Project Report: Possible uses of Problem-Based Learning (PBL) techniques in Curriculum Design and Course Development in Custodial Recruit Pre-Service Training at the NSW Corrective Services Academy.

Dean of Studies, Corrective Services Academy.
Possible Uses of Problem-Based Learning (PBL) techniques in Curriculum Design and Course Development in Custodial Recruit, Pre-Service Training at the NSW Corrective Services Academy.

By: Brian Green
B.Soc.Sc.,M.Gen.Stud.,
Dean of Studies
Corrective Services Academy

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The ultimate outcome of PBL is

"wisdom through reflection".

Charles E. Engel (1991),
Not Just a Method But
a Way of Learning.
ACKNOWLEDGMENT

I wish to particularly acknowledge the assistance of Professor Penny Little who, four years ago, first interested me in PBL when she conducted a trial of the technique with staff and students at the Academy following the 1991 Review of Primary Training of Prison Officers.

I would also particularly like to acknowledge the hospitality and assistance of A/Chief Superintendent David Melville and his staff at the Queensland Police and Emergency Services Academy during my stay there.

I would finally like to acknowledge the support for the project of the Director of the Academy, Mr Peter Raue and the enthusiasm and help of Superintendent Johann Mann, Program Manager, Pre-Service and Security Training in developing examples of PBL within the current, custodial recruit curriculum.
EXECUTIVE SUMMARY

Both the 1991 and 1994 Reviews of custodial recruit, Pre-Service Training recommended that PBL (Problem-Based Learning) be introduced as a design and learning technique within that course. Such was seen as incorporating, by this process, one of the most revolutionary educational initiatives that has been developed in Western Education in the last 2,000 years. An initiative, that in the latter part of the 20th century, has almost transformed professional practice teaching and learning, here and overseas, particularly in the health sciences.

Its rapid spread to other subject disciplines such as dentistry, architecture, electrical engineering, social work, policing and now, possibly, penological practice, make a serious consideration of its theoretical insights, methodological application and accrued learning benefits, imperative. Such was the reason for and the subject of, this project report.

The report seeks to provide, from a review of the seminal literature, including contemporary research findings and personal observances at university and vocational training institutions using PBL, a comprehensive overview of that usage and its relevance to curriculum development and training delivery reform at the Academy.

As such it will allow for an informed judgement to be made, by senior management, of the following recommendations of the Dean of Studies that derive from the same overview.
Recommendations:

1. That PBL be introduced into the Corrective Services, custodial recruit, Primary Training Course.

2. In the first instance, it be only introduced into the Law and Procedures curriculum area.

3. The Director of PROBLARC, Centre for Advancement of Learning and Teaching, University of Newcastle be hired on a daily fee-for-service basis to advise on curriculum re-design and re-development.

4. That she also be used to run staff development courses for those staff designated to use PBL to train them in the intricacies of its use.

5. That $15,000 be put aside from the Academy’s forthcoming budget allocation, or additional funds sought, to facilitate the introduction of PBL into the custodial recruit, Primary Training Course by the implementation of the above recommended measures.
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PROJECT REPORT

Introduction

With the 1991 Review of Primary Training for Prison Officers recommending that the course "....be designed based upon problem-based learning principles" (D.C.S. 1991, p.6) and the 1994 review similarly recommending "that PBL be expanded as a learning technique...." (D.C.S. 1994, p.17) it was felt it was now time to seriously consider the possible uses of Problem-Based Learning (PBL) techniques in curriculum design and course development in custodial recruit, Pre-Service Training at the NSW Corrective Services Academy.

To that end a study of this technique, by the Dean of Studies, Corrective Services Academy, has been authorised. The study will seek to recommend the use or non-use in the Corrective Services primary training curriculum of PBL and if recommended delineate how it can be used, the extent of its use and perceived benefits.

In order to adequately judge the basis of any recommendation and its validity, a consideration of the following important aspects of PBL must be made. Such aspects provide a comprehensive overview, rather than an in-depth analysis, which, taken as a whole, will allow for an informed judgement to be made regarding the relative merits of proceeding or not.

The overview is both theoretical and practical in nature and arises from a review of a literature including contemporary research findings and my own studied impressions of demonstrations I have witnessed at the Faculty of Nursing, University of Western Sydney; Faculties of Medicine and Architecture, Newcastle University and the Queensland Police and Emergency Services Academy.

On the practical side it looks at the relative merits of appropriate models of PBL together with how they would apply and where, in the custodial curriculum. Developed examples, of the chosen process model, are to be provided to enhance understanding and decision making.

a. What is Problem-Based Learning?

"A wide variety of educational methods are referred to as problem-based learning (PBL); methods that can address quite different educational objectives. The common denominator is the use of problems in the instructional sequence."


Historically PBL, in its broadest sense, pre-dates discipline or subject based learning, which itself is over 2,000 years old. In some pre-literate cultures it is the only form of learning, passed on in a verbal tradition from tribal predecessors in a form of 'cognitive apprenticeship' (Ryan & Quinn, 1994, p.15). However as a 'case-based, student-centred', facilitated, systematic learning process it is less than 30 years old (Spauling, 1969 in Engel 1991, p.23) having first been offered as a means of rectifying undergraduate medical education deficiencies in Canada.
Others however suggest it arose out of the earlier 'education which is useful' movement begun by Whitehead in 1950 which itself culminated in the British "Higher Education for Capability" (Engel, 1991, p.23) program in the late 1980's. The consensus however is that whilst it had "its origins in the medical and health sciences it has spread to encompass courses in a wide range of disciplines including architecture, engineering and construction management" (Ostwald & Chen, 1994, p.87).

In Australia, Andersen's pioneering research on nurse education in 1976, created "the rationale for the development of a process-oriented model for a nursing curriculum" (McMillan, 1993, p.7). This original curriculum design was subsequently modified and used to construct PBL curriculums in nursing at the University of Western Sydney, Macarthur and medicine and architecture at the University of Newcastle. The medical curriculum at Newcastle University is almost 10 years old. Since that time PBL has spread to a whole host of tertiary institutions including Griffith University, UNSW and in 1996 the new graduate medical schools at Flinders and Sydney University which will totally embrace it as the basis for their curriculums.

How does it differ from other approaches to learning? Whilst a strict definition is elusive, it is a form of experiential learning which uses group processes which are focussed and directed by a problem/ trigger, taken from 'real life'. In 'solving the problem' students, with the help of a tutor/ facilitator, are required to identify their learning outcomes through the development of a series of hypotheses which are then tested by referral to the necessary discipline knowledges to gain understanding. As Boud suggests "the starting point for learning should be a problem, a query or puzzle the learner wishes to solve" (1985 in Feletti, 1993, p.291).

The approach is based very much upon the successful integration of theory and practice as the student works backwards from the problem to the theory/ data/ research needed to solve such in opposition to traditional learning which occurs in the discrete theoretical disciplines and then, hopefully, is brought together to solve a problem posed. PBL, in fact, is the reverse process of traditional learning which is largely teacher-centred whilst it is student-centred and self-directed.

PBL was introduced, it is argued, because traditional methods, particularly as they relate to professional practice, did not provide the skills needed to operate effectively and efficiently given that change is now endemic, knowledge is increasing exponentially and no one discipline or combinations of disciplines could teach students all they 'needed to know' to handle the myriad of professional practice problems that can arise. It was felt if students were taught a technique which took problems as a starting point and then taught the same students how to research such problems through a self-directed learning approach, through successfully hypothesising and testing such against disciplinary insights, they could master the change and growth in knowledge required.

It was also introduced because, increasingly, community expectations of the education system have sought to make it more accountable. Part of this accountability is to demand that education will result in demonstrable outcomes that can be measured. That medical graduates, for example, can accurately diagnose illness and apply appropriate treatment procedures on graduation and do not require to learn such after graduation.

Allied with Competency Based Training (CBT) it is no longer good enough to infer skills acquisition because one has spent 3 to 5 years at university and memorised a whole battery of facts and figures, skills inferred must be demonstrated as actually having been
acquired. PBL allows for a sophisticated demonstration of competency that avoids the narrow
behaviourist checklist approach assessment of competencies can descend into.

The success of PBL has not been evaluated by any major macro study to date. This
is for two reasons, one, it is not sufficiently widespread a curriculum design technique to
allow for such and, secondly, the technique is not sufficiently standardised to allow for
research comparisons.

That being said, the fact that it has spread from the initial three faculties using it,
Medicine and Architecture at Newcastle University and Nursing at UWS, Macarthur, to
another 25 institutions and faculties (see Appendix A) is a reasonable measure of qualitative
evidence. Also the fact that both Sydney University and Flinders University post graduate
medical faculties will be introducing it from 1996 onwards is further, growing evidence that
in some areas at least it is proving to be a superior technique than traditional educational
techniques. This is so particularly in the area of professional practice where informed
judgement rather than right or wrong answers are required or can be obtained.

Hence PBL is both a learning technique and basis for curriculum design which, whilst
conceptually recent, has a history which pre-dates discrete discipline studies. Whilst it does
not have widespread usage such is growing in both the English speaking and Western
European worlds, particularly in the professions.

It arises out of the movement for 'education which is useful' and is closely allied to
the CBT system with its emphasis on demonstrable learning outcomes in skills, knowledge
and attitudes-attributes. As such, it is the perfect vehicle for the demonstration of those
higher order competencies not trapped by the behaviourist checklist observation type
approach.

Evidence of its effectiveness rests not so much on quantitative data of which there is
little but rather qualitative data of which there is a growing number of instances located in
the increasing number of higher tertiary educational institutions and faculties adopting it as
their basic teaching-learning technique and basis for curriculum design and assessment.

b. Models of Problem Based Learning

"The term problem-based learning must be considered a genus for which there
are many species and subspecies. Each addresses different objectives to
varying degrees. All descriptions and evaluations of any PBL method must be
analysed in terms of the problem used, the teaching-learning sequences, the
responsibility given to the students for learning and the type of student
assessment methods used."

(Barrows, H.S. (1986) A Taxonomy of problem-based learning
methods, Medical Education, 20).

Consequently there are basically two models of PBL which depend to a greater or
lesser degree on how much is included in the case trigger and how the subsequent learning
is managed. How much is left in the hands of the student as a self-directed learner, or
conversely the tutor/ facilitators, sometimes called 'academic referees and coaches', to use
a sporting analogy. The first or 'reactive' model relies upon the fact that "students are given
a complete case for study and research in preparation for subsequent class discussion"
(Barrows, 1986, p.483). That consequent tutorial discussion features self-learning and
teacher-directed learning, hypothesis generation, data analysis, decision making and considerable motivation for learning all round. However because the case material is already organised and synthesised for students severe limits are placed on "the amount of reasoning which will occur" (Barrows, 1986, p.483).

The more classical, 'pro-active' model of PBL sometimes referred to as the "closed loop or reiterative problem-based" method (Barrows, 1986, p.484) relies heavily on the establishment of a data base and the generation of hypothetico-inductive hypothesis (Barrows & Tamblyn 1980 in Rolfe et.al. 1994, p.212) closely linked to the evaluation of such after intensive periods of self-directed learning. "Students have to go beyond the acquisition and discussion of new knowledge in a way that allows them to see its value and evaluate actively their prior knowledge and problem-solving skills" (Barrows, 1986, p.484). Their generation of theses and consequent learning contracts is only limited by the timeframes in which the learning has to occur, not, as with the 'reactive model', the constraints of the case study and the predetermined learning guides and outcomes accompanying it.

Whilst the classical, 'pro-active model' would seem to be obviously superior it is highly resource intensive in terms of the composition of tutorial groups and the ratio of students to tutors. In the Faculty of Medicine at Newcastle University groups appear to be limited to between 6-10 students per tutor whereas, with the changes that have been made to Nursing at UWS Macarthur/Milperra, I observed a ratio of between 20-25.

It would also seem that the frequency with which the groups meet is an important determinant in choosing the PBL model or variant. High status, well resourced courses, like medicine as opposed to nursing, can afford the extra tutorial sessions that may be required to arrive at the self-directed learning needed to 'solve the problem' as opposed to the more teacher-directed learning involved in the 'reactive case-study' model.

Whilst custodial recruit training resembles more the status profile of nursing rather than medicine, the agreement to limit training courses to 40 participants, (D.C.S. 1994, p.29), if such is implemented in reality, given the exigency of high and rising staff attrition rates, then it might well be possible to use the classical model with tutorial group numbers being fixed at 10, necessitating four groups per course.

A more pressing consideration is the length of the custodial pre-service or primary training when compared with both medicine and nursing. Both the latter extend over some three to five years whilst custodial primary training extends over eleven weeks or 55 instruction days of eight hours duration. It is only partly residential with those students recruited in country areas, who will be returning to work in country gaols, being provided with on-site, academy accommodation. This also contrasts with the Queensland Police and Emergency Services Academy, P.R.O.V.E. (Police Recruit Operational Vocational Education) Program which "has 130 days of instruction and is a (full) residential course" (Melville & Cartner, 1994, p.159). I would think, given our teaching time constraints, the more structured, case-study approach or some variant of it recommends itself.

The educational background and nature of our student learners vis-à-vis our corporate culture and their essentially working class status is something that will be further considered when a PBL model for Custodial Pre-Service training is delineated. Suffice to suggest it has been argued that working class persons are not basically 'intrinsic learners' nor are they readily able to extrapolate from the necessarily, flimsy data, making up a problem trigger to higher order ideas and concepts. Rather they are 'concrete' thinkers requiring, as a consequence greater, extrinsic learner direction. It may well be that nursing education using
PBL methods is also moving this way for the same reason. In fact Barbara Sommerville, nurse educator at UWS Macarthur/Milperra, hinted so much when she told me that one of the reasons, other than cost, that they were moving to introduce SIP (Situation Improvement Packages) - documents that "provide a broad overview of the learning area and generally specifies the major concepts and issues to be considered" (Sommerville & Hengstberger-Sims, 1992, p.1) was that "many of their type of student had difficulty maintaining focus given the seemingly open-ended nature of PBL, particularly in the first year" (Interview with B.Sommerville 31 May 1995). Obviously they learnt the technique as they went along but as most of their students come from the Western Suburbs of Sydney, predominantly working class areas, though with higher secondary school exit levels, nevertheless I feel they share the same extrapolation skill deficiencies as working class, prison officer recruits, initially anyway.

This movement away from the pure 'classical or first generation' model of medical education using PBL, by Nursing, towards a hybrid model that has now been recognised under the nomenclature of Inquiry Based Learning (IBL) is, if not a specific recognition of what I have raised in my concerns about class attitudes to learning and the preparatory skills involved, nevertheless a realisation that Nursing is faced with "other constraints and characteristics which indirectly challenge their successful implementation of problem-based learning" (Feletti, 1993, p.292). These 'constraints and characteristics' have to do with the low salaries of nurses compared to medical students attracting students of average or lower academic achievement standards who are subsequently less competent as self-directed learners' thus requiring more 'prescribed' learning (objectives), more nurturance in tutorials and guidance with homework" (Feletti, 1993, p.292).

The University of Hawaii School of Nursing, the first to introduce IBL into their curriculum, suggests it has, by way of contrast with PBL, "broader goals for students and roles for teachers" (Feletti, 1993, p.294). In PBL students begin with the posing of a problem and their task is to "find its cause and how to go about solving it" (Feletti, 1993, p.292) whereas with IBL learning may be triggered by any situation or experience, not necessarily a problem which has to be solved. In this way it is less confining and more flexible than PBL. IBL also focuses more on the learner at each stage of their learning encouraging them to reflect on it in all its critical aspects - how they are responding both emotionally and analytically (Feletti, 1993, pp.292-295). "Although both PBL and IBL approaches encourage students to review how well they functioned as a learning team the latter approach is more open in terms of asking how much did this experience change their insights, attitudes and behaviour, not just their understanding of concepts and mechanisms".

Given that the corporate culture of the Department of Corrective Services is myopic and regressive in the extreme and hence is one of the most significant barriers to positive organisational change and growth which we have sought to address through staff educational imperatives based upon Donald Schon's philosophical theory the 'professional as reflective-practitioner' (Green & Harrison, 1993, pp.1-10), IBL or the introduction of an IBL emphasis into any PBL custodial curriculum developed might, be more in keeping with that theory and buttress it greater.

Not every interaction in the prison presents as a problem yet correctional officers must be able to choose from a whole range of possible responses. In this they must be guided by their ability to reflect on a whole host of corporate givens and behavioural variables and choose the professionally appropriate response. However when we are trying to teach basic skills in particular, PBL that is also Solution-Based Learning ie. where there is a contextual
'best fit' solution that the learner, teacher and profession agree upon as representing 'best practice', then despite what learning might be lost in developing "multiple acceptable paths and multiple solutions" (Cowray, 1994, p.45) given the timeframe, resource and intellectual limitation (both student and trainer) such should be a serious countervailing consideration in custodial primary training.

PBL like CBT with which it has been linked as perhaps a way of examining, in particular, the higher order professional practice competencies eg. "demonstrate ethical behaviour", derives from a different assessment paradigm. "Assessment in a competency based system is the process of collecting evidence, and making judgements on the nature and extent of progress towards the performance criteria or learning outcome" (Adult, Community and Further Education, Victoria 1998, Info Sheet 7, p.1).

Throughout the 1970's and 1980s a global shift in understanding the value of work and the capacities of workers to be involved in such has occurred. These are dependant on two different "metaphysical assumptions about humans" (Hagar & Butler, 1994, p.36) which see humans and human capabilities either fixed at birth "merely waiting to unfold, mechanically across the lifespan of the person" (Hagar & Butler, 1994, p.36) or "containing only the basic elements.... with considerable scope for modification by the processes of interaction between the person and environment" (Hager & Butler, 1994, p.36).

The first assumption focuses on the limits of thinking, working and learning which is fixed by one's innate capacities such as hereditary intelligence to the second, to the processes of thinking, working and learning about which there is only some limited fixity in either individual capacity or the solutions to problems such yields.

The paradigm based on the first assumption that has dominated traditional notions of learning is known as the Scientific Measurement Paradigm, whilst the emerging paradigm is known as the Judgemental Paradigm, (see Appendix B for the nature of the measurement process according to both).

In essence the first is based upon "techniques that focus mainly on producing scores (of capacity) that are scientifically reproducible" (Hagar & Butler, 1994, p.39) whereas the second is based upon judgements about a "candidate's performance (which) are more like those made in a court of law, than they are like decisions made on the quality of output from traditional examinations" (Hagar & Butler, 1994, p.39).

Hence, as a consequence, like CBT which also uses the Judgemental Paradigm, PBL, using that paradigm, allies itself with the changes in workplace performance which now concentrate on outcomes and are results oriented including notions of performance standards, quality assurance and accountability.

In summary, given the constraints outlined, a PBL model that is flexible and incorporates elements of IBL, particularly situations that replicate the custodial workplace, would seem to recommend itself. The model likewise needs to be more the 'reactive' case study approach of nursing rather than the freewheeling 'proactive' approach of medical student training. However as indicated, should course sizes be kept to the 40 recommended the disadvantages being experienced in PBL nurse education with large tutorial groups, can largely be avoided.
c. **How Problem Based Learning Works**

"Problem Based Learning is an approach to structuring the curriculum so it involves confronting you the student with a problem from practice which provides a stimulus for learning."


In the classical theoretical model the problem solving process has three stages, namely - the facts; the possibilities; the resolution (Smith & Bucolo, 1995 in Probe, April 1995 p.11). In Stage 1 - "The Facts" - students are assisted to "explore and understand the 'facts of the matter' and nature of the problem" (Smith & Bucolo, 1995, p.11). The tutor/facilitator starts the first session of this stage with the presentation of a problem in the form of a short video or audiotape 'trigger' or a written account which may or may not take the further form of a case study. During this session the students are expected to "organise their thoughts about the problem and to attempt to identify the broad nature of the problem and (all) the factors or aspects involved in the problem" (Boud & Feletti, 1991 p.26) practising, as a consequence, their powers of observation and their ability to extract and succinctly re-present what they have observed. This is often one of the most difficult steps - identifying the actual problem. Problems can be obscured, disguised or locked inside some emotional distress, attitude, conflict or misleading symptom of another situation thereby preventing their easy identification.

Still within the first session, but moving on to Stage 2 of the classical theoretical model of problem solving - 'The Possibilities' - students are required to "brainstorm, research and explore all possible solutions and their implications" (Smith & Bucolo, 1995, p.11). At the end of the facilitated, brainstorming component of the session in which "underlying causes, mechanisms and (possible) solutions including pertinent ideas (Boud & Feletti, 1991, p.26) are delineated, the "tutor will (also) help the students concentrate on questions that are particularly important at this stage of their studies" (Boud & Feletti, 1991, p.27). What other information they need including the learning issues involved will also be teased out. Still as part of Stage 2 - students are sent away to 'research and explore' these learning issues. They can do this either as a group or if the task is extensive as sub-groups or even as individual learners who are then required to bring their task findings back to their sub-groups or the larger group for further, joint consideration.

This self-directed non-facilitated learning aspect, which is still importantly linked to the synergy that operates as part of any group process, is the crux of PBL. It makes the student responsible for their own as well as group learning. In the process it teaches them how and where to access available information, the benefits of co-operation as opposed to competition with peer-learners, but more importantly it "facilitates the progressive development of a mental process for the storage, retrieval and application of knowledge" (Boud & Feletti, 1991, p.26) to hitherto unfamiliar situations where logical analysis is similarly required to effect a solution.

Stage 3 - 'The Resolution' - "identify, explain and justify the best possible solution to the problem" (Smith & Bucolo, 1995, p.11) can consist of one or any number of facilitated, feedback sessions involving the whole group in which students exchange both the information they obtained as individuals or sub-groups, reflecting on its usefulness to the whole endeavour and the learning insights they have gained in the process.
This "new knowledge and understanding is (then) applied to the original problem" (Boud & Feletti, 1991, p.28) and the best solution, by consensual judgement, obtained. In the process students will have learnt how to obtain information; how to convey information; how to share the learning tasks; how to question others critically without causing offence; how to compare their performance with that of their peers identifying as a consequence their own strengths and weaknesses; how to construct and test hypotheses, but most importantly, that learning in a variety of subjects/topics needs to be carried out concurrently in order to be applied in an interrelated fashion to 'find the best solution' (Boud & Feletti, 1991, pp.26-28).

The group processes involved in 'working a problem' are fully reflected upon, "what they learned, how they learned and how they contributed to the group's work" (Boud & Feletti, 1991, p.28) are fully canvassed so that they realise, amongst other things, that when a great deal has to be learned, sharing out the learning tasks and co-operating with others as a 'learning team', is far more productive than learning alone. Such group learning however imposes mutual obligations on each member similar to the workplace in which these students will eventually find themselves as worker/team colleagues solving the problems of working life.

The key to the process, to a large extent, is establishing good working problems and writing such up. Linda Soars feels that in using case studies as the 'problem trigger' such "case studies/packages have to use real life situations for their content to enable the students to avoid the frustrating paths of enquiry, such as occur when the case is 'created'" (Probe, August 1994, p.9). A corollary to this is that the supporting information that further gives 'clues' to 'the answer' to the problem or allows the enquiry activities of the students to be enhanced, optimally must be released "when their need is identified by the students rather than as part of a booklet or package which is always available" (Soars 1994 in Probe, August 1994, p.9). This is also necessary as Howard Barrows suggests to overcome poor reasoning and develop higher order skills, "the way we encourage higher order thinking skills is to use problem simulations that present as they do in real life, with only a little information and the students have to enquire to define the problems and make decisions" (Probe, April, 1994, p.15).

There must however be limitations on this 'ideal type' advocated by Soars and Barrows. Both are talking about curriculums that run over three years in the case of Soars - Nursing, and five years in the case of Barrows - Medicine. Hence the severe time and resource constraints that exist in the Corrective Services Academy's fifty five day custodial recruit, primary training program, or the Queensland Police and Emergency Services Academy's 130 day P.R.O.V.E. program, do not exist for them. It has been the experience of staff at the Queensland Police and Emergency Services Academy however, that, the less time available to come to 'resolution' stage the more information, tutor/facilitator support and direction that has to be given in delineating the 'facts' and brainstorming the 'possibilities' and guiding the 'research and exploration' consequent upon such. Soars and Barrows' points however need to be borne in mind and the right compromise reached.

The role of tutor/facilitators has been implicitly canvassed but the warning of Soars that "a balance has to be obtained between stimulating student interest and (the tutor) not leading them too strongly, therefore stifling their enquiry abilities" (Probe, August 1994, p.10) must be taken seriously into account. In fact David Melville, A/Chief Superintendent, Queensland Police and Emergency Services Academy, when interviewed, advanced a similar warning stating that one of the biggest problems faced in the P.R.O.V.E. program was the "ever too ready willingness of some training staff to lapse back into the traditional, all
knowing, teacher as informer role" (Interview with D. Melville 18 September 1995). He went on to make the point that, as a consequence of this problem, constant staff development is needed to both remind and refresh tutor/facilitators as to their true role when using PBL, rather than informing and instructing, is "to guide and help students through each of the successive and iterative stages of their discussion and decision making .....to..... also prevent or remediate difficulties that arise in the dynamics of the group’s interaction" (Boud & Feletti, 1991, pp.28-29). Soars similarly suggests "staff development supporting the use of PBL sessions is crucial and should be on-going" (Probe, August 1994, p.10). It is further suggested, by Bingham et.al. that, in order to reduce staff discomfit with the introduction of PBL they should be fully appraised of the reasons for its introduction and trained, beforehand, in the 'new skills' it requires to be successfully operated (1993, p.185).

A corollary to this is the idea that the facilitators should be generalist facilitators rather than subject experts. Whilst, in the Corrective Services Academy's case, this is neither possible nor necessarily desirable given the limitation of staff numbers and other curriculum design duties our senior trainers, in particular, have, the strategy employed at Newcastle University's Faculty of Architecture may well suffice. Arthur Kingsland, Associate Dean and PBL researcher, when interviewed, suggested to combat the problem, prevalent amongst academics when their own subject speciality is the focus of the problem solving process, of lapsing into their subject expert/lecturer role, is to ensure that they do not facilitate the respective groups through that particular problem solving scenario. (Interview with A.Kingsland, 11 September 1995). They use someone without the expert subject knowledge thereby foreclosing the 'expert advice' option.

Assessment in PBL is somewhat problematic as Green suggests, "despite what stimulating learning experiences have been designed for students throughout the year, if you challenge their thinking by a lengthy end of year examination that is what will dominate their learning efforts" (1993, p.389). Likewise Bujack & Little suggest that to assess the broad objectives of PBL an approach which goes beyond the standard formats of multiple choice, short answer and essay type questions needs to be employed" (1988 in Crispin 1993, p.384). However both Green and Crispin argue that such traditional assessment formats as those eschewed by Bujack & Little can, in fact, be modified "to be integrated, performance based and ...... emphasise problem solving and self directed learning..... (including).... both process and outcome measures" (Green, 1993, p.389).

Tutor, peer and self ratings can be built into the process from the start by students learning to critique themselves and each other along dimensions if not jointly designed by themselves, then the standards applying having been jointly determined. Given the move towards CBT and the introduction of the notion of 'industry standards applying' as with the Faculty of Architecture, Newcastle University - 'jury panels' made up of tutors, outside architects and recently graduated, senior students have been used with considerable effect. The one drawback of this method, as reported by Arthur Kingsland, Associate Dean of the faculty in charge of PBL, was that they tended to be somewhat negative in their assessment of the student efforts concentrating on his/her design faults rather than strengths. (Interview with Kingsland, 11 September 1995.) Nevertheless similar panels could be constituted in the C.S.A.’s custodial recruit program for certain course segments that lend themselves to such.

However the traditional, formalised assessment modes, applied formatively rather than summatively and augmented by unobtrusive measures such as 'diarising' to reflect upon learning experiences and processes (Green, 1993, p.390) would seem to be sufficient, provided they are suitably modified to assess the elaboration and integration of concepts and their incorporation "into the students existing cognitive structure" (Crispin, 1993, p.387).
Such measures as retaining the use of, suitably modified, traditional assessment instruments - formal exams, essays and multiple choice tests, would also satisfy the Department of Corrective Services' concerns regarding quality control and assurance. Unlike universities and for that matter TAFE institutes, where educational experimentation is not novel, the department's corporate perspective is educationally conservative. Evidence of this is the fact that although PBL was mooted in the 1991 Review of Primary Training for Prison Officers it is only now, four years later, that it is being seriously considered.

Hence continuation of the established forms of assessment would inspire confidence in the outcome of the endeavour and defray some of the considerable opposition the PBL teaching mode will evoke until its 'product' can be tested and judged in the workplace. Also as a number of outside bodies such as the Industrial Commission and the Public Service Association (Union) are also interested in recruit training and they are also educationally conservative, our credibility with them must not be lost by experimental assessment methods if traditionally recognised ones will suffice.

d. Insights from Interview experiences reviewed

In the course of the preparation of this report I attended day one of the conference at Newcastle University's Medical Faculty entitled "Imperatives in Medical Education: Beyond Problem Based Learning" on 28 May 1995 and apart from the two plenary sessions also attended the two parallel sessions "Writing and Integrated Working Problem" and "Tutor Training: Observation of Small Group Learning" (see Appendix C).

In the plenary sessions some of the major points made which have bearing on the use of PBL in the custodial primary training curriculum are:-

- PBL is being used, in the Newcastle medical curriculum, to produce a 'good doctor' not just intelligent, adept self directed learning students, although lifelong learning is a subsidiary aim. Hence the emphasis must be on 'good practice'. Such practice must form the basis of curriculum development, the framework within which students develop their learning goals, the basis for assessment of students as well as the yardstick for overall program evaluation.

- PBL learning is an active process. Learning should arise from the process of finding the solution not from the solution alone.

- Brainstorming, though an important technique in PBL, does not of itself build a structure in which to learn, some direction must be given by the tutor/facilitator. If we examine the trigger sheet "Teenager with impaired consciousness" together with the Tutor Information Sheet and Clinical Reasoning/Discussion Sheet in particular (see Appendix D) we can see how the direction is given and how much of it there is.

- Other insights advanced were the need to define the depth and breadth of student learning to keep it within manageable bounds hence linked to your core domains i.e in their case - professional/clinical skills; critical reasoning; identification, prevention and management of illness; population medicine and Self Directed Learning.

- If SDL (Self Directed Learning) is the basic technique of PBL sufficient time must be provided in the students course 'free time' for such to be carried out.
- Tutors must be supportive of PBL and adequately trained in its use. Faculty (read senior management) must be supportive of PBL to prevent its subversion.

- From faculty’s perspective, if it is important to know, it must be assessed. From a student perspective, if it is assessed, it is important.

- Assessment should reflect the structure of the curriculum - assessment by domains showing both the lateral and vertical integration of both is important.

- Assessment should adequately reflect the learning process using essay questions and other devices.

- Assessment should reasonably reflect the content of the curriculum. The greater the areas of that content the more time to be devoted to such, that is, there should be a direct correlation between how much time is given over to teaching that part of the curriculum and how much time should be spent on assessing such.

- Assessment should be criterion referenced not normative referenced and students should be able to comment and critique such.

- Assessment should not be ranked, but like CBT, should be pass or fail. This idea however is not universally supported. In the police recruit training program at the Queensland Police and Emergency Services Academy the standard tertiary grades - pass, credit, distinction, high distinction apply (P.R.O.V.E. Recruit Study Guide, 1994, pp.21-23). They see such as encouraging ‘best practice’.

- Assessment should primarily be formative and reflect both the depth and breadth of student performance.

- Finally in relation to the selection of students, you must endeavour to pick desirable applicants and exclude the undesirable.

- Desirable applicants will possess the basic academic and cognitive skills together with positive attitudes, competent communication skills (both verbal and written) but over and above this they will have reasoning skills, logic, problem solving skills, critical analysis skills. Such skills cannot be simply determined by one’s academic record, psychométric testing along with autobiographical data provided at an in-depth interview is more likely to reveal its presence or absence. The ramifications for Corrective Services is that educational entry standards would need to be raised and subsequent job interview testing likewise would need to be more searching, trying to identify at least some modicum of these higher order learner qualities.

Other insights that I gained from attending the parallel sessions could be summarised as follows. In "Writing an Intergrated Working Problem" in particular, I learnt that in the trigger, one must present enough information for the students to carry out the learning exercise but not too much so as to drive them down one particular course. Adopt a broad approach is the recommendation. This I feel however must be modified, in the Corrective Services Academy’s case, by the need to come to 'the resolution' quicker. The other insight was, in presenting a problem, don’t confuse the students by presenting two problems in one - a single problem is preferred, multiple problems confuse the learning objectives and delay appropriate outcomes.
Insights from "Tutor Training" are summarised in the two page pamphlet on 'Tutoring Skills' (see Appendix E) attached.

On 31 May 1995 I interviewed Barbara Sommerville Nurse Educator and PBL practitioner, on-site at the University of Western Sydney, Macarthur/Milperra. I also sat with her in one of her tutorial groups to see how it was facilitated. This differed significantly from the medical student group I had seen facilitated at Newcastle University being three times the size and extending over twice the time, almost two hours duration. When commenting on the size of the group Ms Sommerville was critical stating for a whole host of reasons, budget imperatives being just one, they were being asked to include more and more students in their various groups. I could see the deleterious effect for myself. In a group of between 20-25 students about 15 were fully engaged in the process, ten or more, to varying degrees, had disengaged.

On the question of learner directedness as opposed to teacher directedness and the ability of all nursing students to benefit from the PBL process in its 'pure form' Ms Sommerville felt there were problems. She felt "many of their type of student had difficulty maintaining focus given the seemingly open-ended nature of PBL, particularly in the first year of their nursing degree". To that end, in order to take out the 'seemingly open-ended nature' of the PBL process they had introduced a SIP (Situation Improvement Package) to direct somewhat student learning processes in a way they had not previously been directed (see Appendix F). Hence whilst they still preserved the essential/self directed learning approach, so seminal to PBL, experience had pushed them towards greater teacher directedness. The tutor/teacher however still refrained from 'informing and instructing' as subject expert but rather offered more 'clues', suggested 'what' to look for, perhaps quashed the more esoteric, group generated learning objectives and readily suggested 'where' they might look for further information. I was to see this approach replicated at the Queensland Police and Emergency Services Academy.

On 11 September 1995 I interviewed Arthur Kingsland, Associate Dean, Faculty of Architecture in charge of first student year PBL, on site, at the University of Newcastle, Callaghan and joined one of his tutor/facilitators and students in critiquing some of their end of course assessment items, that is, architectural models whose design they had to defend to the facilitator and before peers.

Mr Kingsland, himself a noted researcher in the PBL field, explained the reason why Architecture at Newcastle had chosen PBL as its integrating methodology for learning. He said they wanted to simulate as closely as possible 'real life' for the working architect exposing students to realistic job and client requirements and constraints so that they could, at the end of their course, 'hit the deck running' so to speak. In the meantime they would also have had the very valuable experience of functioning in peer/colleague workteams as they would in their post graduation design studios.

He said one of the major problems with using PBL in Architecture was the 'subjective' nature of the assessments. To overcome this he said they used jury panels which are moderated to ensure consistency of standards. These panels are made up of tutors, architects from the field and recently graduated senior students as peers. The one problem he had experienced however using these panels was they tended to be 'negative' in the sense that they tended to emphasise only the students' weaknesses, where the students failed or were deficient rather than where they excelled.
They had experienced some problems with 'instruction' with PBL with NESB (Non English Speaking Background) students particularly males who were Muslim. They tended not to function well in groups that were predominantly female or where the tutor/facilitator was a woman. However whilst the faculty were conscious of this factor they were not prepared to subvert their normal teaching processes to accommodate this cultural variable other than with supportive counselling.

Mr Kingsland also felt they had experienced problems with group formation that had not been identified in the PBL literature - that of dysfunctional groups. In situations where you allowed the groups to form of their own accord, often the last group formed was made up of people with few group/teamwork skills who had been 'pushed' together by their exclusion from the other groups. This often meant they were less able to operate effectively and never did quite 'get it together'. To some extent they were overcoming this by getting in a skilled groupwork counsellor to work with these dysfunctional groups. The Queensland Police and Emergency Services Academy overcame this problem by randomly assigning students to groups in the first place and then regularly re-assigning them after fairly short periods in terms of Architecture Newcastle's perspective. Because of their short time frames in the P.R.O.V.E. program they cannot afford dysfunctional groups for even a short time and they are therefore prepared to forgo the advantages of the self appointed groups as opposed to facilitator appointed. This is something, given both the even shorter time frame of custodial primary training and the seemingly non-assertive presentation of self of some of the significant ethno-religious groups amongst our trainees eg. Sikhs, that we will have to take into account. Accordingly we will defer to the Queensland Police and Emergency Services Academy's experience on this matter of group allocation as being more relevant to us.

It was also Architecture Newcastle's experience that some subjects that contained a lot of technical detail such as 'computer programming' and 'building material stresses' could be taught quickly and most efficiently by didactic instructional sessions as opposed to PBL. Hence Mr Kingsland was of the opinion that not everything in the curriculum had to be taught using PBL. In this he was a pragmatist rather than a purist. He conceded others might not agree with him and, in fact, the A/Chief Superintendent David Melville doesn't. Almost everything in the P.R.O.V.E. program is taught by PBL methods.

On the question of course recognition and industry acceptance of PBL Mr Kingsland referred me to Architecture Newcastle's 1994 Student Information pamphlet (see Appendix G) where it is stated that the accreditation panel, consisting of representatives from the Royal Institute of Architects, Commonwealth Association of Architects and NSW Board of Architects in reviewing and evaluating the course in 1992 "was supportive of the innovative and unique Newcastle course and gave a five year unconditional recognition" of its standards and consequently, its graduates.

The final visit on 18-20 September 1995 to the Queensland Police and Emergency Services Academy (see Appendix H) for visit agenda proved to be the most valuable. Its highlights and insights will be recounted, as I develop the model appropriate to the Corrective Services Academy custodial, Pre-Service Training program. Suffice to say however A/Chief Superintendent David Melville was anxious to warn me against the perils of underestimating the opposition to PBL from staff, students and field operatives alike. Staff he said felt, initially anyway, disempowered as their traditional teacher/director of learning role disappeared and they were required to 'sit on their hands', so to speak, when issues came up that they were either expert in or knew a lot about. Students, particularly students who had learnt their policing in an earlier era and were returning to the force or from
interstate had great difficulty sometimes with accepting the PBL approach. Senior Sergeant Andy Morrow, in charge of the training of people in this category, said most, however, appreciated the benefits of PBL at the end of the course, but few were prepared to applaud it.

A/Chief Superintendent Melville said, despite the known difficulties of the experiment in the removal of police training to university campuses and its failure to provide recruits with workplace skills when they arrived back on 'the beat' and the pillaring traditional police training had taken in the Fitzgerald Commission of Enquiry 1989, many police field operatives were still highly critical of what they regarded as an unnecessary, education experiment. Some of the criticism derived from an insecurity felt by some officers that recruits, in fact, knew more than they did and were better equipped to 'work out' what was needed in a number of complex or difficult situations that occurred in the field. He, of course, was not surprised student recruit 'field practice' was often of a higher order than many established police officers as that was the point of PBL. Students were having their analytical and problem-solving skills honed from the start, often on complex problems taken from field practice that might, to date, have never been encountered by an established police officer.

A/Chief Superintendent Melville did not feel the shorter length of four training period provided insurmountable problems. He stated that they had written courses for 'station support staff' and 'aboriginal liaison officers' which only ran for a few weeks, with considerable success, using PBL curriculum design and delivery methods. Also their training course for former police officers returning to policing was considerably shorter the P.R.O.V.E program and quite effectively used PBL as the basis for course development and instruction.

e. Using P.B.L. in Custodial Recruit, Pre-Service Training

Before developing a model for using PBL in custodial recruit, Pre-Service training some analysis of the changing role and function of custodial officers needs to be made. Nothing epitomises more the fundamental change in the role and function of custodial officers that has taken place over the last five years as the nomenclature used to describe such officers in 1991 Report of the Review of Primary Training as opposed to the 1994 Review of Primary Training. The 1991 review describes them as "Prison Officers" whereas the 1994 review describes them as "Correctional Officers". In this case there is everything in that name change!

In 1991 the Prison Officer role was that of 'humane custodian' of the prisoners placed in his/her care and control. Goals were managed using what has been described as the 'static' security model. This involves officers working fixed posts and attending, through their various duties, to the largely physical and material needs of prisoners and relying on non-custodial professionals eg. Welfare Officers, Psychologists, Drug & Alcohol Workers etc. to attend to their psycho-social needs. Their role emphasised the preservation of institutional security through a reliance on guns, gas, batons, armed towers and patrolled perimeters, specialist emergency and hostage response teams.
With the adoption of Area and Case Management as the exclusive correctional centre management mode, commonly described as the 'dynamic' security model, in July 1993, the role of the now designated 'correctional officer' changed, fundamentally.

Officers were now required to interact with prisoners in an intensive, personal way, counselling and mentoring them through the case management process located in the 'structured day'. The reliance upon physical force and its associated instruments of constraint now gives way to a reliance upon 'people skills', verbal influence and pro-active, personal biographical surveillance. The somewhat passive, custodian role of the 'prison officer' has now been entirely jettisoned for the active, interventionist role of the 'correctional officer'.

Of course the knowledge, skills and attitudes - attributes (KSA's) demanded by this changed role and enhanced function are both, quantitatively and qualitatively, different. Apart from taking on some aspects of the roles of the Non-Custodial professionals, correctional officers are required to adopt new methods in relation to their own traditional province of security management. They now work as an integral part of a team contributing to the total complexity of inmate development, supporting prisoners in their industrial and educational endeavours, as both key assessors of personal program deficiencies and motivators of opportunities to be taken up.

These 'different KSA's which require the greater use of personal initiative, self-direction, team working abilities, situation analysis, problem-solving and conflict resolution, are the very 'higher order' capabilities developed by PBL.

As a consequence of both my reading in the area and my personal observations of PBL in action, at the various educational centres I visited, my conclusions would lead me to favour a PBL model that is a hybrid of the more classical 'pro-active' model. I envisage it being rather the 'reactive case-study' model with an IBL focus in that, the 'learning triggers' are not necessarily solvable problems but rather any reality based situation or experience that can be used to initiate the Self Directed Learning process.

Given the restricted Pre-Service custodial training time frame within which we have to work and the nature of the learner, their 'concrete' thinking processes and 'extrapolation skill deficiencies' together with the physical limitation of Academy classrooms and library research areas the UWS Macarthur/Milperra - Nursing, SIP (Situation Improvement Package - see Appendix F) extended case-study approach, with additional aspects of the similarly constructed P.R.O.V.E. (Police Recruit Operational Vocational Experience) program, recommends itself as the basis of the Corrective Services Academy PBL model. Hence conceptually the C.S.A. - PBL Model would consist of a three or four phase (depending on the extent of learning required) session process, diagrammatically represented as follows:-
C.S.A. PROGRAM MODEL

Session 1 -

Initial Phase: CASE ANALYSIS (Facilitated - group process).

Session 2 -

Intermediate Phase: CASE LEARNING (Non-Facilitated - group or individual process).

Session 3/4 -

Final Phase: CASE FEEDBACK (Facilitated - group process).

Session 3 -

Additional Phase: RESOURCE SESSION (Facilitated - group process).

This model is based upon the P.R.O.V.E. - Facilitation Model (see Appendix I) modified to capture the essence or purpose of the phase in the nomenclature. Other than that content, teacher activity, student activity and session purpose remain similar (see Appendix J).

In Session 1 the initial, Case Analysis phase, the 'trigger'-scenario or case-study will be issued by the tutor/facilitator and discussed, taking care not to answer any of the queries raised, other than to identify them as possible case learning objectives/issues. Clarification of what the 'problem is' can occur and direction as to where relevant materials might be found should be given. Care must be taken to ensure that clarification of what the problem is remains largely the work of the students. They should be gradually led rather than vigorously pushed. If it transpires that there is a double problem involved, students must be made aware of this before the completion of the session. During this first session students will be encouraged to brainstorm all possibilities, ideas, mechanisms, possible solutions, underlying causes with the tutor/facilitator offering one or two ideas themselves to either start the process off or re-invigorate it should it exhaust itself prematurely. Tutors will use their tutor guides to ensure all the learning objectives are identified. This may require some sophisticated leading at this point that draws short of channelling them down the 'one true path'.

Session 2, the intermediate Case Learning phase is not facilitated. At an agreed time and place student groups will separately meet to discuss all the learning issues formerly delineated. Using the resource guides provided eg. Prison Act or Regulations, SIP (Situation Improvement type package) or other learning information in the form of definitions, extra case notes, task directions etc. students piece together their 'best solution', recording the reasons for their decision, the evidence they considered, the hypotheses they constructed and rejected. This done, on the basis that an additional phase, Resource Session is not required, they proceed directly to the final phase or 'resolution', Session 3 - Case Feedback.
At this session the learning is brought together by the tutor/facilitator having the students as a group, if there is more than one learning group involved, or as individuals, if there is one small group, argue for their 'best fit' solution presenting whatever evidence is required of their reasoning processes, learning discoveries etc. The tutor/facilitator aids the discussion by clarifying points raised and applying them to the case, challenging obviously incorrect premises and assumptions where they occur, still within the context, that the group must ultimately arrive at the 'best solution'. The tutor 'teases out' the answers, so to speak, to the learning issues delineated in the first session.

Given the short timeframe of the custodial primary training program the tutor must not let students leave the final session confused as to the 'best solution' based on contemporary 'best practice'. This is where the pedagogical dilemma may arise. What to do if the students, as a group, have gone down a 'blind alley' or have identified a serious gap in their 'technical knowledge' crucial to resolving the problem.

In the first instance, so as not to discount their learning to date, you could add in the tutor/facilitator 'best solution' and as a group, discuss it or use it to begin the learning cycle again. The thing you have to guard against however in doing this, as experience at the Queensland Police and Emergency Services Academy has shown, students may not work as hard as they might knowing they are going to be given the 'correct' answer (so to speak) by the tutor/facilitator at the end anyway. Hence the preference is for beginning the learning cycle again, time permitting.

In the case of a serious gap in the technical knowledge being identified, as Arthur Kingsland, 'Architecture Newcastle' suggests, a didactic lecture session (additional phase - Resource Session) might be added as the most efficient way of addressing this learning shortfall. What would be important in doing this, which distinguishes it from didactic lecturing/teaching generally, in line with PBL research, is the fact that it is being given at a time most propitious for learning. This is because, as suggested earlier, the need for this particular learning has now been identified by the students themselves. They therefore now 'own it' and will as a consequence, absorb it almost totally, appreciating fully its necessary relevance to 'solving the problem'.

The model now developed, I would suggest, encompasses the best of the various models reviewed. It is not as open-ended as the Newcastle Medical School model nor is as prescriptive as the P.R.O.V.E. model, although it relies heavily the format of that model which is as much IBL as PBL. It takes on the SIP aspect of the UWS, Nursing, Macarthur model to bolster learning but hopefully, given the guaranteed class size limit of 40, can avoid the problem of dysfunctionally large tutorial groups. It fully takes into account the limitations of learner skills together with educationally conservative corporate nature of the organisation. For whilst assessment processes will incorporate most PBL assessment recommendations, the assessment format will replicate traditional forms in that it will continue to include essays, multiple choice tests and competency demonstrations along with 'peer assessment', jury panels, self-rating tests and reflective learning diaries.

In considering where PBL would apply in the custodial recruit training curriculum together with what course components are suitable to its application, one needs first to resolve the issue, why not transform the whole curriculum? Indeed purists would argue why not! A/Chief Superintendent David Melville tended to take this position when interviewed. Apart from being totally convinced of its efficacy he had also been faced with the total discrediting of traditional police training in Queensland including its university campus experiment, which meant, political and corporate support for a radical educational change.
was there.

That does not apply to custodial recruit pre-service training in NSW. The 1994 review of that training found very little wrong with it and whilst it recommended some important additions to the curriculum by way of extending some subject areas eg. conflict management, it was not highly critical of current delivery methods. It's recommendation that "PBL be expanded as a learning technique....." (D.C.S. 1994, p.17) was a recommendation that when compared to other recommendations did not convey any great sense of urgency, though its importance was recognised by its inclusion. Hence this is a powerful constraint operating upon any recommendation I care to make. Therefore I am buoyed by the considered comments of Linda Soars deriving from her own extensive research on nursing programs using PBL throughout Australia. Based on that research she states that "the most important point I gleaned from these visits was that it was worthwhile to pursue the implementation of a PBL approach, even within the constraints of a traditional curriculum. The benefits for nursing students in using this approach can be achieved even if it is included in only one subject or group of subjects" (Probe, August 1994, p.9). I propose to adopt this course as the basis of my recommendations.

Of the four major course curriculum areas - Professional Development; Law and Procedures; Weapons and Emergency Response Training; On The Job Training, in consultation with Superintendent Johann Mann, Program Manager, Pre-Service & Security Training Division, it was felt the central pillar of the curriculum, Law and Procedures, more than any other is the one that should be converted to PBL (see Appendix K).

That having been the decision taken, it is important now to consider examples from that area of PBL written up as learning problems including trigger and task, with a supporting tutor guides and some short explanation of the process together with a possible assessment format. What must be noted is the fact that neither myself or Superintendent Mann are in anyway experts in PBL curriculum formatting. This first example is primarily in the area of Movement Orders and Escort Procedures (see Appendix K) but relates also to such other subjects as Searching Inmates, Security in a Correctional Facility and Inmate Control, Musters and Counts. The format used is loosely based upon the P.R.O.V.E. and Newcastle Medical School formats as adapted. Before proceeding it is important to re-conceptualise the overall model of PBL and how the CSA program model relates to it.


Stage 2 - 'The Possibilities' - Includes CSA - Initial Phase, CASE ANALYSIS, Session 1 - brainstorming ideas, causes, possible solutions. Intermediate Phase, CASE LEARNING, - Session 2 - from resource guides provided, students identify 'best fit' solution, arguments, reasoning.

Stage 3 - 'The Resolution' - Includes CSA - Final Phase, CASE FEEDBACK - Session 3/4 facilitated full group discussion and consensual agreement on 'best solution'.
LAW AND PROCEDURES

Movement Orders & Escorts

Time: 1 hour
(total time 4 hours)

Session 1

CASE ANALYSIS

Student Information Sheet

Trigger Scenario: At 8pm at night a prisoner is seen by the nurse on duty in the gaol who decides because of his medical condition he must be immediately sent to the local hospital.

Task: Describe the steps that must be taken, including their correct sequence, to effect this transfer procedure up to the time of arrival at the hospital.

TUTOR INFORMATION SHEET

Learning Issue Considerations:

1. Canvas authority to remove the prisoner from gaol.
   - Requires written recommendation from the duty nurse.
   - Section 28 of Prisons Act authorisation must be obtained from Governor or Deputy Governor to remove a prisoner from gaol. This authorisation can be verbal including over the phone or in writing.

2. Security Concerns, the classification of a prisoner either A, B, C dictates the security procedures to be followed in each case.
   - If A1 (maximum security) the removal of a prisoner requires armed backup by Emergency Unit Officers with an armed officer in the transport car. The prisoner is to be handcuffed also.
   - A2/B classification, the prisoner is to be handcuffed, and the local escorting officer armed. Emergency Unit backup is not required.
   - C1/2 classification, there is a discretion to handcuff or not.
   - C3 classification does not require transport in a prison vehicle or with officer accompaniment ie. he could be given his bus fare and told to take himself to hospital.
3. **Read Warrant if available, if not then ORS (Offender Records System) computer mainframe to obtain security classification.**

- Special considerations are involved. If the prisoner has recently attempted an escape this will change his classification which might not be noted, as yet, on the warrant or ORS.

- Therefore if you escort a prisoner from a maximum security gaol despite his lower classification rating you must apply maximum security conditions as you do not know why they are there in that maximum security gaol.

4. **Record Procedures**, a record of the movement of removal must be kept as it could effect the gaol state (record of gaol population numbers).

- Section 28 escort releases are however temporary and do not effect the gaol state.

- Entries that need to be made are - cell card, night senior's log, muster book, gatekeeper's records - who records the use of vehicle transport. Arms book is noted if a weapon is drawn to accompany the escort as in the case of A-B classification prisoners.

5. **Searching Procedures**, before removal to hospital a prisoner must be searched, either a body or strip search.

- What determines the search type is recent recorded attempt to escape/ or 'gut' feeling - strip search in these cases.

- Conditions pertaining to strip searches are that -
  a. A Senior Prison Officer must be present to prevent harassment or spurious complaints of such.
  b. Regulation 24 forbids members of the opposite sex to either conduct or be present at such a search of a prisoner.

6. **Mode of Transport** depends upon the injury/illness and security classification. Can be ambulance, a truck or car. Different security restrictions re security belts apply in trucks.

The above Learning Issue Considerations must be teased out via brainstorming or in brief heading form, issued as an SIP type resource, before students proceed to the Case Learning (non-facilitated) Phase. At this stage appropriate educational resources with which to 'solve the problem' of how you correctly effect a hospital escort must be made available. In this case they would include the Prisons Act of 1952; Prisons Regulations; C.S.A. Law & Procedures manual (a user friendly version of the Departmental Prisons (Operations) Procedures manual).

Given the importance of the Offender Records System and the strong likelihood that
at that time of night, 8pm, there is little chance that staff can access the Warrants file and will have to rely on the ORS system then you might run a session - a Resource Session (additional phase) on that system and how it operates getting them to 'call up' prisoner classifications/details in a mainframe computer workplace simulation exercise. Similarly a session on searching practice could also be conducted before the final Case Feedback phase. This is then a four phase cycle.

At final phase, the fourth session the tutor using his/her tutor guide can ensure all the aspects of the scenario task are covered.

As to the mode of assessment it could be that, using the cells on the Academy complex, you simulate this particular workplace problem using 'created forms' and persons acting out the various roles to see if students can actually carry out what they have just learnt. You could assess their competence using a 'jury panel' of peers, operational prison officers and other Academy correctional staff. You could also get them to reflect on their learning by critiquing their own performance and its faults, if any.

The second example presented in such developed form, is to be found in the area of Reception Room Procedures. It could be developed, as follows.

**CASE ANALYSIS**

**Phase, Session 1 - Student Information Sheet.**

**Trigger Scenario:** A prisoner is received in gaol from court having received a sentence. He had previously been on bail and hence was not as a consequence subject to search procedures previously. On reception the inmate refuses to be searched. Negotiations with him using a prison psychologist have failed to change his resolve.

**Task:** Indicate how do you carry out the search using a minimum of force. Consider not so much the process of searching but rather the responsibilities and authority to carry out the search and the force that can be used.

Brainstorming exercise would be carried out, facilitated by tutor using the Tutor Information Guide as follows.

**Tutor Information Guide**

**Learning Issue Considerations:**

1. **Is there a legal obligation to submit to such a search?** Regulation 24 provisions establish such.

2. **The right to use force to reinforce a lawful order.** Escalation of force continuum - gas to guns. Legislative authority/departmental policies. Common law prohibitions an excessive force. Forceful resistance to be met by similar but not lethal force.

3. **Report requirements - documentation of actions required - witness to actions - reports required.**
4. Medical requirements - every time force is used the prisoner must be medically examined. Reasons, to prevent bashing or false claim to have been bashed and to ensure prisoner not unnecessarily injured by use of force. To assist with medical aid.

5. Restraint aids (physical) and searching modes - strip search, body search. Conditions governing each. Authorisation requirements. Handcuffing requirements etc.

CASE LEARNING Phase, Session 2 - non-facilitated. Students would have been provided with resource material such as Prisons Act 1952; Departmental Prisons (Operations) Procedures Manual; Prisons Regulations; Use of Force/Weapons Policy together with a number of Law reports/ Common Law 'precedent' cases on the unlawful and excessive use of force.

The results of the brainstorming exercise and the identification of the relevant learning issues would now be looked at by student groups using the resource material supplied. They would be required to jointly answer the task and provide a 'best solution'. It may well be, given the complexity of Use of Force provisions and the escalation of force continuum, from gas to batons to guns including physical holds/restraints such as handcuffing, that if not enough students handle this well, a post - CASE FEEDBACK Phase, an additional RESOURCE SESSION might be instituted. Such would include a demonstration of the use of force in a simulated, like scenario situation. Assessment might include individual or group critiques of that scenario simulation.

f. Conclusion of Project

Taking into account the weight of body of opinion canvassed in the literature and personal observances, I recommend the use of PBL in the Corrective Services Academy custodial recruit, Primary Training Course. I also recommend in the first instance, that it be introduced only into the Law and Procedures curriculum area on the basis that it will be most effective at this point and have its best chance of success here, where the curriculum is almost totally controlled by Pre-Service and Security Training Division staff. Such success will allow it to be eventually expanded into the Staff Development and Specialist Training area where cross-divisional training, including the use of outside, expert lecturers, occurs. Introduced into this curriculum area will allow the additional staff development and curriculum design resources required, to be targeted to those solely involved in the piloting of this technique, ensuring efficiency of purpose.

I also recommend the use of the Director PROBLARC, Centre of Advancement of Learning and Teaching, University of Newcastle to be hired on a daily, fee for service basis, to advise on curriculum re-design and re-development and to run staff development courses to train those staff designated to use PBL in the intricacies of its use. As a consequence of this I recommend $15,000 be put aside from the Academy’s training budget for the forthcoming financial year to effect this.

Although this amount may seem a lot of money to expend on training and curriculum design technique, the benefits in terms of advancing the development of our underlying model of the professional, 'reflective practitioner', correctional officer who can decide on
the 'best course' of action whilst in the midst of that action, are enormous. Through its insistence on Self Directed Learning as the fundamental learning mode students will graduate with, whole of career, higher order analytical skills that will make them an ongoing asset to their organisation and assist them immensely with career path planning. It will also have an important favourable effect in their own private lives which ultimately impacts back on their workplace performance.

As Schon suggests, under the impact of technological change the demands upon the professional knowledge of all professionals are so great they will have considerable difficulty coping with these demands. Yet at the same time they bear responsibility to generate a considered response and further manage this very change. This places on the professional a requirement for adaptability that is unprecedented in history (1983, p.15). Problem-Based Learning is a technique of excellence in training for that required professional adaptability.
Bibliographical References (notated once in order of appearance in text)


8. Feletti, G. (1993) Inquiry Based and Problem Based Learning: How Similar are These Approaches to Nursing and Medical Education in Ryan, G. (1993) Research and Development in Problem Based Learning, Volume 1, Australian Problem Based Learning Network, UNSW.


Personal Interviews

1. Professor Penny Little, Director PROBLARC, Centre for Advancement of Learning and Teaching, University of Newcastle.

2. Ms Barbara Sommerville, Nurse Educator & PBL practitioner, School of Health Science/ Nursing, UWS Macarthur, Milperra.

3. Mr Arthur Kingsland, Associate Dean and PBL researcher, Faculty of Architecture, University of Newcastle.
4. **A/Chief Superintendent David Melville, Queensland Police & Emergency Services Academy and staff** -

- A/Superintendent O'Regan - PBL Administrator
- A/Senior Sergeant Bennett - PBL Curriculum development
- Ms Sue Gronow - PBL Curriculum development
- Sergeant Rhule - PBL Class and Assessment
- Sister Burke - PBL Class and Assessment
- Mr McBride - PBL Validation
- Sergeant Townsend - PBL Group Work
- Mr Woods - PBL Group Work
- Mr Monteath - PBL as a technique
- Academy Librarian - Resourcing PBL
- Senior Sergeant Andy Morrow - PBL Curriculum development - special programs

5. **Superintendent Johann Mann, Program Manager, Pre-Service and Security Training Division, NSW Corrective Services Academy**

**Other**

*Attendance of one day conference* - Imperatives in Medical Education: Beyond Problem-Based Learning 28-31 May, 1995, Faculty of Medicine & Health Sciences University of Newcastle, Newcastle, Australia.

*Experiential learning sessions* where I witnessed PBL in action

- UWS Macarthur/ Milperra
- Architecture Newcastle
- Medical Conference, Newcastle University
- Queensland Police and Emergency Services Academy
Australian Institutions Implementing Problem-Based Learning*

The following institutions within Australia are understood to be implementing problem-based learning.

New South Wales
- New South Wales Police Academy
- New South Wales College of Law
- Department of Architecture, University of Newcastle
- Department of Design, Architecture and Building, University of Technology, Sydney
- School of Crop Sciences, Sydney University
- C.B. Alexander Agricultural College, "TOCAL", Paterson
- School of Electrical Engineering, University of Technology, Sydney
- *Faculty of Health, University of Western Sydney, Macarthur
- School of Community Health, Faculty of Health Sciences, (Cumberland College), University of Sydney
- *Faculty of Medicine, University of Newcastle
- Department of Occupational Therapy, University of Newcastle
- School of Social Work, University of New South Wales
- Mission Employment, Sydney City Mission
- Faculty of Nursing, Sydney University.

Victoria
- Department of Science Education, La Trobe University College of Northern Victoria
- Department of Civil Engineering, Monash University
- Department of Mechanical Engineering, Monash University
- Faculty of Health Science, La Trobe University College of Northern Victoria
- Department of Orthoptics, Lincoln School of Health Sciences, La Trobe University

Queensland
- Division of Nursing, Australian Catholic University, McCauley College
- School of Nursing, Division of Health and Behavioural Sciences, Griffith University
- School of Optometry, Queensland University of Technology
- Queensland Police Academy
- Tropical Health Program, School of Medicine, University of Queensland
- Department of Dentistry, University of Queensland

South Australia
- Department of Architecture, University of Adelaide
- Department of Dentistry, University of Adelaide
- Department of Nursing, University of South Australia, Underdale.

*NB: If you are implementing problem-based learning, and are not included in this listing, or if you know of others whom we could contact, please let us know.

* Faculty of Medicine, University of Newcastle
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<thead>
<tr>
<th>Scientific Measurement Paradigm</th>
<th>Judgmental Paradigm</th>
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<tr>
<td>Assess tasks remote from the world outside of classrooms</td>
<td>Assess tasks that reflect outside contexts</td>
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<td>Test solutions to problems</td>
<td>Assess processes by which problems are solved, as well as the solution</td>
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<td>Assess simplified, discrete tasks</td>
<td>Assess performance of holistic tasks in their actual context</td>
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<td>Assess individuals only</td>
<td>Assess group work as well as individual work</td>
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<tr>
<td>Emphasise one right solution</td>
<td>Emphasise alternative ways to reach acceptable solutions</td>
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<tr>
<td>Assess tasks directly from the curriculum as taught</td>
<td>Assess tasks that are relevant to the curriculum but expand on it</td>
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<tr>
<td>Assess discrete tasks one by one</td>
<td>Assess performance on holistic tasks as well</td>
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<td>Teachers rigidly prescribe nature and form of assessment tasks</td>
<td>Learners help to design nature and form of their assessment tasks</td>
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<td>Examination focus</td>
<td>Variety of assessment events as the focus</td>
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<tr>
<td>Measurement of attainments</td>
<td>Inference of competence</td>
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<td>Single scores and measures</td>
<td>Multiple sources of evidence</td>
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<tr>
<td>Controlled test conditions</td>
<td>Simulation of life situations</td>
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<tr>
<td>Emphasis on objectivity</td>
<td>Emphasis on avoidance of bias</td>
</tr>
<tr>
<td>Focus on test instruments, validity, reliability</td>
<td>Focus on triangulation, direct evidence, informed judgement</td>
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The Faculty of Medicine and Health Sciences at the University of Newcastle, New South Wales, Australia, will be holding a conference from Sunday, May 28 to Wednesday, May 31, 1995. The focus will be on practical aspects of implementation and maintenance of a problem-based, integrated curriculum. Other issues in medical education, such as quality assurance, information management and the continuing professional development of graduates will also be considered. Active student participation will be a feature of the meeting.

Proposed sessions include developing an integrated, problem-based curriculum, student determined priorities, library and resource support for a problem-based curriculum, programme and outcome evaluation, assessment, admissions, basic science in an integrated curriculum, student directed and life-long learning, professional skills, tutor training and evaluation, medical informatics and computer assisted learning, critical reasoning, and population medicine. There will be opportunities to observe and participate in student group tutorials.

Charles Engel, Foundation Head of the Discipline of Medical Education, will return to Newcastle as the main guest speaker.

The 1990s are an exciting time for medical education in Australia and elsewhere. At least three other Australian medical schools are now committed to significant changes in their programmes including changes to admissions policy and the introduction of problem-based learning. This conference will provide practical assistance to all those involved in curriculum development and evaluation. Some of the challenges facing medical education will also be presented and explored.
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<td>7.00pm Reception</td>
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<td>Setting the Scene:</td>
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<td>Basic Sciences in an Integrated Curriculum</td>
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<td>b) Implementation</td>
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<td>- The Role of the Medical Education Unit</td>
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<td>11.00am Parallel Sessions:</td>
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<td>a) Student Symposium:</td>
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<td>Does an Integrated Curriculum Work?</td>
<td>Electives</td>
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<td>Chair: Charles E. Engel</td>
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<td>Health, Law and Ethics</td>
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<td>b) Workshop:</td>
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<td>Observation of Small Group Learning</td>
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<td>1.30pm Afternoon Tea</td>
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<td>1.00pm Parallel Sessions:</td>
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<td>Assessment Instruments and Quality Control</td>
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<td>Different Approaches to Clinical Teaching</td>
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<td>c) Workshop:</td>
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<td>Infrastructure Support for an Integrated, Self-directed Curriculum - Implications for the Library and the Medical Communication Unit</td>
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<td>d) Workshop:</td>
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<td>2.30pm Plenary:</td>
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<td>d) Poster Session</td>
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<td>6.15pm Buses leave for Restaurant</td>
<td>6.30pm Conference Dinner</td>
<td>3.30pm Afternoon Tea and Close</td>
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It is 11.00pm on a Friday night. You are working in the casualty department of an urban teaching hospital. A 17 year old man, David Potter, is brought in by ambulance. He was found drowsy in his bedroom by his mother. The mother says that "her blood pressure tablets are missing" but she does not know the name of them. The ambulance officer reports that David’s heart rate is 36 beats per minute and his blood pressure is 60/40.

Tutor Information Sheet

TEENAGER WITH IMPAIRED CONSCIOUSNESS

David Potter came home early after an evening out with a friend, and refused to talk to his mother. About 30 minutes later she heard him in the bathroom but did not attempt to speak to him for a further 2 hours. At that time, she knocked on his bedroom door, and receiving no answer became concerned and went in. He was lying on his bed apparently asleep. When he was slow to respond to speech and shaking his mother called the ambulance. On checking the medicine cupboard in the bathroom she noticed that her packet of blood pressure tablets was missing. She cannot remember how many tablets had been left in the packet or what their name was. Her husband arrives shortly after the ambulance with an empty packet of verapamil (40mg) which he found under the bed.

David is described as a normal teenager who has been previously well. His mother says that he has always been a shy and sensitive boy. He has never had a steady girlfriend. His parents were divorced when he was 12, and at that time there was some trouble over shoplifting. His mother is not aware that he is involved in any inappropriate behaviour at the moment. David is in Year 11 at Newcastle High, where he is in the middle of his class academically. He is not good at sports.

Physical Examination:
- well nourished young man with severe cystic acne
- drowsy but does respond to spoken commands
- no needle tracks
- temperature is 36.8°C in the axilla
- respiration rate is 16 per minute
- the ambulance men had given 50g of glucose intravenously with no improvement in consciousness; the blood sugar on blood they had taken before giving the glucose was 5.0 mmol/L (normal) (Note: the absence of response to 50g of glucose and the normal blood glucose exclude both hypoglycaemia and diabetic ketoacidosis)

Cardiovascular:
- pulse rate is 36 per minute
- blood pressure is 60/40 as he lies flat in bed
- all peripheral pulses present
- cool extremities
- jugular venous pressure not elevated
- heart sounds normal
- no oedema
- lung bases clear
- ECG shows: severe bradycardia
- third degree heart (AV) block
- urine normal
### Trigger

**Teenager with impaired consciousness**

### Cue Recognition:
- young man
- drowsy
- low BP
- slow pulse
- missing blood pressure tablets

### Problem Formulation:
Drowsy teenager with hypotension and bradycardia possibly due to drug overdose with suicidal intent.

### Hypothesis Generation:

1. Drug effect:
   a) drowsiness
   - direct effect on brain
   - reduced cerebral blood flow
   - abnormal composition of blood, e.g.
     - drug or metabolite
     - oxygen
     - glucose
     - metabolite from other tissues eg liver
   b) low BP
   - direct effect on vessels (dilator)
   - direct effect on heart contractility
   - effect on other organs (e.g. kidneys → diuresis; gut → diarrhoea/vomiting)
   c) low pulse rate
   - direct effect on heart or its innervation
     → block impulse generation
     → block impulse conduction
     → block heart contraction

2. Pre-existent or co-incidental disorder

### Problem Reformulation

### Plan Enquiry Strategy

### Discussion

- Students should review normal range for BP and pulse

- What is normal BP? How is it controlled? (Block 2)

- 1. What normally controls the heart rate? What causes it to vary?

- Drug overdose as suicidal attempt (Block 2)

- Consider mechanisms which can account for the combination of signs

- Principles of management of hypertension (Block 2)

- 2. What are the mechanisms of action of drugs used to treat high blood pressure?

- Cerebral hypoxia (Block 2)

- 3. What is cardiac output? How is it normally achieved?

- How does the body respond to volume depletion? (Block 1)

- 4. What stimulates the heart to contract? How is the normal rhythm achieved?

---

Students should identify and record their own learning goals during the session. These should be discussed in relation to the learning goals identified above. Ensure students allocate their learning goals. Boxed items indicate previous student learning relevant to this problem.
Good small group tutors have a number of qualities in common irrespective of the setting. These include:

1. The ability to facilitate the creation of a cohesive group from a collection of individuals. For this, the tutor must establish a non-threatening environment in which students:
   - feel free to raise ideas or opinions that may be wrong or different;
   - know that their contribution will be considered seriously and not ridiculed or ignored.

   This environment must be reestablished at each tutorial. This task may be facilitated by taking time at the beginning of a group of tutorials to explore their previous experiences as a group and to agree with the group on guidelines for appropriate group behaviour. It may also be helpful to remind the group of these guidelines at various times and to check that they are still acceptable to the group.

2. The ability to maintain effective group process and encourage individuals to be active, effective and task oriented. This is facilitated by the tutor demonstrating the necessary interactive skills and thus providing a role model for the students. The necessary skills include:
   (i) being an active and effective listener by:
      - identifying the major points in a discussion;
      - identifying the implications or flaws in a particular line of reasoning;
      - identifying links to other topics;
      - summarising the main points in a discussion or paraphrasing a group member's comments in order to move the discussion on.
   (ii) stimulating group process by:
      - ensuring that all group members are involved and that no individuals dominate the discussion unduly;
      - being sensitive to patterns of interaction which might impede group progress;
      - keeping the group focussed on the task at hand;
      - ensuring that the group regularly monitors its own progress, both in terms of the discussion and analysis of the problem at hand, and in terms of group function.

3. The ability and willingness to encourage the group members to progressively take over the leadership roles so that, eventually, the group will work equally well without the tutor.

Being a Good Working Problem Tutor

The working problem tutorials at Newcastle are a specific example of small group tutoring. For these group sessions the organisational framework and learning agenda has largely been set by the working problem. However, the same general tutor skills are required to enable students to use the working problem tutorials effectively to achieve their aims which are:

- to help students develop their process skills in clinical reasoning (which, despite its name, is generalisable outside clinical medicine and is used in many spheres of professional life including laboratory science, management and research);
- to provide a stimulus and conceptual framework for the learning of the basic and clinical sciences;
- to encourage the interpersonal development and communication skills of students.
Information for this package collected by Judy Saunders and Barbara Somerville.

Prepared for the third year team by B. Somerville, S. Gatley, L. Moxham, G. Teale G. Ongley and A. Dowling
SECTION 1

INTRODUCTION

This situation improvement package is one of two which you will explore in this subject and has been designed to reflect the type of experience you, as a nurse, are likely to encounter. You will be exploring the package over a total period of five weeks of university-based activity.

A one week practicum is integral to this subject learning experience.

Organising your time:

Your exploration of the situation while you are on campus will centre upon problem-based tutorials, resource sessions and self-directed activity.

Components of the package:

The package consists of four sections:

1. The introduction
2. Learning stimulus material
3. Objectives and references

Some further resource material may be obtained from your facilitator.

Clinical experience:

During the clinical experience you will have the opportunity to care for a person experiencing a similar, though not necessarily identical health breakdown.

In approaching this experience, you should use the guidelines provided in the subject outline, together with the specific objectives of this package.

You will be expected to record your enquiry process and the outcomes of your situation improvement, and bring this information to your tutorials to share with your group in the exploration of this package.
You are a registered nurse working in the adolescent unit at Macarthur University Hospital. You are responsible for the care of several clients and have been allocated as the primary nurse for Tina Vanpen, a 19-year-old Vietnamese girl. Tina has been admitted with a diagnosis of Osteogenic Sarcoma of the Right Knee and is to commence chemotherapy tomorrow. Tina has showered herself and is sitting on her bed. She is not mixing with other clients in the four-bed ward. Tina is withdrawn and tearful and tells you she is worried about her H.S.C. exam.

Suggested Approach

1. Identify situations in need of improvement.
2. Investigate learning issues.
3. Seek further information from your facilitator.
4. Form a clinical judgement.
5. Prepare a SIS for your client.

YOU SHOULD COMPLETE THE ABOVE STEPS BEFORE PROGRESSING TO THE NEXT BLOCK.
OBJECTIVES

When you have completed this package you should be able to:

1. identify a variety of causal and predisposing factors relating to malignant (neoplastic) diseases;
2. examine the morbidity and mortality patterns of malignancy across the lifespan;
3. seek methods to minimise the incidence of malignancy in a population;
4. discuss the pathophysiology relevant to the development and progression of malignant (neoplastic) disease across the age continuum;
5. discuss the rationale, actions and the relative advantages and disadvantages of the common medical/surgical treatment modalities available to clients with a malignant (neoplastic) condition;
6. explore and analyse alternative treatment modalities to conventional medical/surgical management for clients with a malignant (neoplastic) condition;
7. analyse effects that malignant (neoplastic) conditions have upon the emotional aspect of the individual and significant others and identify common coping mechanisms adopted by people facing death;
8. recognise and discuss actual and potential health problems and possible interferences to activities of daily living for clients/patients with a malignant (neoplastic) condition;
9. synthesise knowledge of causal and predisposing factors, pathophysiology, psychosocial, cultural and spiritual dimensions to formulate appropriate intervention strategies for the person with a malignant (neoplastic) condition;
10. detect appropriate activity stimuli, plan realistic, meaningful goals, select appropriate strategies and evaluate their appropriateness in the nursing care of the client with malignant (neoplastic) condition;
11. demonstrate empathy and sensitivity towards the individual and their significant others who are faced with the prospect of death and dying;
12. discuss the legal aspects related to a client/patient's refusal of conventional therapy;
13. recognise that caring for terminally ill clients/patients can be potentially stressful for nurses and others;
14. explore the use of support networks for health care givers;
15. discuss and apply the information within the package to the relevant aspects of the Health Breakdown Model.
REFERENCES


CONCEPTS AND ISSUES

The core concepts and issues are those which are found in all packages in this module. The additional concepts and issues are those specific to this package.

Core

anxiety
bereavement/loss
body image
coping mechanisms
counselling
empathy
family dynamics
neoplasms
pain
pharmacology
stress
treatment modalities

Additional

adolescence
chemotherapy
palliative care
primary nursing
protective isolation
remission
relapse
rehabilitation
communication
cultural/religious differences.
WHY NEWCASTLE?

- “one of the best, if not the best” course in Architecture in Australia
- unique innovative educational program using Integrated Problem Based Learning
- overall graduate satisfaction with the course content and outcomes
- spacious design studios for all students providing a dynamic learning environment
- small numbers and personal tuition in small tutorial groups
- pleasant campus and living environment

A UNIQUE EDUCATIONAL OPPORTUNITY

Newcastle Faculty of Architecture has in place a unique and exciting educational program for aspiring architects. This course has attracted the attention of architectural educationalists from both Europe and USA and, for instance, the University of Delft in Holland and the Frank Lloyd Wright School of Architecture in America have sought collaboration on our teaching structure and methodology.

Graduates from all Universities in Australia have been surveyed for the last two years by the Graduate Careers Council of Australia (GCCA), an independent agency reporting to the Federal Government. The results of their survey of graduates of all Architecture Schools in Australia found that graduates from the Newcastle School were the most satisfied with the goals and standards of their course, most satisfied with the acquisition of generic skills and the most satisfied overall with their course.

In 1992 the Newcastle School was the subject of its five year accreditation review by the National Visiting Panel. The Chairman of the Panel stated that the Newcastle course was “one of the best, if not the best course in Architecture in Australia”. In 1992 and 1993 Newcastle graduates won the prestigious RAIA Design Medal for the best graduates in New South Wales, and in 1994 Newcastle students won the prestigious James Hardie Scholarship and the Byera Hadley Travelling Scholarship. We believe that these favourable results confirm that the Newcastle course is the best in Australia. The small numbers, enthusiastic staff, attractive campus, excellent facilities and scenic Hunter Region location, combined with this innovative educational program, offers the student of architecture a unique opportunity for effective learning and satisfactory personal development.

COURSE STRUCTURE

The Architecture course has a two degree structure consisting of a first degree BSc(Arch), of three year full time duration, followed by a second degree BArch, of two year full time duration. Students have the opportunity of taking a break after the first degree, but this is

PROBLEM BASED LEARNING

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not mandatory.

There are no subject choices to be made when enrolling for either architecture degrees, each are single subject courses - Architecture 1 for Year 1 of the BSc(Arch) and Architecture 4 for the BArch.

There is no part time option in the present program. Arrangements for articulation from other Universities or Colleges of Technology are the subject of individual application.

COURSE RECOGNITION

Architectural courses in Australia are accredited by the Royal Australian Institute of Architects, the Architects Accreditation Council of Australia, the Board of Architects in each State and the British Commonwealth Association of Architects. In 1992 the review panel evaluating the Newcastle course was highly supportive of the innovative and unique Newcastle course format and gave a five year unconditional recognition.

The BArch degree, plus two years professional experience, enables graduates to progress for registration as a Chartered Architect and full membership of the Royal Australian Institute of Architects. These qualifications are recognised internationally.

COURSE FORMAT

Unlike traditional architectural courses where design, structures, construction, management, history, theory are taught as separate streams and, in many cases, not linked nor their context explained, the Newcastle course integrates all study areas around a series of design projects. Starting from first year architecture, students undertake study 'phases' which introduce problems of design integrated with drawing skills, structures, construction, management, etc. and this follows throughout the five years of the course with problems of increasing complexity. The study of architectural history and theory is developed throughout the course and, where possible, is related to the issues being addressed in the problems at hand at each stage.

STUDENT DESIGN PROJECTS

The theme of first year is 'Problems of the Workplace' and students undertake design projects ranging from the design of a personal work station and a light fitting, to the design of a drawing office and eventually to the conversion of an existing building into an architects' office. Basic drawing skills and constructional principles are developed.

The theme of second year is 'Problems of the Dwelling' and students design and resolve technically projects such as a holiday house, a private residence, an old person's home and medium density group housing. Organisational, structural and constructional skills appropriate to domestic construction are explored and the placing of the house in history and modern architecture is studied.

The theme of third year is 'Problems of Public Space' and students embark on the design of public buildings in urban and suburban settings including, for example, an art gallery or museum or a courthouse. Structures and construction studies in steel and concrete buildings are integrated with the design problems, as are issues of professional practice, environmental control, etc.

The theme of fourth year is 'Problems of the City' and students examine international developments in Urban Design and apply these to the execution of an urban design study, the design of a major city CBD high rise building and a low rise urban multi-function project. Issues of procurement and construction of major urban projects are integrated with the design problems and students are introduced to the financial criteria of property development and project management.

The final and fifth year has no theme and students elect their own areas of study to include a theoretical exploration of an aspect of world architecture and the research, design and technical resolution of a major architectural project of their own choice. The final year culminates in a public exhibition of the student projects.

RELEVANCE

The Newcastle course simulates as closely as possible a real life situation for a working architect and exposes students to realistic client requirements and implementation constraints and sets an agenda for integrating design concepts and technical solutions. This realistic context enables students to understand and remember the processes needed to be an effective architect rather than providing them with encyclopaedic information in unrelated packages the relevance of which they may not understand, and the content of which they may not remember.

PERSONAL THEORY AND IDEAS

Although the Newcastle course is structured so as to present students with problems of
increasing complexity and to lead them eventually to be suitable for employment in architectural practice, the course offers opportunities for individual students to explore and research areas of individual interest in both the philosophical theoretical fields and the technical scientific fields.

CAREER OPPORTUNITIES

The "Integrated Problem Based Learning" course at Newcastle has been shown to produce graduates who are immediately employable in architects' offices, public authorities, builders' organisations and in project management. Newcastle graduates in recent years have had an excellent record of obtaining job placements and have, in many instances, even in the present difficult economic climate, gone straight into responsible positions in leading practices and organisations. The course also provides a relevant training for employment in many diverse fields such as international aid agencies, journalism, infrastructure planning, property development, conservation and research.

SMALL NUMBERS

The total student numbers in the Department of Architecture is approximately 200 with a first year intake of about 60. Each year is run on a tutorial group basis with groups of approximately 10 students under the supervision of a "Year Manager". This size of school, and the smaller working
tutorial group size, allows students to receive individual and personal attention to the extent that most staff know all their students on first name terms and are sensitive to their particular needs, strengths, weaknesses and can encourage personal individuality.

CAMPUS FACILITIES

The campus of the University of Newcastle is in an attractive heavily wooded bushland setting with on-campus student union, bar, shops, banks, post office, restaurants, sports facilities, playing fields and student residences.

The School of Architecture is located in its own buildings within a few minutes walk of the student union and the main University Library.

Two new buildings have been recently added to the original Faculty building. These consist of the widely published "Red Square" designed by British architect Michael Wilford of James Stirling Michael Wilford and Associates, and an expansive studio building designed by innovative Australian architect James Grose. The latter provides a facility unique to Newcastle - a working design studio with a drawing board and work station for every student, which is open 24 hours a day 7 days a week. This environment enhances the educational potential for all students by allowing participation in the synergy, or group dynamic, of a shared learning experience.

The Faculty makes use of its attractive setting to hold regular staff/student barbeques and other social events.

REGIONAL FACILITIES

Newcastle and the Hunter Region is a beautiful scenic environment with magnificent natural facilities including almost continuous clean surf beaches, the vast Lake Macquarie with its extensive sporting and recreational potential and the beautiful Hunter Valley with its wineries and historic settlements. All are less than half an hour from the campus by car.

The potential for sport and recreation in almost all areas is immediately available.

ACCESS TO AND FROM SYDNEY

Access to the University of Newcastle is an easy drive of about 2 hours from the centre of Sydney by the F1 Freeway. The electric train service from Sydney to Newcastle serves Broadmeadow Station which is a short distance from the University Campus.

AUSTRALIAN HIGH SCHOOL CERTIFICATE TER SCORE

The TER score for 1994 entrance was 79.5 and in 1995, due to an increase in student intake, 72.5.

PREREQUISITE SUBJECTS

There are no compulsory prerequisite subjects. Study of Architecture calls upon skills of literacy, numeracy and design. Subjects such as English, Art, Industrial Arts, Mathematics and Physics provide a basis for the development of these skills.

APPLICATIONS

Australian resident students wishing to make an application for admission to the School of Architecture at the University of Newcastle should apply through the UAC for the Bachelor of Science (Architecture), University of Newcastle which is UAC Course Code BBA. Further information on the courses at the University of Newcastle can be obtained by contacting the Assistant Registrar, Faculty of Architecture, University of Newcastle, University Drive, Callaghan, NSW 2308, Telephone (049) 215771, Fax (049) 216913.

International students wishing to make an application should contact the International Student Office, The University of Newcastle, University Drive, Callaghan, NSW 2308, Australia, international telephone 61 49 216592, Fax 61 49 501786 at the agent representing the University of Newcastle in their country.

We would welcome your application to Architecture Newcastle Australia.

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We would welcome your application to Architecture Newcastle Australia.
6 September 1995

Mr Brian Green
Dean of Studies
Corrective Services Academy
Department of Corrective Services
Terry Road
EASTWOOD NSW 2122

Dear Brian

I acknowledge receipt of your letter dated 6 September 1995.

I confirm that you will visit the Academy arriving at midday on 18 September and leaving Wednesday 20 September 1995.

Arrangements will be made for you to gain access to the P.R.O.V.E. Program personnel and recruits.

Accommodation is available at the Academy on the Monday and Tuesday nights, including meals, at no cost.

I look forward to meeting you and I am sure you will find the visit an interesting experience.

Yours faithfully

S D R MELVILLE
A/Chief Superintendent
HUMAN RESOURCE DEVELOPMENT BRANCH
OLD POLICE & EMERGENCY SERVICES ACADEMY

AGENDA

Mr. Brian GREEN - Dean of Studies, N.S. W. Corrective Services

Monday 18 September 1995


1pm - 2pm. Lunch. A/Superintendent O'REGAN & Acting Senior Sergeant BENNETT

2pm - 4pm. A/Senior Sergeant BENNETT & Ms. Sue GRONOW - PROVE curriculum. (PROVE Conference Room)

Tuesday 19 September, 1995.

8am - 10am. Sergeant RHULE and Sister BURKE (Room 14). Class and Assessment

10.30 - 12md. Mr. McBRIEDE - Validation.. (Main Conference Room)

12md - 1pm. Lunch.

1pm - 3pm. Group Group 23. (Room 8) - Sgt. TOWNSEND and Mr WOODS

3pm - 4pm Mr. MONTEATH - General Discussion on PBL and Academy Tour

Wednesday 20 September, 1995.

9 - 10am. Library - Resourcing P.B.L.

11 -12md. A/Superintendent O'REGAN - De-brief e.t.c.
<table>
<thead>
<tr>
<th>Type of Session</th>
<th>Content</th>
<th>Teacher Activity</th>
<th>Student Activity</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Case - Investigation (Facilitated)</td>
<td>Part 1 - Case</td>
<td>Guide student's through analysis of situation</td>
<td>Identify need to respond, Brainstorm possibilities (ideas), What else they would need (information), Identify learning issues.</td>
<td>Provide context for learning, Practice investigative thinking, Identify own learning needs.</td>
</tr>
<tr>
<td>2. Case - Management (Non facilitated)</td>
<td>Learning issues triggered by Case</td>
<td>Provides guide to students' study of learning issues.</td>
<td>accesses resources, records learning group discussion??</td>
<td>Allows students to learn how to access information that is readily available, Allows students to learn where information is located, Makes student responsible for learning?</td>
</tr>
<tr>
<td>4. Resource Session (Facilitated)</td>
<td>Élaboration of learning issue skill demonstration</td>
<td>Acts as Resource person.</td>
<td>Participate in role play, skill demonstration discussion, tasks, etc.</td>
<td>To provide students with learning opportunities not easily done on their own.</td>
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