive professional network as fundamental to the course. Other strategies to improve retention rates include orientation programs, social events, information sheets, a group of study facilities, peer mentor systems, exit interviews and now, more importantly, introducing an associate dean (with responsibility for students) into each faculty of the university.

It is important to remember that an organisation's values are reflected in its operational structure; that is, if students are to be valued, then the structure should

reflect this. As many universities and TAFE institutions rush to reduce unit costs through slimmer and flatter administrative structures, it is important that the final structure still reflects an organisation committed to high-quality student outcomes.¹⁰

Community mentors

Western Australian Academy of Performing Arts, Perth, Western Australia

The activity

The Friends of the Academy is an association of community members whose objectives are:

- to render assistance in any matter pertaining to the welfare, maintenance, benefit or advancement of the students enrolled at the academy
- to promote the wellbeing and advancement of the academy as an institution

The Friends are a group of people who support the students and the objectives of the academy, made up of arts lovers, parents and supporters of students, graduates and staff. Membership is open to the community. Each year, the Friends raise approximately \$40 000 to directly assist students at the academy. In order to raise these funds, the Friends rely on subscriptions from members and a number of fundraising events. Perhaps the most important way their support is provided though is by simply 'being there', attending the performances regularly and enjoying and encouraging the talent and commitment of the performers.

The management of the association is delegated to a committee. The association provides loans, grants to students, scholarships and other major student-related services. Of special interest is the hosting service which the Friends provides to new students (particularly to students from interstate or overseas) to help them become acquainted with Perth and the academy.

The Friends themselves benefit from the arrangement by advance notices of performances, mailing list for information, a week of prebooking to shows before the general public and special 'Friends' shows throughout the year.

More information

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Mentoring in the United States

A search of the Internet reveals an extensive and comprehensive array of mentor programs operating in the United States, at both the institutional and national level. Many of these have been documented by the National Education Association (NEA)¹¹. The summary below draws together many of the common themes described in these examples, clearly illustrating the approach and utility of these programs. However, for a more comprehensive account, readers are referred to the NEA website, which also provides an excellent coverage of other teaching and learning issues in the United States.

More information

For more information on any of the United States programs, see the National Education Association web site <<http://www.nea.org/>>

The activity

Mentors are usually drawn from academic staff, college administrators and senior students. They volunteer their time and advice in order to help guide students

¹⁰ How many vacant reception desks can you find nowadays, proudly displaying a customer service charter?

¹¹ NEA [date unknown] Minority mentoring programs, National Education Association <<http://www.nea.org/he/pgms.html>>.

through their university experience. They are selected from a variety of disciplines, and often receive a reduction in teaching load as compensation. They attend training sessions during the year to help deal with such concerns as recruitment and relationship development.

Most programs comprise a number of inter-related activities, such as:

- (a) a one-to-one mentor relationship—a faculty or staff member is matched with a student based upon academic, career and personal interests
- (b) a group of proteges—incoming students are often grouped together (sometimes linked to a more senior student), giving transitional aid and support through the network
- (c) social activities—students are encouraged to meet informally through a variety of social activities and clubs

All programs are intended to motivate, encourage and support students. However, some programs are designed specifically to empower minority faculty and/or students to persist in higher education by broadening their experiences and extending their opportunities both academically and socially. Examples include:

- minority achievement programs which target minority students who show potential but do not meet the regular admissions standards
- orientation programs, focussed on newly hired faculty and all minority students
- academic careers program, designed to increase the number of minorities in faculty positions

All the mentoring relationships described consist of two or more people sharing common expectations — the mentor wants to help, the mentee wants to meet certain goals, and both believe that the relationship will make a difference.

Initiation

Most college programs take special care to assist students making the transition to academic life. According to the data provided, the greatest rate of withdrawal occurs during the first six weeks of the first semester. To address this critical time period — the 'anxiety of newness' — and to replace the inherent fear with a sense of ownership and belonging, senior student mentors are matched with incoming students (the proteges) to guide them through the maze of rules, regulations, expectations, activities, and the general confusion of student life on campus. Student mentors are directed by faculty mentors who are responsible for their supervision and training. Institutions in the United States find that mentors are generally eager to help newcomers adjust to the new environment. The students, both mentors and proteges, meet also in social settings during the semester. Mentors may wear the identifying tee-shirts to make them more accessible and approachable. They act as guides and resource persons, encouraging newcomers to seek academic help or administrative advice when necessary and promote involvement in extracurricular activities.

Other institutions offer special classes for incoming students, such as 'succeeding in college', 'succeeding in careers', and 'succeeding in life'. The message in all of these programs is about gaining confidence in one's self and abilities through education and commitment. It is about being successful and promoting success in others.

Ongoing activities

Mentors are expected to meet regularly with their students to provide social and personal counselling as well as academic support and encouragement. In some institutions, the concept of peer support is developed further through the term as teams of students engage in various activities ranging from individual counselling

and social gatherings to study groups. Participants may be assigned in groups to student mentors who report to an experienced graduate assistant. The graduate assistant supervises the activities of the student mentors and acts as a support system for them.

Faculty mentors usually attend seminars each year to discuss the goals and objectives of the mentor program, multicultural sensitivity, and relationship building. Peer mentors may receive seminars from a planned instructional curriculum and attend workshops on issues such as leadership, time management and study skills.

Finally, mentees become part of a campus mentor club which sponsors extracurricular activities such as musicals, plays, discussion groups, out-of-town field trips, and group cultural events. These social interactions provide an opportunity for students to make meaningful contacts with faculty and others who can enhance their educational experiences.

Outcomes

Positive outcomes reported on the NEA website as a result of these mentoring programs include:

- positive feedback from those who participate, with many new students seeking entry to these programs — experience has shown that all members of the group benefit from the communication and sharing of experiences that take place
- several students published professional articles with their mentor faculty and several were awarded scholarships for further study
- more student involvement in college activities, e.g. student newsletters
- retention among protégés is significantly higher than retention of non-participants, with many programs experiencing extremely low (< 5%) attrition rates
- improved student outcomes, e.g. in one institution, 75 per cent of entering students improved their academic standing
- improved campus environment, where the emphasis is on collaboration rather than competition — students encourage other students, and mentors seek advice about student problems from other mentors, creating an atmosphere of co-operative success
- students show more awareness and pride in their own accomplishments
- increased participation in student organisations and clubs
- provides a college entrance vehicle for minorities who would otherwise not be admitted
- increased graduation rates
- increased representation of minority faculty on the teaching staff

4 Discussion

THE PREVIOUS CHAPTER provided examples of various mentoring practices which have been introduced into educational situations in order to cultivate a richer, more effective, individualised learning environment for students. But what is it about traditional learning practice that is causing educators to look for new and more appropriate models? Does mentoring provide a suitable solution to their concerns?

Learning communities

There are some who believe a revolution is long overdue in education—in the way people learn and in the way instruction is given. The information explosion has left large gaps in curriculum. Many new careers are emerging. Industry requires new types of leaders. ANTA's national strategy describes various economic, technological and social trends that are affecting vocational education and training in Australia, including (ANTA 1998b):

- the growth of global markets and intensifying international competition
- the increasing importance of service and knowledge-based industries
- changes in the geographical and regional distribution of job opportunities
- the increasing impact of information and communication technologies
- the increasing number of small businesses
- the changing ways in which work is organised
- major demographic and social changes

In an information age, industry needs employees who can do their own thinking, get actively involved, work in teams and be innovative.

The education community has been hearing of reforms for the past few decades (two recent examples are computer-managed learning and the video) but few of them have provided any long-term benefit. In a discussion paper produced in 1995, the National Academy of Sciences/National Academy of Engineering expressed the view that since the industrial revolution schools have increasingly mimicked the practices of factories, treating students as products to be shaped with assembly-line precision. Although this method of education may be effective at teaching basic skills, it is not suited to a society in which individual success often depends on a person's ability to adapt to changing circumstances. In the information age, industry needs employees who can do their own thinking, get actively involved,

work in teams and be innovative. Too many students still spend much of the day passively listening to lectures. Many classes teach skills for jobs that either no longer exist or will not exist in their present form when the students graduate. It is unlikely that education will succeed in the twenty-first century by merely extending the traditions of a previous era. In the new millennium, classrooms may need to look and function very differently from the way they do today. Education should be experimenting with new organisational structures, new curriculum and new forms of teaching and learning (National Academy of Sciences/National Academy of Engineering 1995).

Tinto (1997, p. 53) suggests that education has been:

... organised to promote individual, isolated, passive learning and forms of discourse that are very much limited to the narrow boundaries of separate

disciplines . . . Yet we know that student learning is greatly enhanced when students participate in shared, collaborative learning experiences, when they are active, rather than passive, in the learning process and when their discourse is wide-ranging and interdisciplinary.

Tinto (1997) further suggests that in order to adopt modes of organisation in curriculum that promote, rather than discourage, shared learning and community among students and staff, we should:

- organise curriculum into learning communities to enable student learning to span disciplines
- reorganise our classrooms to promote collaborative learning experiences
- employ forms of assessment that encourage students to engage in a shared discourse about their learning

In learning communities, students (Tinto 1997):

- become more actively involved
- spend more time learning together
- form social groups outside their classrooms
- bridge the large divide between academic classes and student social conduct
- develop a deeper appreciation of the value of co-operation—they understand that learning is enriched when organised co-operatively

Tinto introduces two structures to achieve this:

- *shared learning*
Learning communities enrol the same students in several classes so that they get to know each other quickly and fairly intimately.
- *connected learning*
By organising the shared courses around a theme or a single large subject, learning communities seek to construct a coherent first-year educational experience.

There is evidence that students in learning communities spend more time studying and more time studying together than those not in such communities; that is, enhanced social affiliation produces better academic involvement. Learning community students have continued their studies at a rate approximately 25 per cent higher than students in the traditional curriculum (Tinto 1997, p. 55), leading one to conclude that students are empowered by an environment that gives them the freedom to collaborate and work in teams.

The enhancement of teaching and learning:

A collaborative framework

Extending the principle of collaboration in learning further, McCann and Radford (1993, pp. 30–43) promote a three-phase framework to enhance learning outcomes:

phase 1—*individual reflection* (thinking carefully and systematically about what we are doing and why)

phase 2—*sharing practice* (reflecting the observation that it is likely that many mentoring schemes begin by peers coming together to share practice)

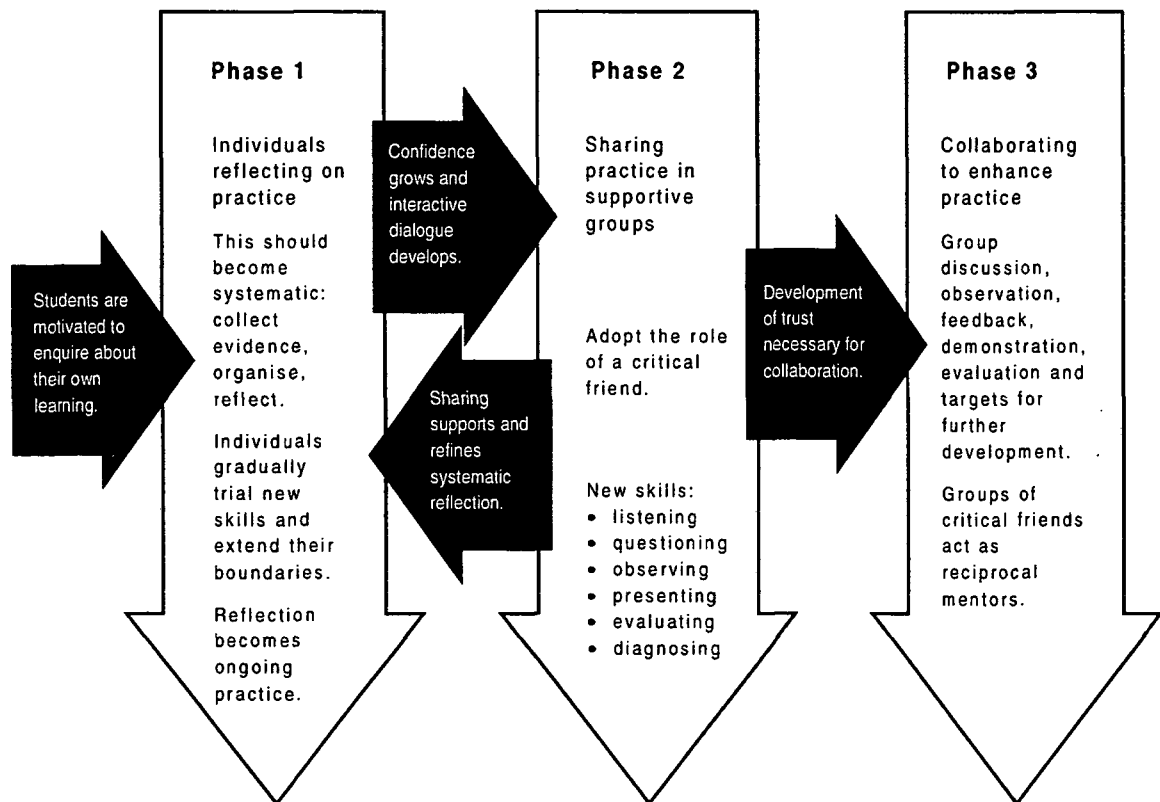
phase 3—*collaborating to enhance practice* (sharpening the focus)

Collaboration cannot be left to chance. Therefore it will be necessary for curriculum planners to approach the matter with care and considerable thought, being prepared to look at other ways of organising time and institutional structures.

Figure 6 illustrates the framework.

The common thread that links this discussion to the mentoring examples of the previous chapter is the underlying belief that more attention must be given in education and training to the process of learning, and the engagement of students in that process. Learning that develops the whole individual, laying the foundation for a lifetime of learning, must be more individualised, personalised and active than has traditionally been the case. The ability of students to question, reflect, evaluate and diagnose must be developed through some form of mentoring program, underpinned by a collaborative environment where the skills of talking, listening and observing can evolve.

Figure 6: The enhancement of teaching and learning—a collaborative framework



Adapted from McCann and Radford (1993, p. 20).

There appear to be two distinct mentoring models. One is a kind of affirmative action position, which is adopted by many mentoring programs, based on empowering students to achieve their ambition through a one-to-one mentor–mentee relationship. Students become clearer about their personal and professional goals through the consultations, and recognise how these may be achieved. The other is a 'softer' approach, which is based around a culture of 'talking'. This position recognises that there are many different people who will have an effect on the learning program by teaching, encouraging, providing advice and so on. The physical and social environments play key roles. In these environments, it is important to build a climate of communication and trust. Opportunities are provided for people to come together to discuss, review, confirm and reaffirm. In this model, evident in many peer support systems, the social and educational environments blur in a kind of 'collaborative learning community' which emphasises co-operative and team skills and differentiated experience.

New models of learning are therefore emerging which can provide these rich learning environments. Examples of effective mentoring involving competence, experience, good communication skills and a clear role definition can be found in the previous chapter. Although examples have been provided in which mentors have been drawn from students, staff, the community at large and the profession, of particular interest in today's vocationally oriented education is workplace learning.

Learning in the workplace: A model that proliferates mentors

The workplace is a natural learning environment, partly because it is a place where learned skills can be applied and practised in 'real life' situations, but partly also because of the number of potential vocationally oriented mentors available to assist the learning process. In some respects, educational institutions have established structures that are counter-productive to producing 'vocationally able' graduates who are 'job ready' at the point of leaving the institution, due to the traditional separation that has been created between on-the-job skills training and off-the-job education. This is an artificial and recent divide, which militates against the successful preparation of students for work. At least in the arts, training was historically a responsibility of the profession and the associated industry guilds. With the transfer of training responsibility to publicly funded institutions and the general expansion of the education sector after the Second World War, this connection was lost. Now, in the late twentieth century, diminishing resources available to the education and training sector make it necessary for these institutions to consider alternative strategies to educate and train our future workforce. Pressures from global competition and changing technologies are further forcing institutions to explore more high-performance methods of 'doing business', in place of the more traditional Socratic/atelier methods of an earlier era. What better place to train students than in the workplace? It is quite natural in the current 'user pays' environment that industry should bear some of the responsibility for training their new workforce in an educational alliance which integrates education and workplace training into a single curriculum once again.

This model is currently being developed on a large scale in the training of teachers in the United Kingdom, where:

... by far the most significant change to initial teacher education in the last ten years has been the growing insistence by the Government that schools take on a greater and more consistent involvement in the training process. (Furlong 1994, p. 6)

In corroboration of the discussion above, it should be remembered that teacher training in the nineteenth century was largely school based, being replaced in the early part of the twentieth century with a predominately college-based system. It is only in the latter part of the twentieth century that it has once again been recognised that:

... it is only practising school teachers who can directly introduce students to the practice of teaching and especially to the use of contextualised knowledge ... which is the crucial element of teaching. (Furlong 1994, p. 16)

Professional debate will of course continue. However, there appears to be a growing consensus that members of the professional community, acting as mentors, must have a full and equal role to play in the training process. Their knowledge is vital,

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... that industry
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curriculum once
again.**

and training without their contribution is fundamentally flawed. These mentors must be highly skilled. They have a distinctive body of professional knowledge into which they must somehow induct the student, a process which demands skills over and above those required to be a successful member of the profession—they are indeed trainers, not merely 'master teachers'. Above all they need to develop a 'language of teaching' so that they can articulate to others the basis of their own professional knowledge (Furlong 1994, p. 17).

In a model very similar to the staff–student mentoring system at the California Institute of the Arts described in the previous chapter, Stephenson (1994, pp. 28–29) describes the role of the mentor in the teacher training system of the United Kingdom (see example 2).

Example 2: The role of the mentor in teacher training in the United Kingdom

1. The mentor is the key person in school-led school experience. She/he is the link between students and tutor and is the person who will oversee and monitor the progress of the students, whilst the tutor chiefly works with the mentor rather than the students. The mentor will normally have undergone a program of mentor training.
2. The mentor ensures that students' training and preparation are such that they adequately safeguard the interests of the school and its pupils throughout the school experience.
3. The mentor acts as the students' 'sponsor' in relationships with other colleagues, so as to help students participate as fully as possible in the benefits and obligations of staff membership.
4. The mentor liaises with the college tutor on matters of college supervision policy and to discuss the progress of students with difficulties.
5. The mentor liaises with class teachers on matters concerning the students, carries out direct observation of students equivalent to a half hour per day per student, and feeds back appropriate support and advice. Mentors on a formal training course will be keeping an observational journal as the basis of their feedback.
6. The mentor will make a formal, interim assessment of each student during week two. The mentor and tutor will jointly make a final assessment of students during week four. The final written report will be discussed with the students.
7. The judgements and observations of class teachers will be a valued additional source of informal support and assessment of student performance, but there will be no formal requirement for class teachers to assess students unless a particular school wishes each teacher to perform a mentor function.

Source: Stephenson (1994, pp. 28–29)

The optimum mentoring model should therefore seek to maximise the benefit available from three potential learning environments:

- the workplace (the broader work environment)
- on the job (specific vocational skills)
- off the job (classroom or training venue)

These should be melded together in an appropriate balance, so that a variety of learning options are available to suit the specific needs of the individual (ANTA 1996, p. v).

Discussion

Through vocational and professional mentoring programs an opportunity is provided for education providers to combine resources with industry to establish transitional training for students who have not acquired the skills of the profession and are not yet ready to enter the workforce. These students can be refined by a program that aims to prepare the whole individual for work. The structures of these industry-based schools and their programs must be strongly vocational and based around group, or interdependent, learning. The learning environment should be exploratory, innovative and multidisciplinary, so that new vocabularies, products and visions are created. However, there are a number of issues to be explored. What

form should this training take? What are its objectives? How can work-based learning best be merged with the educational curriculum? We need to understand more fully issues associated with:

- the workplace as a learning environment
- teaching and assessing skills in the workplace
- how workplace learning differs from classroom learning
- fostering strategic alliances to promote both workplace learning and off-the-job vocational education and training
- joint ventures between training and entrepreneurial organisations
- identification of transitional issues—classroom to applied practice

Bringing the mentor into the classroom: An alternative model

An interesting alternative to workplace learning models are those which bring the mentor into the classroom. There are many such examples of learning that is based on the participation in the educational curriculum of members from the broader community. These programs help students to become accountable to themselves by presenting them with strategies, tools and opportunities for positive relationships, as well as guiding their educational and personal choices. Forging a bond with the community helps students discover that their education has purpose, solidifies their personal and career goals and helps them to understand and react constructively to their peripheral role in the culture at large.¹²

Bass and Vaughan (1996, pp. 35–37) discuss four ways of behaving that produce human learning:

- *trial and error*
This is the most primitive and simple way in which learning occurs.
- *perceptual organisation*
Much human learning is a consequence of perceiving the total situation and organising it into a meaningful pattern.
- *modelling*
We can profit from the experiences we observe in others.
- *mediation*
Communication from others can serve as an intermediary process for modifying our behaviour.

Bass and Vaughan (1996) suggest that much of the learning in institutions is based around mediation, as opposed to modelling. Many community-based programs bring successful members from the community into the classroom to share their experiences and provide a role model for students. Community associations formed to assist educational programs exist in various forms. Destin Middle School in Florida in the United States has enlisted support from the parents and community to provide friendship, assistance and role models for their students.¹³ Mentors from the business community help students learn the importance of a good attitude, and how necessary it is to get along with people in order to be successful. The

Forging a bond with the community helps students discover that their education has purpose, and solidifies their personal and career goals.

¹² Robin Nelson, San Diego Learning Communities Network.

¹³ *The Log online: The Destin Log, Local information,*
<<http://www.destin.com/localinfo/index.shtml>>.

Western Australian Department of Training has launched a similar program for 41 women, linking new and experienced businesswomen in non-competing sectors so that they can share their knowledge and experience through a combination of individual counselling and fortnightly functions and workshops over a five-month period. The Women's Mentoring Program has been highly successful in addressing network needs in order for women to establish businesses on their own, learn specific approaches to key business issues and improve productivity.

Establishing a mentoring environment

There are, of course, many factors to be considered and difficulties to be overcome when establishing a mentoring environment. Mentoring programs, although of potential benefit to students, do not 'just happen'. ANTA (1996, p. v) emphasises that for mentoring to work:

... it must be well structured and researched. Ad hoc, unplanned mentoring programs rarely succeed for very long, and can be counter-productive for the organisation.

Several factors are critical to the effectiveness of mentoring relationships—for example, the 'match' of personalities and the impact of place and time on the occasion. Mentoring programs try to address a gap between expectations and reality. It is easy to create a feeling of 'information overload', especially during the initial orientation period.

Some simple suggestions concerned with improving the social environment before more formal mentoring programs are undertaken include:

- Make sure students are aware of support services—students often withdraw without seeking assistance.
- Improve pre-course literature.
- Be sensitive to the feelings of new students; create a culture of 'talking'.
- Create a more personalised, social and innovative environment—an environment of friendship, rich in opportunity.
- Provide situations which encourage active student participation.
- Check that there is adequate provision for student feedback.
- Introduce student reviews, and particularly exit interviews for all withdrawing students.
- Promote a meaningful integration of learning experiences.
- Motivate students to improve their own performance—create a love of learning and the strength of purpose to pursue it in depth and with intensity.
- Assist students to pursue their dreams.
- Celebrate achievement to give encouragement and recognition. Ways of sharing and celebrating achievements before a wider audience should be a component of any mentoring scheme.
- Making sure the operating ethos of your organisation provides the right message to students (see example 3).

Example 3: Operating ethos, WA Academy of Performing Arts

Our institution strives to achieve:

- a student-centred organisation, where students are respected as the colleagues they will become
- a tolerant atmosphere, conducive to debate and accepting of alternative views
- an environment free of harassment and exploitation
- a safe working environment
- an environment committed to excellence, yet accepting of risk, innovation and artistic failure
- a happy workplace, a place of celebration

Introducing mentoring

The following are some suggestions about how to introduce student mentoring.

1. Start at the 'edges', providing many opportunities for friendships to form. Try buddy systems, clubs, social groups, student councillors.
2. Work 'inwards', introducing one or more of the following: peer tutors, staff mentoring, peer mentoring, peer study groups, course counsellors, semester leaders.
3. Use the curriculum to create a culture of learning—move from a teacher-driven enterprise to a student-driven enterprise. Fully utilise the potential of the student tutorial. Understand the learning situation and the learner's needs, then allow the learning process to self-manage; develop strategies for collaborative and shared learning.
4. Provide opportunities for students to seek mentors as the need arises, from wherever these may be found to suit the need of the individual (from the profession, staff, peers, alumni or the community). Stress differentiated and individualised experiences. Just as each case of mentor-protégé matching is unique in the placement process, the actual mentoring process is also unique for each pair. Mentorships thrive on diversity and flexibility (Haeger & Feldhusen 1989, p. 25). Mentoring is about helping students 'reveal their potential' through sharing experiences.
5. Be clear about institutional expectations, and the skills you expect a mentor to have.
6. Provide information and support to the mentors so that they fully understand their role and how they may assist the learning process. Bear in mind that mentoring is itself a finite process, commencing with an initiation phase, moving through a cultivation phase, and ending with a separation and then a redefinition phase (Wunsch 1994a, p. 11). Mentorships commonly turn into friendships.

Structuring mentoring to avoid pitfalls

Mentoring can, however, have its disadvantages (Carruthers 1993), such as:

- elitism—the old boys' network
- the Matthew effect—the situation in which gifted students find mentors more easily than less gifted students or disadvantaged minority groups, thus increasing the gap between them
- the Salieri phenomenon—based on the story of Salieri, the court composer who kept the genius of Mozart from being publicly recognised
- jealousy and perceived threat

An overemphasis on a traditional mentoring model (a one-to-one relationship with an elder) has some difficulties in mainstream education—achieving compatible pairing, the number of mentors required and the management of the program.

A more expansive notion of mentoring has emerged through this project which is sustainable within the education sector—one that uses the educational and social environment to promote learning through multiple, helping relationships in an environment which is rich in educational experience and personal support. Improved quality of outcome is achieved by allowing student choice from a variety of available alternatives. The common theme is the individual in the equation—one model cannot apply to all students. The student returns to centre stage, with the curriculum focussed on learning rather than teaching.

Online mentoring

Through the World Wide Web . . . A more broadly based teaching and learning environment is possible—one which can include other teaching organisations, professionals, graduates, community members and the profession

. . .

Digital technology provides a unique opportunity to develop new mentoring models in education. Already, online mentoring has demonstrated the potential of the digital network to provide mentoring support to students. The 'Reach for the sky' project in New Jersey in the United States has created a nationally scaleable online mentor training model, applicable to those with minimal online access as well as for those with full Internet access (Odasz & Goettemoeller, date unknown). It is now possible for staff, students, industry and the community to use technology to overcome barriers of location and time and come together electronically. There is now a simple mechanism by which industry and education can interact. Technology is seen by some as the panacea for budget cuts, with hundreds of students sitting in front of programmed learning packages that provide cheap mass education. Other staff see technology as complementary to the educational experience, opening more opportunities for the learner than can be encompassed on any

one campus.

Learning in a mentoring model is about relationships—opportunities to establish relationships through dependent learning strategies. These can be made more accessible through technology. Promoting improved learning for students through the World Wide Web will depend upon how effectively the medium is exploited and the value that is added to the teaching–learning situation. Digital technology provides an opportunity to transform many educational traditions and social practices. For example, does technology support, or detract from, human tendencies to congregate and communicate? Anecdotal evidence would indicate that the most popular web sites may be those that operate in the area of personal expression, offering users free home pages, chat, email and instant messaging. Can electronic forums strengthen the local community? Evidence would suggest that telepresence is an increasingly viable and attractive alternative to physical presence, albeit through fundamentally different concepts of place and community. Developments in digital technology and computer-mediated communication allow the education community to extend beyond its physical location. Through the World Wide Web, new communities will develop and new relationships can be established. A more broadly based teaching and learning environment is possible—one which can include other teaching organisations, professionals, graduates, community members and the profession in research networks, collaborative teaching, peer networks, mentor circles, online tutorials, bulletins, skill remediation and extension programs, and new skills programs.

Digital technology is having a huge impact on modern business, and it can do the same for education by involving students more, expanding their thinking and creative processes and extending their boundaries.

Further research

Further research is required, however. We know little about what it is thoughtful mentors do and how they make their knowledge available (Terrell & Hassell 1994). We have little quantifiable evidence that will allow us to make value judgements regarding the benefits of one model over another.

For this area to develop, pilot studies should be designed which can be evaluated with respect to specific goals, such as:

- to achieve a first-year retention rate of at least 80 per cent
- to increase student persistence in their course of study
- to stimulate action-oriented career exploration and informed career decision-making
- to facilitate student awareness and use of university resources
- to enhance the on-campus environment
- to strengthen and improve the supportive networks for minority groups
- to stimulate and encourage increased contact between the student and their learning environment
- to complement, enhance and reinforce the efforts of the academic staff
- to promote ethical and moral development, and a sense of commitment among students to other students and the community at large
- to increase student survival skills

However, this may be a difficult task. Student mentoring is an intervention program designed to enhance student learning and improve retention rates. The most obvious question is, 'Does it work?' The answer is not simple. Finding it would involve a significant amount of sophisticated educational research and analysis to demonstrate statistically that mentoring programs are successful compared to non-intervention. To explain why they are successful, one would also need to show that the reasons for their success stand independently of any other environmental circumstances, and demonstrate that the benefits of mentoring are due to mentoring alone and not to attitudinal and social environmental characteristics in the mentoring institutions. Given the complexity of the learning situation, it may be some time before such an analysis is possible.

5 Conclusion

MENTORING PHILOSOPHY EMPHASISES that for training to be effective it must be approached from a caring and challenging perspective. Learners are encouraged to use the frameworks, processes, strategies and models provided in a multidimensional way. They progress through interactive training, focussing on designing individual action plans for implementation, validation and evaluation. Through mentoring, organisations can enrich their environments so that learners can develop and become more effective.¹⁴

This new model of education calls for changing the roles of students, teachers and colleges of learning. Students assume many of the functions previously reserved for teachers. In small groups, individual students act as peer tutors for others. In this way, students begin learning from an early age how to communicate and how to assume greater responsibility for their own education. Teachers, in contrast, change from being the providers of knowledge to being guides or mentors who help students navigate through the information highways, and to gather information, judge its value and decide how to present it to others. Technology is a key transforming element, offering unlimited new ways of learning, and providing new ways for those involved to interact (National Academy of Sciences/National Academy of Engineering 1995).

What has been learned?

This study has highlighted a design for a better learning environment that focusses on the social and individual contexts of learning. It has reinforced notions that:

- Mentoring is about relationships (both *structural* and *personal*—a rich environment will have both), and so is learning.
- For formal mentoring to be successful, informal mentoring must be integrated into the social fabric of the organisation at all levels.
- Successful mentoring requires an investment in time and resources as well as a focus on an improved social and learning environment.
- Successful mentoring focusses on the growth of the individual within the learning environment.
- Students appear to perceive a need for formalised mentoring programs, and stand to benefit from their introduction in various ways. There is evidence to suggest that students participating in mentor programs achieve better and study longer.

Mentoring schemes are a current solution to providing people with assistance for improving their present qualities in life and at work. They are a particular order of practice to help each other make sense of our places of study and work. They bridge the gap between worker and the workplace, between student and student. Mentoring schemes have been praised for assisting people both to define their work or study-related goals, and to conscientiously achieve them. They create openings for people to explore their current situation and continually develop it. A mentor is trained as both listener and provider. The mentor is one means through which the needs of each individual as a 'whole person' are heard; the mentor is required to assist the person in what they do, and to find ways to do it better.

¹⁴ Diann Feldman, Feldman and Associates, Human Resource Training and Career Consultants.

In a climate of limited resources, programs designed to enhance student learning and improve retention rates warrant serious consideration. Their integration into education has to go hand in glove, however, with the understanding that there are few additional resources to be reallocated; that is, mentoring programs have to be considered in conjunction with a fundamental rethink of our educational processes. Every person has a potential inside them which needs to be 'unlocked'. The modern lecturer is a facilitator, not a 'master' in the traditional master-apprentice relationship. The environment must encourage creativity, risk taking and team building, and unleash each individual's, as well as the group's, potential. Staff in any college or program have a responsibility to offer students and colleagues support, encouragement and mentoring.

We see potential benefits to TAFE in mentoring, not simply in terms of increased productivity and enhanced skills, but also in continuous learning, enhanced work satisfaction, expanded opportunities for women and a greater empowerment in one's workplace.

To achieve such benefits, we argue that a broad notion of mentoring needs to be adopted. This notion emphasises the needs of the mentee, a skilled approach by mentors, and individuals taking responsibility for their personal and career development, rather than being locked into the immediate demands of developing competency in performing day-to-day tasks.

(Garrick & Alexander 1994, p. 8)

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