An assessment of teaching strategies used by lecturers at a nursing college in Mpumalanga

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The need for the utilization of various teaching strategies by lecturers when facilitating learning cannot be overemphasized. The aim of this study was to establish if lecturers at a Nursing College in Mpumalanga were using teaching strategies that could facilitate the personal development of nursing learners. A quantitative approach was followed for this study. The participants of the study were all lecturers at a Nursing College in Mpumalanga. Data was gathered by means of a questionnaire. Descriptive statistics were used to describe and summarize data regarding the type of teaching strategies used and the recommendations that could enhance the utilization of various teaching strategies. The data revealed that the teaching strategies mostly utilized required active participation of the learners namely: formal/informal writing of assignments; learner-led class presentation; group sessions; clinical case studies; role-playing and clinical rounds. Inclusion of certain strategies such as problem-based learning, structured accompaniment and computer literacy for learners could enhance the personal development of nursing learners. Although lecturers did use some of the teaching strategies that could enhance the personal development of nursing learners, staff development regarding the utilization of various teaching strategies was highlighted as an important factor to be considered. Other findings revealed that lack of resources have a negative influence on the utilization of various teaching strategies.

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Introduction
The view of health from a nursing perspective emphasizes the quality of life of the individual, which is more than just the absence of disease (Vlok 1996:7). The South African Nursing Council (SANC) shares the same view. In order for this goal to be achieved, the SANC believes that all programmes of nursing education should be directed towards the provision of nursing practitioners who are able to deliver effective, comprehensive nursing care based on the needs of the communities they serve (SANC [S.A.]: 4). The outcomes emphasized by the SANC that should be achieved by learners during their education and training are (SANC [S.A.]: 6):
- Ability to be an analytical- evaluative and creative thinker;
- Capacity to interpret scientific data for nursing outcomes;
- Ability to draw conclusions and to exercise independent judgment.

The South African Qualifications Authority (SAQA) requires the inclusion of critical outcomes in all programmes of education and training (SAQA [S.A.]: 8). The implications of the demands put forward by the SAQA and the SANC are that lecturers should expose learners to various teaching strategies and learning opportunities in order for the latter to attain the intended outcomes. The attainment of the set objectives is viewed as important by educational institutions because it serves as an indicator of the personal development of students (SAQA [S.A.]: 8).

Motivation for the study
SAQA has adopted various critical cross field outcomes intended to direct the thinking of facilitators of learning. At least some of the outcomes should be incorporated in the personal development of learners. These outcomes include the following:
- Identifying and solving problems using critical and creative thinking;
- Working effectively with others as a member of a team, group, organization and community;
- Collecting, analyzing, organizing and critically evaluating information;
- Reflecting on and exploring a variety of strategies to learn more effectively.

To contribute to the full personal development of a learner, all activities of lecturers should be directed towards attainment of the critical outcomes (SAQA, [S.A.]: 8).

Nursing Colleges are accountable to the public, the learners and regulatory organizations such as the South African Nursing Council (SANC) for educating critically thinking and highly skilled health professionals (SANC, Regulation R.425 Guideline 1985:1). The requirement by SAQA that all programmes include critical outcomes, requires of lecturers to ensure that the teaching strategies used contribute to the personal development of nursing learners.

The demands of the academic situation coupled with the need to personally develop a learner, make it difficult for lecturers to maintain and update their skills. It is therefore of utmost importance that, taking the above into account, lecturers should be constantly reminded of the various teaching strategies at their disposal. Lecturers are in an excellent position to provide the necessary opportunities to enhance the personal development of learners, especially if they are familiar with appropriate teaching strategies.

SANC emphasizes that all programmes for the four- year comprehensive course should be directed specifically at the development of the personal and professional skills of a nurse (SANC, Regulation R.425 Guideline, 1985:2). The views of both SANC and SAQA are similar because both have in mind the personal development of a learner.

Aim of the study
The aim of the study was to establish if the lecturers at a Nursing College in Mpumalanga use teaching strategies to facilitate learning to ensure the personal development of nursing learners.

Research objectives
Considering the aim of this study the following objectives were formulated:
- To establish which teaching strategies have been planned for in the nursing education programme of a nursing college in Mpumalanga.
- To establish whether nurse educators use teaching strategies planned for in the nursing education programme.
- To establish whether the teaching strategies used by lecturers in a nursing college in Mpumalanga contribute to the personal development of nursing learners.
- To make suggestions regarding the use of teaching strategies that will lead to the personal development of nursing learners.

Definition of core concepts
Personal development
For the purpose of this study personal development will include the following:
- That the learner will at least demonstrate some of SAQA’s critical outcomes from first- to fourth- year level in all nursing science subjects.
- That the learner will, according to SANC, develop the ability to be an analytical, critical, evaluative and creative thinker. This learner must be able to interpret scientific data, make conclusions derived from the data and be able to exercise judgment independently (SANC Policy Regarding Nursing Education [S.A.]: 6).

Personal development that the learner should display in this study, embraces concepts such as problem-solving, critical and creative thinking, participating...
A teaching strategy can be defined as a broad plan of action for teaching activities with the aim to achieve an outcome (Van der Horst & McD Donald, 2003:21).

Teaching strategy

According to Jacobs, Vakalisa and Gawe (2008:25) a teaching strategy gives the notion to facilitate activities in the psychomotor areas, through the active involvement of the learner (SANC, Regulation R.425 Guide, 1985:3). Thompson and Bartels (1999:171) express the same view as SANC when they state that learning entails not only what the students know. Learning involves not only knowledge and abilities but also values, attitudes and habits of mind that affect both academic success and performance beyond the classroom level. This implies that nurse educators should expose learners to multiple instructional strategies that will enhance the achievement of personal development outcomes. Bell in Simpson and Courtney (2002:4) states that debate is a strategy essential to critical development. Nurse educators can involve learners in debate sessions regarding the subject of Ethics and Professional Practice by the use of scenarios or case studies. Miller and Malcolm in Simpson and Courtney (2002:8) strongly encourage the integration of instructional strategies to enhance critical thinking at all levels of the nursing curriculum, while Paul in Simpson and Courtney (2002:8) argues that it is essential for nurse educators to abandon strategies that make learners passive recipients of information. Active learning strategies mentioned by Youngblood and Bertz (2001:3) comprise portfolio development, clinical case studies, active examination preparation and deconstruction, and cooperative learning. Formal/informal writing assignments or brief case studies, questions that involve reasoning skills, an ability to organize and articulate knowledge and getting into dialogue on complex problems are said to be strategies to encourage critical thinking (Simpson and Courtney 2002:9).

According to Morales-Mann and Kaitell (2001:1) problem-based learning (PBL) is a strategy of group learning, which stimulates learners to grasp problem-solving because it uses true-to-life problems as triggers. Best and Rose (1996:42) observe that ward rounds, team meetings, group sessions, in-service sessions, community education and evening programmes are additional learning experiences to expose learners to. Motivation to learn can be fostered by using portfolios as a method of teaching and it will assist a person to monitor his or her own development, and promote reflection on practice by providing continuous cognitive feedback (Tillema 1998:263). Nursing education literature clearly demands that curricula should change from traditional approaches where teaching emphasizes transfer of knowledge from teacher to learner, to a curriculum that demands active participation of students in the acquisition of knowledge (Amos and White 1998:1; Loving and Wilson 2000:1; Morales-Mann and Kaitell 2001:1; and Shell 2001:8). Self-directed learning, small group activities and PBL are examples of such educational approaches that can enhance insightful learning (Lunyk-Child, Crooks, Ellis, Ofosu, O Mara and Rideout 2001:116). Meyer, van Niekerk & Naude (2004:114) supports the idea of pre-planned educational activities. These authors are of the opinion that nothing concerning the education and training of nursing learners should happen by chance. Both lecturers and managers should remember that opportunities for learning need to be created. Exposing learners to various methods of teaching will enhance the incorporation of the experiences of each method into observable behavior (Steinaker and Bell in Hinchliff 1996:79).

The implication for nurse educators with regard to the personal development of learners is that they should be effective in their teaching. To impart the above core skills, a lecturer should possess knowledge of the subject matter and be flexible in the use of a variety of teaching methods (Kelly 2002:3).

Literature review

The SANC emphasizes the development of a nurse on a personal level, stating that the principles of learning should be observed. This implies that learning should lead to behavioral change in the cognitive, affective and psychomotor areas, through the active involvement of the learner (SANC, Regulation R.425 Guide, 1985:3). Thompson and Bartels (1999:171) express the same view as SANC when they state that learning entails not only what the students know. Learning involves not only knowledge and abilities but also values, attitudes and habits of mind that affect both academic success and performance beyond the classroom level. This implies that nurse educators should expose learners to multiple instructional strategies, that will enhance the achievement of personal development outcomes.

Research Methodology

Research design

A comparative non-experimental descriptive survey was used, to identify and document the teaching strategies used by lecturers at a nursing college in Mpumalanga. This method was chosen for its advantage in arriving at a standard against which the researcher could measure the types of teaching strategies used for the attainment of personal development outcomes in a learner nurse. Descriptive statistics were used to describe and summarize data regarding the types of teaching strategies used at the nursing college. The extent of the research was limited to the strategies used by lecturers during the four-year Comprehensive Nursing Course at the nursing college in Mpumalanga.

Population and sampling

A population is the entire aggregation of persons, objects or events that meet a designated set of criteria (Polit and Hungler 1999:278). The population in this study comprised the lecturers who were involved in teaching all the nursing science subjects from the first- to the fourth-year of the comprehensive nursing programme offered in the Mpumalanga College.

Sampling refers to the process of selecting a portion of the population that will represent the whole population (Polit and Hungler 1999:279). For the purpose of this study a census sample was selected. When the entire population is small, everybody can be included in the study. The census sample consisted of all twenty-five (n=25) lecturers on the staff establishment of the college in Mpumalanga that were invited to participate. The sample was not considered to be representative of all lecturers of nursing colleges in South Africa because only one college was chosen. The criteria used for selecting the respondents were as follows:

- All respondents had to possess a diploma in nursing education;
- All respondents had to be registered at the SANC as nurse educators;
- All respondents had to be in-
volved in facilitating theory and/or clinical learning for the four-year comprehensive programme.

Research instrument
After a thorough review of the related literature, the researcher designed and developed an 11-item questionnaire to assess the teaching strategies used in the given situation. In view of the nature of the study, both closed- and open-ended questions were employed. The questionnaire consisted of three parts with eleven questions. In part one the participants were asked to provide demographic information. In part two the participants were requested to provide information on the teaching strategies that they used to facilitate learning. In part three the participants were requested to provide recommendations to enhance the utilization of various teaching strategies.

Ethical consideration
Permission to carry out the research was given by the Department of Health and the Ethical Research Committee of the Mpumalanga Province as well as the Ethics Committee of the University of Pretoria. The participants were asked not to include their names. Their consent to participate in this study was determined by the completion and return of the questionnaire.

Validity and reliability
• Validity
Validity refers to the extent to which the questionnaire addresses the research question, objectives or hypothesis posed by the researcher (Parahoo 1997:246). Face validity was aimed at for this study, because it allows independent lecturers to evaluate the questionnaire (Parahoo 1997:275). The researcher formulated the questions and her supervisors and a statistician at the University of Pretoria validated them. The eleven-item survey instrument was tested for content and face validity by a panel of three previous lecturers who had resigned from the College less than five months prior to the investigation. Revisions were made following their review of the instrument.

Reliability
Reliability refers to the consistency with which respondents understand and respond to the questions (Parahoo 1997:265). A pilot study was carried out by using three members of the group of lecturers (the population) who were similar in characteristics to those included in the main study.

Data collection
The questionnaire was personally handed over to the participants by the researcher at the provincial tutors’ meeting. A total of twenty-five questionnaires were distributed to the participants. Twenty-one responses were returned using the provided stamped self-addressed envelope.

Data analysis
Numeric values were assigned to the answers given. Data editing was done to check for any errors that needed corrections. Descriptive statistics were used to describe and summarize data on the types of teaching strategies used by lecturers.

Analysis, discussion and recommendations of research results
The census sample consisted of twenty-five (25) lecturers facilitating theory and clinical learning during the four-year Comprehensive Nursing Course at the said nursing college. The response rate for the survey was 84% (n=21). A discussion of the results together with recommendations will follow on each questionnaire item.

Part I: Demographic factors
Most of the respondents held a senior appointment as was illustrated by 91% (n=19), that were employed as chief professional nurses, followed by 10% (n=2) who were appointed in assistant director posts. Seven lecturers (33%) had occupied their posts for between one and five years. It is evident that the majority of lecturers had occupied their posts for an extensive period of time as 38% (n=8) between six and ten years and 29% (n=6) between 11 and 15 years. The lecturers were well educated as a Masters degree was held by 14% (n=3) of the respondents; while 24% (n=5) held an Honours degree and 57% (n=12) held a Baccalaureate degree. The majority of the respondents fell in the older age groups as illustrated that 38% (n=8) were between 46 and 50 years of age, followed by 33% (n=7) of the respondents who fell in the age range of 41 to 45 years. The majority of respondents who participated in the study were females, 95% (n=20), while 5% (n=1) was male. All participants were registered General Nurses and Midwives with a response of 100% (n=21). A Community Nursing Science registration was held by 68% of respondents (n=14), followed by Psychiatric Nursing Science with a response of 33% (n=7). All respondents (100% (n=21) had a qualification in Nursing Education.

Part II: Data regarding teaching strategies used
Strategies used when facilitating learning
Data collected on this item revealed that the majority of the lecturers 86% (n=18) preferred to give students formal/informal assignments and facilitate learner-led class presentations, as indicated in table 1. Group sessions were utilized by 81% (n=17); followed by clinical case studies which were employed by 76% (n=16) of the respondents; role play was used by 71% (n=15); clinical rounds and ward rounds were employed by 67% (n=14) and 48% (n=10) respectively. The findings indicate that lecturers were using teaching strategies that will ensure the personal development of learners and facilitate learning. The following recommendations could enhance the utilization of teaching strategies:

• Structured in-service training programmes with regard to the utilization of various teaching strategies when facilitating learning should be planned and implemented;
• Opportunities for lecturers to attend short courses on the facilitation of learning should be funded and supported.

Teaching strategies incorporated in the college curriculum
Incorporation of teaching strategies that require active participation of a learner was reported by 76% (n=16) of participants as their favorite teaching
Table 1. Teaching strategies used when facilitating learning

<table>
<thead>
<tr>
<th>Teaching strategies used</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal/Informal writing of assignments</td>
<td>18</td>
<td>86</td>
</tr>
<tr>
<td>Learner-led class presentation</td>
<td>18</td>
<td>86</td>
</tr>
<tr>
<td>Group sessions</td>
<td>17</td>
<td>81</td>
</tr>
<tr>
<td>Clinical case studies</td>
<td>16</td>
<td>76</td>
</tr>
<tr>
<td>Role playing</td>
<td>15</td>
<td>71</td>
</tr>
<tr>
<td>Clinical rounds</td>
<td>14</td>
<td>67</td>
</tr>
<tr>
<td>Ward rounds</td>
<td>10</td>
<td>48</td>
</tr>
<tr>
<td>Active examination preparation and deconstruction</td>
<td>8</td>
<td>38</td>
</tr>
<tr>
<td>Debates</td>
<td>7</td>
<td>33</td>
</tr>
<tr>
<td>In-service sessions</td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>Cooperative learning</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Brief case studies</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Team meetings</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Portfolio development</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Role development reaction paper</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Other: Community survey</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Evening programmes</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 1: Availability of supportive resources to enhance the utilization of various teaching strategies

Data regarding supportive resources

The survey instrument was also used to collect data on the availability of resources that could enhance the personal development of student nurses, both in class and in the clinical areas. According to the data in figure 1, 52% (n=11) indicated that the College had a well equipped library; 57% (n=12) reported the availability of classrooms to accommodate group sessions; 48% (n=10) mentioned a well equipped simulation room as resources to support learning. Half of the respondents felt that the classrooms were not suitable for group sessions and that the library was not well equipped.

The above findings indicate a limitation in physical facilities that may hinder the use of small group discussions, PBL and cooperative learning. This may mean that lecturers will most probably resort to the use of traditional strategies such as lectures and prefer to utilize the formal/informal writing of assignments and learner-led class presentations.
The following recommendations were suggested:

1. The College’s capital budget should make provision for the building of additional classrooms as well as increasing the resources in the library;
2. Increased access to technological services for both lecturers and students should be supported and implemented by the management of the college.

Available learning aids in the wards
The majority of the respondents, 81% (n=17), indicated that access was given to patients’ case notes for the students to learn from. This response reveals that the majority of the respondents utilized such records to engage learners in learning. Textbooks, information booklets and visual aids provided by suppliers drew good responses of 76% (n=16); 67% (n=14) and 76% (n=16) respectively.

Part III: Data regarding recommendations to enhance the utilization of various teaching strategies
Recommendations for main factors that could enhance the utilization of various teaching strategies were grouped into six categories as illustrated in figure 2. The entire group of respondents, (100% (n=21)) indicated that the availability of material resources could enhance the employment of various teaching strategies. A response of 38% (n=8) indicated aspects of human resources as important factors and curriculum review was indicated by a response of 48% (n=10) as an important factor. Management support were important to 43% (n=9) of the lecturers. The need for capacity building and for service delivery, with a response rate of 24% (n=5) and 19% (n=4) respectively, were the least recommended factors in this respect. Each one of these factors will be analyzed and discussed.

Material resources recommended to enhance the utilization of various teaching strategies
The majority of respondents were of the opinion that broadening the availability of resources to learners and lecturers may contribute to improved utilization of various teaching strategies. As is evident in table 2 the need for teaching aids and a well equipped library received a response of 43% (n=9); followed by a response of 24% (n=5) regarding the need for physical structures as well as for computers and internet facilities.

Human resources recommended to enhance the utilization of various teaching strategies
A number of respondents, 19% (n=4), suggested a need for a reduced number of students per class and/or per group to accommodate small group discussions, while 29% (n=6) reported a need for additional lecturers in order to match student ratios and to enhance problem-based learning. The following recommendation was made:

- That less students be allocated to lecturers in the theoretical and clinical settings to enhance

Table 2. Material resources recommended to enhance the utilization of various teaching strategies

<table>
<thead>
<tr>
<th>Material resources</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadening availability of resources to students and lecturers</td>
<td>10</td>
<td>48</td>
</tr>
<tr>
<td>Teaching aids and well equipped library</td>
<td>9</td>
<td>43</td>
</tr>
<tr>
<td>Computers and internet facilities</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Physical structures</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Easy accessibility to visual aids</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>
Factors that should be included in the college curriculum to enhance the utilization of various teaching strategies

A variety of activities should be included in the education of learners to enhance the personal development of learners. A response of 19% (n=4) indicated that the college curriculum should incorporate new developments such as technology. Lecturers were in support of active participation in learning, as shown by the 14% (n=3) of responses which indicated that the curriculum should accommodate student participation in doctors’ rounds, report taking and handing over at every shift. The introduction of all teaching strategies from the first year of study, a learner-centered curriculum and modular system both received a response rate of 10% (n=2).

Capacity building factors recommended to enhance the utilization of various teaching strategies

Of all the respondents who participated in the study, 19% (n=4) reported a need for academic development to enhance the use of the various teaching strategies; while 14% (n=3) mentioned that there was a need for in-service education with regard to the use of such strategies. The following recommendations were made with regard to lecturers who felt unsure to utilize various teaching strategies:

- Lecturers should be encouraged to attend workshops and undergo training with regard to facilitation of learning to augment their knowledge pertaining to the use of various teaching strategies, documented in the literature as leading to the personal development of learners.
- Lecturers should attend short and long term courses and international conferences on facilitation of learning.

Factors of service delivery recommended to enhance the utilization of various teaching strategies

- Different views were held by lecturers with regard to the factors of service delivery that could enhance the use of various teaching strategies. Good communication, as well as good interpersonal relationships between students and lecturers, received the largest response rate of 19% (n=4), while 10% (n=2) of the respondents indicated ongoing research on issues affecting nurse education as being important towards the facilitation of the use of the various teaching strategies. The following recommendation was made:

- Good communication should be regarded as important because it would open doors for negotiation with regard to the use of certain teaching strategies between lecturers and the students.

Factors of management support that might encourage the utilization of various teaching strategies

A response of 29% (n=6) indicated that there was a need for management to support the use of various teaching strategies, especially by making available mechanisms to support research activities. Two respondents (10%) suggested the drawing up of duty schedules that could accommodate teaching/learning for learners in the wards. The following recommendation was made:

- Managers should have structures at their workplace either by means of user-friendly protocols and/or funding of research activities to encourage lecturers and learners to embark on research matters.

Limitation of the study

- This study is limited to one nursing college; therefore it cannot be generalized to the whole population of nursing colleges and lecturers offering a four-year comprehensive nursing course.
- The type of sampling used may lend itself to too small a population, with the result that results may be limited to the educational background of respondents; for example, they may supply answers according to what the situation instead of what is being actually practiced.

Recommendations regarding future research

A similar study should be done at another college offering the same student registration, to determine whether teaching strategies are utilized to the fullest, to enhance the personal development of student nurses.

Conclusive statement

Various teaching strategies have been used to facilitate learning in learners at the college. However they were not utilized to the full extent due to limitations, such as shortage of resources impacting on learners as well as lecturers. The use of various teaching strategies should never be underestimated to contribute to the personal development of nursing learners.

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