

# Learners and Teachers: Introducing Problem Based Learning

*Barbara Simsen, Hilary Yung and Diana Lee*

*The Chinese University of Hong Kong*

## Abstract

This paper involved the course Nursing Leadership, a final year, one semester course in the post-registration Bachelor of Nursing programme at the Chinese University of Hong Kong. Within an action learning/action research framework, the course was redesigned using guided design, a particular conception of problem based learning (PBL), as the teaching-learning method. This was seen as a means of explicitly valuing and utilising the students' professional experience as a resource for learning and of equipping these potential leaders with skills for life-long learning. Multiple quantitative and qualitative measures were undertaken to monitor the change through two action cycles. Analysis of the second cycle is ongoing, however the results to hand suggest that overall the students recognised and appreciated the benefits of this self-directed learning approach but found it costly, particularly in terms of time. The aim of the Action Learning Project is to enable teachers to reflect on and improve their teaching practice. In reporting the project here we aim to give a reflective account of what we did and how we now view what we did based on evaluative data. The paper will describe the structure and process of the project and reflect on the major considerations relevant to the implementation of PBL in a context unfamiliar with it. More detailed analyses of the evaluation measures will be published elsewhere.

## Introduction

Nursing Leadership is a final year course conducted within the post-registration degree programme for nurses at the Chinese University. When the course first ran in 1992 it had two broad aims:

- to enable students to understand and develop key skills associated with good leadership; and
- to critically analyse leadership and related theory with respect to its application to professional practice.

More detailed objectives stemmed from these two general purpose. Skills such as assertiveness, conflict resolution, negotiation, decision making and others were taught and then applied to leadership, change, motivation, resource management and other pertinent theoretical perspectives.

After conducting and evaluating the course twice, several problems were identified by the teaching team.

The experience of these mature age professionally qualified nurses was not being overtly used as a resource within the course and therefore was given little explicit value in the learning process.

The desired level of analysis and synthesis of theory and its application to practice was not yet being reached.

The course was conducted in a largely teacher-directed manner, was highly dependent on lectures and did not model the very things we were trying to teach — about leadership or learning.

Vaughan (1990), when investigating student nurses' attitudes toward teaching/learning methods, found a strong preference for 'student-centred' approaches, a preference that seemed at odds with most of the teaching strategies used in the schools of nursing. Whilst no evidence was found to indicate that Chinese nurses would prefer student directed methods, there is support in the literature to suggest that such approaches are indeed appropriate for and appreciated by adult learners (Knowles, 1975). Certainly the principles of responsibility for learning resting with the student and the teacher acting as facilitator, were more in tune with the philosophy of the course than those underpinning an authoritarian teacher-directed approach.

Thus three questions guided the project:

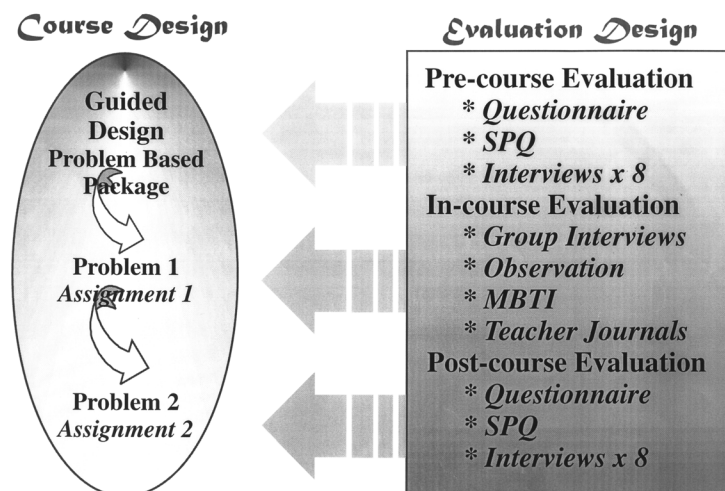
- Would the use of student centred teaching strategies prove beneficial to student learning?
- Would utilising 'experience mix' group activities show improved learning for both the more and less experienced students?
- How acceptable would Hong Kong nurses find active student centred learning strategies?

In addition to these explicit project questions were implicit questions to do with our own roles and performance as teachers. Hammond and Collins (1991) maintain that too often teachers are so busy teaching that they fail to reflect. This project offered team members a welcome opportunity to do both.

## Structure of Project

A two cycle action research project was designed as a suitable means of implementing practice innovations whilst critically evaluating their effectiveness. The project involved both redesigning the course and planning to evaluate the changes. We conceptualised the project as having two interrelated but separately identifiable elements as illustrated in Figure 1. In addition to being methodically useful, it was also practically expedient to treat the project in this manner given the need to account for where our teaching time was being used.

Figure 1



## Course Design

In redesigning the course the general aims and objectives were not greatly altered. However, guided design, a particular conception of PBL, was adopted as the vehicle to achieve them. Guided design was chosen as a teaching-learning strategy said to promote the development of problem-solving skills in real-world situations through experiential small group activities (Fuzzard, 1989). Thus, central to our course design was the establishment of small Inquiry Groups comprising four to six members. These were permanent work groups for the duration of the course.

Theoretical content would be presented in two class sessions and two Concept Group sessions where students from different Inquiry Groups pooled their findings from literature exploration. Assessment for the course included a mid-course group project/presentation and an end of semester individual paper written from the groups' work on planning a ward change. An element of peer assessment based on a published formula (Conway, Kember, Sivan and Wu, 1993) was also applied to the course marking.

Cycle 1 ran in 1995 with 84 students and Cycle 2 in 1996 with 93 students (Table 1). The course is offered on a part- and full-time basis with roughly equal numbers in both groups for each cycle and with day and evening class options. The latter is provided for part-time students.

*Table 1: Mode of study & Class Attended*

	Cycle 1	Cycle 2
<b>MODE</b>		
Full Time	44	52
Part Time	40	41
<b>CLASS</b>		
Day Class	64	69
Evening Class	20	24
<b>N=</b>	<b>84</b>	<b>93</b>

The teaching team consisted of four members. Each teacher was responsible for 16-17 students in three and four Inquiry Groups in the day class (Table 2). Responsibility for the evening class was shared between teachers so that these groups would not have one teacher as the facilitator. A measure of consistency was attempted by rostering teachers to cover several consecutive weeks.

*Table 2: Number of students & inquiry groups per teacher*

	Cycle 1	Cycle 2
Teacher A	16	17
Teacher B	17	17
Teacher C	16	17
Teacher D	15	18
Evening	20	24
<b>Total N=</b>	<b>84</b>	<b>93</b>

Cycle 1: 3 (day) groups per teacher of 5-6 members per group

Cycle 2: 4 (day) groups per teacher with 4-5 members per group

Evening groups were not allocated to a specific tutor, 5-7 members

## Evaluation Design

If the primary purpose of action research is to create an environment through which reflection can lead to improved practice, then systematic observation provides the information needed for reflection (Kemmis, 1982). As an interpretive method, action research can be open to critique as lacking in rigour and substance. For this reason the literature recommends that the triangulation of evaluative measures is useful to provide more convincing evidence for the results (Kember and Kelly, 1994). With this in mind a variety of quantitative and qualitative methods were planned for this project.

## Quantitative Measures

- A pre-course questionnaire was given to students at the end of the semester preceding the start of the course. As well as generating an expectation for change, it sought to collect demographic data from which the Inquiry Groups could be designed.
- It was planned that students would complete the Study Process Questionnaire (SPQ) (Biggs, 1987) and the Approaches to Studying Inventory (ASI) (Ramsden and Entwistle, 1981) in the first and last sessions of the course to test for changes in the students' approaches to learning.
- A post-course questionnaire was written to elicit student ratings on various aspects of the course with some open-ended questions available for more explanatory data.
- The Myers-Briggs Personality Inventory, used as a learning tool in the course, was formally administered and data was used to contribute to the project evaluation.

## Qualitative Methods

Interpretive accounts of the course and the change in the teaching-learning approach it introduced were sought. Candy (1988) suggests that it is essential when studying self-directed learning to understand the attitudes and intentions of the learners and the 'concrete realities' that shape them.

- In-depth interviews were conducted by a researcher outside the teaching team. Eight students per cycle were interviewed within the first two weeks of the course and again soon after its completion.
- Non-participant observation of selected sessions was planned for Cycle 1. In the event finding suitably skilled observers proved problematic, and so video taping was used in Cycle 2. These tapes have yet to be analysed.
- Teacher journals were kept as a record of the team members' reflections on the sessions.
- Midway through the first cycle the team detected a worrying level of anxiety among the students. This led to the introduction of group interviews into the evaluation design and enabled modifications to be implemented. This effectively became another action cycle — a cycle within a cycle. It proved so useful that it was subsequently planned for Cycle 2.

## Project Process and Reflections

### Introducing SDL/PBL

During the first session, students were given a brief introduction to the concepts of SDL/PBL and three key articles to read. They were also given an overview of how PBL would be implemented in the course.

## Reflection

Whilst not specifically evaluated, few students appeared to have read the literature provided. The students' understanding of SDL was variable judging by the interview data. However, the data suggest that students found the ambiguity and freedom of the method frightening. They felt they could not 'find boundaries' and feared they might select a 'wrong focus'. These insecurities remained even after more attention was given to the orientation in Cycle 2. Whilst there may be room for re-examining how the foundations for PBL could be better laid, our experience supports the view that the transition to SDL necessarily requires a degree of tension and uncertainty until strategies for taking responsibility and using new freedoms are learnt.

## For Further Reflection

Given the anxiety we encountered in students in the early stages of both cycles, it could be useful to devote the first session to a mini PBL workshop that could be used to both teach the method and establish the work groups.

## Developing the Real-Ward Scenario and Problems

At the heart of any PBL course are the problems that frame and focus learning. In keeping with what we understood by this teaching-learning strategy, an initial and detailed 'real ward' scenario was written and from it a set of problems were derived and progressively revealed to the students (Appendix 1). As the first set of problems was addressed new scenario data was added and fresh problems revealed. Also in keeping with the literature, the scenario and problems were pilot tested. This was undertaken with groups of former students.

## Reflection

In retrospect, the pilot group's familiarity with the course may have masked some of the difficulties the participating students subsequently experienced. However, it provided important feedback that guided the team's writing and re-writing of the material. In spite of this, there was some student confusion over the initial problems in Cycle 1, demonstrating the importance of pre-testing the material.

This confusion over the first set of problems for Cycle 1 compounded the anxiety students were already experiencing in adapting to the freedom and responsibility of PBL. In order to understand their anxiety, a mid-term evaluation (group interviews) was introduced. After reviewing the tapes, the team prepared a feedback letter for circulation to students detailing modifications that would be made to the remainder of the course. These included primarily clearer and earlier instructions and some added handouts. Whilst most students did acknowledge some degree of resolution to their problems in the second half of the course, several saw the modifications as reflecting teacher indecision and/or inexperience with the teaching method.

Nonetheless, quantitative data from Cycle 1 indicated that the scenario and problems were well rated by the students with Cycle 2 showing still higher scores (Table 3). The qualitative data provides even stronger appreciation for the scenario and problem material as providing a beneficial framework for learning. The data demonstrates that the material was successful in:

- providing an easily recognisable and applicable real life situation
- being useful to students across a range of experience levels
- bridging the theory practice gap.

Table 3: Usefulness of scenario & problem material as a framework for learning

	Cycle 1			Cycle 2		
	f	Valid %	Cum %	f	Valid %	Cum %
Very useful	11	13.3	13.3	30	33.7	33.7
Fairly useful	52	62.7	75.9	51	57.3	91
Not very useful	19	22.9	98.8	8	9.0	100
Not at all useful	1	1.2	100			
Missing	1			4		

In terms of evaluating the course design, the scenario and problems appear to have met our expectations.

### For Further Reflection

Guided design requires an element of surprise and progressive revelation and hence the need for new material each year. The process of developing it is a 'cost' to be considered in using the strategy.

Furthermore, this progressive revelation was something many students found difficult. It may be that using a more standard type or PBL where the problem is more fully revealed at the outset would prove less fearful for students already struggling to adapt to the vulnerability that a first encounter with SDL necessarily incurs.

## Managing Resources

The literature on PBL warns of the need to provide adequate resources for students. In order to deal with an expected increase in the demand for literature resources, a detailed interdisciplinary resource folder was prepared. The preamble explained to students that not all references should be used and that many covered similar ground. The team determined not to grade the readings, believing that students would then compete just for the few most highly recommended texts or articles.

### Reflection

Students rated the folder as fair to very useful but appear to qualify this in the interview data. Most students wanted more guidance over how to select and focus their reading. In some instances the resource folder was simply overwhelming. In Cycle 2 teachers did give some stronger indication of preferred readings, however the insecurity students experienced at being free to choose from such diversity remained. Teachers found the line between giving guidance and being directive hard to find. It may be that, in our commitment to giving students responsibility for learning, we tended to abdicate responsibility to teach.

### For Further Reflection

Ideally multiple copies of key literature are needed. Pruning the reference list a little and developing the annotations would help. However, this requires considerable staff input. Developing a folder of readings to accompany the wider reference listing could be more cost effective.

## Developing Inquiry Groups

Allocation to groups, unlike most other courses, was assigned by the teaching team rather than by self selection. Membership was based on students' years of experience. As far as possible each group consisted of at least one member with 10 or more years of experience. Time was allocated to encourage speedy group formation with 'purposeful games' used to break down initial barriers and facilitate interaction. After the problems were introduced in the second session, groups were given maximum latitude as to when and where they would work with access to teachers freely available during the scheduled class time and by appointment at other times.

### Reflection

Fewer than 20% in Cycle 1 and 4% in Cycle 2 rated the Inquiry Group work as 'not very' or 'not at all' beneficial (Table 4). This would seem to provide strong support for the value of participative group work.

Table 4: Rated benefit of Inquiry Group work

	Cycle 1			Cycle 2		
	f	Valid %	Cum %	f	Valid %	Cum %
Very beneficial	21	28.6	28.6	33	37.1	37.1
Fairly beneficial	44	52.4	81.0	53	59.6	96.6
Not very beneficial	12	14.3	95.2	3	3.4	100
Not at all beneficial	4	4.8	100.0	0		
Missing				4		

Whilst the overall level of benefit and the improvement in rating between Cycle 1 and Cycle 2 are encouraging, the qualitative data is important as it provides insight into both the positive and negative aspects of the group experience. As in other areas, the data suggests that students were ambivalent. They demonstrated that they enjoyed

- making new relationships
- learning through sharing
- learning from each other

but that they were also frustrated by

- difference and diversity within the group
- unequal contribution and selfishness
- conflict and the many compromises needed to make their groups work.

Time was a problem too in that it did not always permit the group to reach a mutually satisfactory consensus. 'We spent a lot of time agreeing to compromise about group work but it (we) still did not reach the expected result' (Lee, Simsen and Yung in Kember et al., 1996).

In Cycle 2 stronger expectations were put on student attendance and meeting during scheduled class times. This seems to have relieved the students of having to arrange so many out of class meetings but was at best a partial solution. It is hoped that the substantial learning that clearly took place in the groups — learning leadership, learning to learn and learning life-lessons — will remain well after the frustrations have faded.

## For Further Reflection

Allocation to groups by the teaching team met with some initial resistance. However, the general consensus of the data indicates that over time the benefits outweighed the difficulties in the eyes of the students. Since groups in the workplace are rarely formed by self-selection, this process was also planned as part of learning about leadership. The strategy would be used again.

Nonetheless, forming new groups requires group theory to be considered and applied by teachers and students throughout the life of the group. Some authors make a distinction between task and learning groups. There may have been some disparity here with students seeing them, out of pragmatic necessity, as task groups. The teachers' facilitative role may need to be moderated by the readiness of each group to enter into independent learning. This raises issues of resourcing groups adequately and is discussed further in the next section.

## Covering the Content

One criticism of PBL is that theoretical coverage may be limited. Two key theoretical areas were covered by a full class lecture. In addition, two class times were given to Concept sessions where students shared their literature learning with colleagues from other Inquiry Groups exploring the same topic. The number of topics was limited by the teaching team so that one teacher could be responsible for one topic to facilitate the session and to ensure that major theoretical aspects were covered. Thus four concurrent sessions were conducted. The following week students returned to their own small group to share with members what they had learned.

## Reflection

Perhaps the strongest themes emerging from the qualitative data relate to the guidance teachers did nor did not give students in relation to assessing and selecting appropriate content. Whilst the exact guidance that students wanted varied, they were in strong agreement that they wanted quantitatively more and qualitatively better guidance. One aspect of the students' preoccupation with wanting 'more' was to do with timing and organisation. It would seem that 'being kept in the dark' by the developing disclosure that is part of the guided design strategy was a problem to some. This was true for Cycle 2 participants even though more attention was given to introducing and explaining the overall course objectives the second time around. In terms of getting the quantity right, teachers were rated in two groups of 'high' and 'low' facilitators (Table 5). The nature of high and low facilitation needs more examination and the categories should not be too readily equated with 'good' and 'bad'. It may be that the high facilitators were rated so, in part at least, because they took back responsibility or fell into old teaching habits that were more comfortable for the students. On the other hand, there is also some evidence to suggest that at times the low facilitators were seen by the students to have abdicated any active part in the process. Clearly students had quantitatively different levels of need for facilitation. Getting the quantity 'about right' is no easy task. We hope to have more to say on this in the future.



Table 5: Percentage rating of teacher facilitation of inquiry groups

	High Facilitators		Low Facilitators	
	Cycle 1	Cycle 2	Cycle 1	Cycle 2
Too much	11.8	3.1		
About right	<b>66.7</b>	<b>96.9</b>	<b>39.0</b>	<b>59.7</b>
Too little	27.5		61.0	40.3

Qualitatively three tentative themes have emerged to describe good guidance and facilitation:

- guidance as inspiration and motivation
- guidance through emphatic understanding
- guidance as explicit direction.

These categories too need further examination. It seems to be that providing guidance to assist students to manage their own transition to PBL such as using time, dealing with group conflicts and so on, went a long way toward dealing with many of the difficulties students were experiencing. Understanding students' varying and fluctuating needs for motivation, understanding and direction remains a challenge in using PBL.

### For Further Reflection

However, one must ask if such an individualised understanding of student needs for guidance can be achieved given the student-teacher ratio and the number of groups a teacher must normally interact with? If it is not feasible, at what point do the compromises become unacceptable and necessitate abandoning the use of PBL?

## Some Concluding Reflections

Throughout Cycle 2 we endeavoured to address the concerns expressed by Cycle 1 students by providing more input sessions, more handout guidelines, greater access to teacher time and clearer advance instructions, to name a few. The results indicate improvement on all the post course evaluation ratings in Cycle 2 — some significantly so, which is pleasing (e.g., Tables 3–5). Overall, the structure of the course as it was redesigned for Cycle 1 and refined through Cycle 2, appears to have worked well. Many important outcomes were achieved in terms of student learning and overall grades improving. Yet many of the student concerns appear to have remained unaltered — uncertainty about dealing with content, insecurity over meeting teacher expectations, complaints of insufficient and inadequate guidance, concern over perceived differences/discrepancies between teachers and so on. The qualitative data leaves little room for complacency. It drives us to 'dig deeper' into the data in order to better understand the nature of the students' anxieties and the relationship they have with the teachers' role and with the teaching-learning approach. It would seem that introducing a self-directed approach requires not only new structures, procedures and processes for presenting content — matters that occupied us greatly — but involves a transitional process that requires more attention than perhaps we gave it. Perhaps it was that with such mature students and experienced teachers, we overestimated the facility that each would have in making the transition. Our current analysis focuses on the nature of this transition for teachers and students.

## Appendix 1: Scenario and Problems Used in Cycle 2

During the project work associated with this course you will be required to analyse a work situation and to solve two problems. Along the way you will identify areas of knowledge and skill required to deal with the problems. You will then set about acquiring the knowledge and using it to arrive at solutions. A detailed resource folder has been prepared to assist groups to find suitable reading.

### Scenario and Background to the Problems

A male medical ward with

- 60 beds
- 3 nursing officers
- 1 Ward Manager (WM)
- 1 Department Operations Manager (DOM)
- 12 Registered Nurses (RNs)
- 4 Enrolled Nurses (ENs)
- 10 Student Nurses
- 2 Health Care Assistants (HCAs).

The DOM, Mrs Wong, has been promoted to this position in her late 30s. She is conservative and autocratic. The present policy of Hospital Authority (HA) puts her under pressure to allocate resources in the ward in a cost-cutting way. She is reluctant to confront problems and thus will try all means to avoid holding unit meetings with the nursing staff. She had worked in the medical ward for over eight years before she was promoted to her present position.

The ward manager, Mr Lee, was promoted to the present post directly from his RN position. He is keen on continuing education and staff development and often encourages staff to attend seminars. However, he frequently shows favouritism towards several staff nurses when it comes to giving study/conference leave. He only does rounds with doctors in the morning and seldom takes initiative to interact with staff. He enjoys a good relationship with the DOM but generally keeps a distance from most of the staff.

The most senior nursing officer, Ms Chow, will be retiring in two years. She is conservative and traditional and views her own ability in managing the ward very highly. She thinks she should have been promoted to the ward manager position instead of Mr Lee. Therefore, she is often obstructive to the ideas suggested by Mr Lee. She also liked to confront the staff nurses concerning their mismanagement of patient care in front of the patients and Mr Lee. She is in charge of setting the duty roster.

The other nursing officer, Mr Lok, is in his mid-40s. He is undertaking an MBA programme and his mind is often preoccupied with a small private business he is currently establishing with his friend. He is easy going but does not want to be bothered by any extra work assignments.

Karen is a newly promoted nursing officer to this ward. She was transferred from the medical ward of another regional hospital. She is ambitious and energetic and is studying for her Bachelor of Nursing degree. She is in her third year of the programme and is under considerable pressure for finishing up her honour's research project. She has high expectations and hopes for her future career. However, she has a problem in asserting herself when it comes to handling interpersonal conflicts. In addition, she is not good at delegating work to others.

Ms Chow and Karen seldom relate to each other because of differences in personality and work style. Ms Chow is not convinced of Karen's ability and thus does not like to work with her. Mr Lee and Mr Lok are very good buddies. However, Karen does not think highly of Mr Lee, especially his leadership ability.

The DOM, Mrs Wong, does not view Karen very positively because she thinks she is only an 'academic'.

There are a few other key characters in the ward.

The most senior RN, Lisa, has been working in the nursing field for over 20 years and has employed a good relationship with Mrs Wong. She has been working in the ward for 5 years and is familiar with every aspect of ward management. However, she does not like to take on any responsibility and will try her best to avoid any decision making. She is highly in favour of having the Health Care Assistants helping in the patient care. She has a fiery temper and gets irritated easily.

There are three RNs undertaking part time degrees and they often compete for time release for their studies. They enjoy working with Karen because they speak a 'common language' and can identify with the pressure of coping with both work and study. Since they feel the role of Health Care Assistant is not well defined they dislike the idea of having them.

The rest of the staff are generally cooperative in their work and enjoy working with Mr Lok very much. On the contrary, they find Ms Chow rigid and difficult to approach. To a certain extent, they are quite apprehensive of working with Ms Chow.

### **Problem 1.1**

As a new member to the ward, Karen is anxious to gain acceptance to the ward and demonstrate her leadership ability to the DOM.

One incident happened in the first week she worked in this ward. That day was a usual, busy admission day for the ward. Karen was working with two new nursing staff who were not motivated to work at all. After the ward round, they stayed in the nursing station most of the time and left the Student Nurses and Health Care Assistant to work alone. They did not bother to check if they had done the work properly. Karen was away for a meeting for the whole day. After she returned from the meeting, she received a complaint from the doctor regarding the poor performance of the staff nurses in the matter of patient care. A patient was found to be in septic shock around 4pm. The Health Care Assistant took the temperature of a patient at 10am and 2pm (after the doctor's round) but it never occurred to her that she should report the high temperature to the nurse. Since both the am and pm shift staff nurses did not check the temperature chart, the feverish patient was left unnoticed until he was found shivering severely by the patient in the next bed. Karen reported this incident to Ms Chow but the latter did not consider that it was a big problem. Since then, Karen has been aware that the nursing staff have become very unfriendly and have avoided approaching her.

Imagine you are Karen. What knowledge and skills might you need to learn in order to function as an effective leader?

### **Problem 1.2\***

After the incident of the patient with an unreported fever, Ms Chow notices an obvious strain in the working atmosphere in the ward. The conflict between the Nursing Officers and staff regarding patient care became more apparent than before. Added to this, a few staff who have been

scheduled to work on the weekend frequently feel bitter toward Ms Chow. The quality of patient care is compromised by the low morale of the ward. Therefore, Ms Chow decided to discuss her concern with the Ward Manager, Mr Lee, who then reported the complaint to Mrs Wong. In order to test Karen's ability to manage the problem, Mrs Wong asked Karen to draw up a plan for the training of the Health Care Assistants that will be agreed upon by the rest of the staff.

In order to achieve an agreement for the plan, Karen decides to set up a working group composed of Ms Chow, Mr Lok, Lisa and one of the RNs, Linda, who is doing part time study. As a start, Karen organises a meeting with the group members aiming to come to an agreement on the job description of the Health Care Assistant.

Karen is ambivalent about the introduction of Health Care Assistants to the ward. Imagining you are Karen, prepare a group presentation to demonstrate and explain the knowledge and skills you would use (before and/or during the meeting) to achieve agreement on the job description.

### **Problem 2.1**

Although the staff have generally agreed on the job description of the Health Care Assistant, the working relationships among the staff have not improved greatly. Moreover, the introduction of the Hospital Authority has resulted in a very turbulent environment. Many staff find it difficult to adapt the HA's approaches to management. The introduction of Health Care Assistants is only one instance. As a result, the turn-over rate of staff remains high and the quality of care is being compromised. A few staff, noticeably the nursing officer Mr Lok and two of the RNs who are undertaking part time study, call in sick frequently and this affected the work rotation schedule of other staff. In a patient satisfaction survey conducted in the hospital one month ago this ward was among those with the lowest scores. Therefore the DOM, Mrs Wong, has decided something needs to happen to improve the ward environment for the staff and patients and invites ideas for change/innovations from the staff.

Imagine you are one of the nursing staff. You decide to propose a change/innovation to Mrs Wong.

- Justify the change/innovation that you have chosen; and
- Identify what learning you need to acquire to implement the innovation.

### **Problem 2.2\***

Mrs Wong is very interested in the innovation that you have suggested. She has requested that you prepare a paper to explain and justify how it can be introduced given the ward circumstances and staff.

As a group, plan how the change should be introduced. It might help if the group can choose a model/theory of change to guide the planning.

---

Note: The Scenario and Problem 1.1 were given to the students at the outset. The remaining problems were progressively provided to students in line with the development of content.

\* Problems 1.2 and 2.2 were incorporated into assignments used for grading students. Various assignment and marking criteria were also provided.