



**OBJN**  
Online Brazilian Journal of Nursing

**ENGLISH**

Fluminense Federal University

AURORA DE AFONSO COSTA  
NURSING SCHOOL



Original Articles

## Reflective learning through distance education: a critical reflection on the possibilities in developing countries\*

Neltjie van Wyk<sup>1</sup>

<sup>1</sup> University of Pretoria

### ABSTRACT

To develop critical thinking skills that are typical of a reflective practitioner is for most students in nursing a difficult process. Not only is it difficult for them to evaluate themselves, but they can find it extremely difficult to evaluate their own colleagues. The process can, however, be simplified. When students are supported by reflective lecturers who are willing to let themselves be evaluated and who encourage the students to evaluate them, the process becomes less threatening. Through this they learn that nobody has all the knowledge that is needed to optimally nurse patients and that there ought to be a continued search for new information and knowledge. Interpersonal contact between lecturers and students is therefore crucial in the development of the students into reflective nurses. Distance education in developing countries is currently viewed as an innovative development. It is in accordance with the concept of lifelong learners. In countries like Africa, and certainly also in other developing countries worldwide, education for persons in rural areas are made accessible through distance education. However, the question that also arises is whether reflective learning through distance education is possible.

**Keywords:** Reflective learning, Developing countries, Student-lecturer contact

## INTRODUCTION

The challenge to academic departments of Nursing is to ensure that reflective practitioners are being prepared for the profession. It will be expected from these persons to be able to adapt nursing care to the unique needs of the patients by using critical thinking skills. To be able to do this, they have to be sound 'thinkers', who are able to reason things through and to act in a disciplined and effective way (Paul & Heaslip, 1995).

### *Purpose of the article*

The purpose of the article is to debate the necessity of lecturer-student and student-student contact in the development of reflective practitioners in developing countries.

### *Development of reflective abilities*

People, and therefore also nurses, are by nature not able to think critically and to act reflectively. The opposite is, however, true. Routines that are not scientifically founded develop easily due to the fact that humans learn through repetitive action. By repeatedly being exposed to certain actions nurses will learn that action and continue to implement it as nursing routines without questioning the effectiveness thereof. When the action leads to mistakes, critical thinking is stimulated and alternatives searched for. However, it should be tragic if routines in nursing are being continued with until it seems to be wrong before change is brought about. The ideal is that there should be a continuous search for better techniques and more effective performances.

Not only is it essential for the delivery of effective patient care, but also for the development of Nursing Science as professional

discipline. The profession is degraded without reflective nurses who are skilled in critical analytical thinking (Jarvis, 1992). Because the responsibility for the development of the theory of nursing is not only the responsibility of theorists, but in particular the responsibility of each nurse in practice, training of reflective nurses becomes essential. Each nurse, and as such each student in Nursing Science, is responsible to develop the knowledge and skills inherent in nursing by means of critical thinking and reflection (Powell, 1989). Thereby the students develop into professional persons and comprehend something of the critical disposition of true scientists (Lyons, 1999).

This can only be done when the students are exposed to learning opportunities that stimulate critical thinking. Due to this reason the practice exposure of students should be well planned because practice exposure does not always lead to the development of reflective nurses. Unfortunately the opposite is sometimes true. For that reason 'think while you do' can be omitted (Powell, 1989). This happens when students are exposed to the practice without the lecturers creating structure for it and without the lecturers accompanying them (O'Neill, 1999). No theory and practice integration takes place and the students learn in the classroom that which they cannot apply in practice. The theoretical presentation should be made applicable in the practice situation. Furthermore, the students must be supported in questioning the applicability of theory. Hereby they learn to continuously question everything, also the theoretical knowledge that has been relayed to them. Not only do they learn to apply what has been learnt, but also to question their own actions. An important skill namely reflection-on-action is being learnt (Schön, 1987). A prerequisite for this is that the students must be continuously aware of their own capabilities as

well as their own shortcomings. They should be accompanied in self-evaluation so that they can become aware of their ability to evaluate themselves and others, and to find solutions to address their own inability and shortcomings as well as that of other nurses in order to address problems that may occur in the nursing care of their patients. To become aware of one's own shortcomings and to rely on one's own ability is, according to Paulo Freire, a pre-requisite for the development of reflection and action or also named 'think and do' (Freire, 1972). With the development of increased skills, the students are able to reflect during action and subsequently develop reflection-in-action also described as 'thinking aloud', so that actions during the implementation thereof can be evaluated and changes made if necessary (O'Neill, 1999).

#### *Contribution of the lecturers*

Students in Nursing Science cannot develop skills in critical thinking and reflection without the accompaniment of experts. Only persons who had already followed the process of developing critical thinking and reflection and had developed into reflective nurses can accompany other persons in developing these skills. In the case of lecturers or mentors/preceptors who are not reflective nurses themselves, it is not possible, because such persons become threatened by the inquiring disposition of the students. They discourage critical thinking and therefore plan learning opportunities for students that promote routine actions without questioning.

Reflective lecturers act as role models for students when they are prepared to evaluate themselves continuously and also encourage students to evaluate not only themselves and their fellow students, but also their lecturers (Hawks, 1992). Instead of persons with all the

knowledge, the lecturers should demonstrate to the students that nobody has all the knowledge and that everybody should continuously seek knowledge.

#### *Implications for distance education*

As the name indicates, distance education takes place over a particular geographical distance (Ayer & Smith, 1998). This automatically limits the contact between lecturers and students. Furthermore, distance education is planned and presented mainly for persons who do not stay near educational institutions and whose circumstances do not make it possible to move temporarily to cities where educational institutions are available. It is thus planned mainly for persons resident in rural areas and is therefore supported by health services in the rural areas because students need not move. Services are also disrupted to the minimum by the students' studies (Leasure, Davis and Thievon, 2000). However, it is hoped that the students will improve themselves through their studies and therefore be to the advantage of the health service. It is also anticipated that they will be able to deliver care of a higher quality to patients on completion of their studies.

Distance education in Nursing Science is mainly limited to the presentation of programs for obtaining post-registration qualifications. Due to this it means that those students who successfully complete the courses will be able to give guidance to subordinates either in the clinical field or in the domain of nursing management and nursing education. If they are not reflective nurses already and they are not stimulated in the development of critical thinking skills during the program that they registered for, they will not be able to stimulate and support their subordinates in critical thinking and reflection. It is therefore of the

utmost importance that these future leaders in nursing be enabled to develop into reflective nurses.

Interaction between the student, fellow-students and the lecturers is essential for supporting students in the development of critical thinking. Critical thinking is developed when ideas, concepts and actions of persons are being validated in conversation with other persons (Garrison, 1992). The students in a remote rural area cannot develop these skills without any interaction with other students or their lecturers. They do, however, acquire knowledge but will still be inclined to continue their invalidated routine actions in practice. Neither the patient care that they deliver nor the guidance that they give to their subordinates will be benefited by their studies.

When study material is being made available to students, as is often the case in correspondence distance education programs, the students memorize the content only and reproduce it in evaluations. Their contribution to their studies is therefore committed to memory only, whereas education takes place on a linear level. The lecturers compile the study material and the students memorize it. A non-linear inductive approach to education is necessary for the support and development of reflective skills so that the students themselves become actively involved in the identification of knowledge and skills that are needed to comply with the outcomes or objectives set for the program (Davis & Crowther, 1995).

Students in rural areas, particularly in developing countries, experience severe shortages in facilities and sources. Resources in the form of information technology are often not available. Not all the hospitals and clinics have computer facilities. Furthermore, the students stay and work away from big cities where facilities like libraries and Internet

facilities are possibly available. It is thus almost impossible for these students to complete any course successfully if all the study material and structured guides are not made available to them.

#### *Necessity of student-student and student-lecturer contact*

The isolation of students in Nursing Science in rural areas, particularly in developing countries should therefore be broken. Two possibilities for breaking this type of isolation exist. Either the educational institution must be taken to the students, or the students must be taken to the educational institution. Not only is the isolation of the students broken by it but an opportunity is created for interaction with fellow students and lecturers that offers possibilities for developing reflective skills.

#### *Contact through the tutor system*

Tutors appointed by the educational institution are currently being used in various existing programs. These persons are usually employed in the geographical area where the students find themselves. The support given by tutors to students is an affordable alternative to contact with persons of the educational institution. Usually it is expected of tutors to fulfill a coordinating function and also to give administrative support to students. The support that they give is in many cases also of pastoral nature and is of great value for the motivation of students (Bailey & Moore, 1989). Unfortunately the system does not necessarily present the opportunities for the development of critical thinking skills. Should the tutors be skilled in the stimulation of these skills, they can act as mentors and stimulate reflection (Kelly & James, 1994). Unfortunately this is not always the case.

Tutors often learn what is expected from them by means of a trial and error method, which in turn makes the training of tutors by the educational institution extremely necessary (Price, 1996). Tutors are not always specialists. According to Hopper (2000), the training of a person by a master specialist remains the only way whereby true professional development can be stimulated. It is particularly necessary in the rural areas of developing countries where shortages are experienced in well-trained persons who can act as tutors. The training of tutors also means that they have to travel to the educational institution or that the lecturers must visit the tutors. This dramatically increases the cost of the programs offered. Coordination and monitoring of the standard of tutorial support is, however, necessary and contribute further to the cost. Direct contact between the educational institution and the tutors is indispensable and should take place repeatedly. It cannot be replaced by correspondence or telephone calls because these persons are responsible for the stimulation and support of student skills. The tutors' skills with regard to critical thinking and reflection should also continuously be stimulated and evaluated. It is thus not a cheap alternative for interaction between students and lecturers.

#### *Contact through visits by lecturers*

Direct contact with the lecturers presents the best opportunity for developing critical thinking skills. The students prefer it and the relationship between lecturers and students is thus personalized (Reinert & Fryback, 1997; Zalon, 2000). A single contact opportunity is, however, not sufficient because it is only an opportunity for making acquaintance whilst the trust between the lecturers and students that is necessary for exposure to self- and reciprocal

evaluation requires that it be established over a period of time. According to Lawton (1997) distance education study material cannot replace these opportunities.

The feasibility of lecturers' journeys to students is, however, questioned. When programs from one country is presented in another, or presented to students who live and work in a widely spread area, it is very difficult to manage the process as well as time consuming and very expensive. Murphy (1995) however, warns that effective distance education is not cheap and can even be more expensive than campus teaching.

Considering that lecturers at educational institutions are appointed after a rigorous selection on the basis of their particular expertise and teaching ability, they are the master specialists, to whom Hopper (2000) refers. It is with these master specialists that students should practise their skills. By means of this the students of rural areas in developing communities get the opportunity to develop critical thinking skills with a true specialist and on completion of their studies they are enabled to make a real contribution to the improvement of nursing care.

The practical feasibility of the system should be investigated and planned according to circumstances. This does not necessarily mean that lecturers should travel to students. It is, however, stronger recommended that students travel to lecturers and spend so-called 'residential weeks' on campus with their fellow students where all the campus facilities are available (Lawton, 1997). This includes library and computer facilities. The residential weeks are followed up by self-study weeks during which students return to their hospitals and clinics and apply what they have learnt.

Another possibility is that some of the lecturers involved in presenting the program



temporarily move to a central town in the specific geographical area where students have a need for a post-registration program. A sub-campus with interactive television contact is established in the particular town (Lia-Hoagberg, Vellenga, Miller & Tao-Yuan, 1999). The lecturers are responsible for all the students in the area. On termination of the planned period, they should have trained enough students in critical thinking and reflection, so that they can return to the campus. The nurses, who were accompanied by them, can then function as well trained tutors so that the program can there be continued with.

Direct contact with lecturers is a very expensive method of training. If taken into account that it is an effective method and that a shortage of role models for young nurses exists in rural areas of developing countries, it is a method that should be considered. Otherwise a situation will be continued with whereby persons obtain qualifications without it being accompanied by skills that were developed.

This approach is only possible if limited numbers of students are registered for distance education programs and if the programs are presented only in specific accessible geographical areas. Distance education does not necessarily mean that larger numbers of students should be handled. Education through this approach must rather be viewed as a method whereby effective education is also made available to persons in the rural areas. It must not take place less effectively in order to make it more available. It should also never be a cheap alternative. More institutions like hospital authorities where students work should be involved in financial support of these students.

### *Interactive distance education technology: support for students in developing countries*

Interactive television offers an affordable

support system to students in the self-study period, in other words, in the period between contact opportunities with the lecturers (Reilly, 1998). It is an affordable possibility even in developing countries. The educational institutions that do make use of this establish centers in a central town in the geographical area served, where students then view the transmissions according to a roster. They can also make use of the facilities to ask questions to the lecturer or to participate in discussions with other students. It makes the use of a problem-based approach to learning possible (Edwards, Hugo, Cragg & Peterson, 1999). Zalon (2000) also proposes that the facilities are used before and after the lectures for discussions in order to replace the office hours of the lecturers. The lecturers are then available and the students can put questions directly to them.

The centers referred to need not necessarily be structures that must be erected. A venue in a hospital or business can be adapted for this purpose and could possibly be made available to other institutions when not in use. Thus expenses can be shared and presentation of the program becomes more affordable. A full-time center manager is not needed because the tutor or even one of the students can handle the transmission.

Audio-teleconferences do not provide the same opportunities as television facilities, but can also be used in support of distance education students. Contact between lecturer and student and student-student is also made possible. It is even more affordable than television facilities and interaction with lecturers and students are brought about.

Evaluation feedback serves also as support to students. It is therefore necessary that it must be done comprehensively and in a constructive and supportive manner. Commentary passed can either pose challenges to the students

or discourage them. Not only commentary regarding shortcomings should be included, but particular facets should also be pointed out by means of which the students can demonstrate their development in critical thinking (Price, 1996). In order to ensure that the feedback also takes place at interactive level, the lecturers should encourage comments by the students regarding the manner in which they handled the evaluation. Thereby the lecturers show their continuous pursuit of excellence.

## SUMMARY

Students in Nursing Science in developing countries earn, in as much as their colleagues in other countries, the best education that can be given to them under the circumstances. For this reason the most important consideration in the choice of an educational approach for developing countries should not only be affordability, but also affordable effective education. This is only possible when programs presented by distance education are planned in such a way that sufficient opportunity for contact with fellow students and lecturers is ensured so that development of critical thinking and reflective skills can be promoted by it.

## RERERENCES

1. Ayer, S & Smith, C 1998 Planning flexible education to match the needs of consumers: a national survey. *Journal of Advanced Nursing*, 27(5): 1034 – 1047
2. Bailey, D & Moore, J 1989 Closing the distance: counseling at O.U. residential schools. *Journal of Guidance and Counseling*, 17(3): 317 - 330
3. Davis, L & Crowther, D 1995 Active Learning 3, The benefits of using multimedia in higher education: myths and realities. CTISS Publications Oxford
4. Edwards, N, Hugo, K, Cragg, B & Peterson, J 1999 The integration of problem-based learning strategies in distance education. *Nurse Educator*, 24(1): 36 - 41
5. Freire, P 1972 *Pedagogy of the Oppressed*. Middlesex: Penguin Books
6. Garrison, DR 1992 Critical thinking and self-directed learning in adult education: an analysis of responsibility and control issues. *Adult Education Quarterly*, 42(3): 136 - 148
7. Hawks, JH 1992 Empowerment in nursing education: concept analysis and application to philosophy, learning and instruction. *Journal of Advanced Nursing*, 17: 609 – 618
8. Hopper, KB 2000 Are digital distance learners learning or just distant? *Letter. Respiratory Care*, 45(4): 432 - 434
9. Jarvis, P 1992 Reflective practice and nursing. *Nurse Education Today*, 12: 174 – 181
10. Kelly, J & James, C 1991 The process of facilitation in open learning. Conference Paper, *Nurse Education Tomorrow Conference*, Durham University, Durham
11. Lawton, S 1997 Supportive learning in distance education. *Journal of Advanced Nursing*, 25(5): 1076 - 1083
12. Leasure, AR, Davis, L & Thievon, SL 2000 Comparison of student outcomes and preferences in a traditional vs World Wide Web-based Baccalaureate Nursing Research Course. *Journal of Nursing Education*, 39(4): 149 – 154
13. Lia-Hoagberg, B, Vellenga, B, Miller, M & Tao-Yuan, L 1999 A partnership model of distance education: students' perceptions of connectedness and professionalization. *Journal of Professional Nursing*, 15(2): 116 - 122
14. Lyons, J 1999 Reflective education for professional practice: discovering knowledge from experience. *Nurse Education Today*, 19: 29 – 34
15. Murphy, M 1995 Open learning: the manager's and educationalist's perspective. *Journal of Advanced Nursing*, 21: 1016 - 1023
16. O'Neill, ES 1999 Strengthening clinical reasoning in graduate nursing students. *Nurse Educator*, 24(2): 11 - 15
17. Paul, RW & Heaslip, P 1995 Critical thinking and intuitive nursing practice. *Journal of Advanced Nursing*, 22: 40 – 47

18. Powell, JH 1989 The reflective practitioner in Nursing. *Journal of Advanced Nursing*, 14: 824 – 832
  19. Price, B 1997 Defining quality student feedback in distance learning. *Journal of Advanced Nursing*, 26: 154 - 160
  20. Reilly, CE 1998 A satisfaction survey on distance education: A model for educating nurses in the Cognitive Treatment of patients with Addictive Disorders. *Journal of Psychosocial Nursing*, 36(7): 38 – 41
  21. Reinert, BR & Fryback, PB 1997 Distance learning and nursing education. *Journal of Nursing Education*, 36(9): 421 – 427
  22. Schön, DA 1987 *Educating the reflective practitioner*. San Francisco: Jossey-Bass Publishers
  23. Zalon, ML 2000 A prime-time primer for distance education. *Nurse Educator*, 25(1): 28 - 33
- 

**Received:** 10/13/2003

**Revised:** 11/22/2003

**Accepted:** 12/13/ 2003