Guided reflection: A valuable tool for improving undergraduate student nurses’ levels of reflection

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Abstract

In 2011, the undergraduate nursing programme at the Durban University of Technology introduced reflective journal writing. Students submitted journals of poor quality which lacked reflection, thus motivating the need to improve the levels of reflection by introducing a structured guide developed from Gibb’s reflective cycle. Using a purposive sampling approach, forty students volunteered their reflective journals to be used for the study. During their clinical placements, each participating student wrote and submitted two reflective journals. Analysis of the journals revealed lower levels of reflection in the first reflective journal compared to improved levels in the second journal. The students initially struggled with the last three phases of Gibb’s framework, but improved following feedback and guidance. Levels of reflection and development of reflective practice could be enhanced if all educators participate actively in guiding and supporting students during the writing of their reflective journals.

Keywords: Gibb’s reflective cycle framework, reflective journals, undergraduate nursing students, clinical learning, guided reflection.

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Introduction

The South African Council for Higher Education (CHE) requires that programmes promote graduates’ successful integration into the world of work and enable graduates to make meaningful contributions in contexts of development (CHE, 2010). It is, therefore, imperative that innovative curricular, teaching, learning and assessment practices are developed to prepare graduates to meet the CHE guidelines. The Durban University of Technology (DUT) has embraced this as a requirement for university programmes and qualifying graduates and for implementation in the undergraduate nursing programme (DUT, 2012). As such, one of the requirements for assessing students’ clinical competence is the submission of completed reflective journals. Believing that critical thinking is an essential outcome for nurses, the South African Nursing Council (2005) makes it a pre-requisite for accreditation of nursing education institutions.
Joubert and Hargreaves (2009) note that learning needs which may not be accounted for in the module outcomes as the students’ progress, through their community experiences, can be identified from students’ completed reflective journals. Writing reflective journals assist students to actively participate in the process, to learn to be self-directed and to multitask within one journal (Smith & Kirsten, 2005). Some studies (Chabeli, 2006; Bagnato et al., 2013) have explored the development of higher order thinking skills and concur that critical thinking, reflective thinking, creative thinking, dialogic thinking, decision making, problem solving and emotional intelligence are higher order thinking skills required from graduates if they are to function effectively in the future working world.

Kennison and Misselwitz (2002), Hargreaves (2004), Clarkeburn and Kettula (2012) all argue that educators and clinical facilitators might lack skills to guide, support and assess students. These authors also indicated that clear guidelines or structure might be lacking and that poor feedback to students, incorrect assessment of the written content could occur. Authentic and valid measurement tools need to be developed and used rather tools which can lead to basing evaluations solely on the personal judgement by the educator (Clarkeburn & Kettula, 2012). According to Moon (1999), Plack and Greenberg (2005) as well as Harrison and Fopma-Loy (2010), assessment of reflective journals can be improved through the development of clear guidelines for students made accessible to students before they start writing their reflective journals. When students are guided, they might be motivated to embark on the reflective process (Dunlap, 2006; Harris, 2006; Epp, 2008; Duffy, 2009; Dean et al., 2012). These authors state that structuring reflection will guide students to begin writing, but warn that the structure must not be too restrictive as this might limit the students’ freedom of writing and reflection. Assessment instruments or rubric must be developed around well-defined frameworks easily understood by students. These must be explained to students before they start writing their journals. Van Aswegen’s Model of Critical Thinking (1998) was used as a framework by Harris (2006) and proved that journaling enabled post-basic nursing students to address issues at a deeper level, looking beyond the superficial aspects of the problem.

Gibbs’ model of reflection (Gibbs, 1988) was used for this study. It consists of six distinct steps namely: the description of what happened; the practitioner’s feelings during the experience; the evaluation of what was good and bad about the experience; the analysis or sense making of the situation; the conclusions and potential alternatives in dealing with the situation, and; the action. The experience of the researcher, as a clinical facilitator for student nurses, led to choice of this particular framework. The students in the study were introduced to reflective journaling during their first year when their submitted journals were of a narrative nature, mostly in a factual trend, and lacked reflection. Gibbs’
Reflective Cycle (Gibbs, 1988) was appropriate for starting the first year student nurses off and allowing them to proceed to reflection based on the implications and action plans that arose from their specific clinical situations (Bulman & Schutz, 2008). It was hoped that the students would have direction and be stimulated to organise their thoughts and their writing. Gibbs’ Reflective Cycle is illustrated in Figure 1.

Gibbs’ Reflective Cycle emphasises that both the event and the feelings are vital for effective reflection to occur. The clinical environment is filled with emotions due to the nature of nursing; it is therefore not possible while carrying out nursing activities to divorce feelings from the equation. This model was used for its simplicity and easy-to-follow steps to assist undergraduate student nurses to understand and develop personally and as reflective thinkers through their journey as students and ultimately to become reflective nurse practitioners. Gibbs’ Reflective Cycle was used and recommended by Chong (2009), Fakude and Bruce (2003) and O’Connor (2008). After using Gibbs’ framework, Wilding (2008) recommended it to be useful for deep learning and practical applications of reflective practice, even for first-year student nurses.
Methodology

This study took place at the Indumiso campus of DUT which is situated in the greater Edendale area of Pietermaritzburg in the uMgungundlovu District of KZN. This is a semi-urban area and the student nurses come mostly from the districts of KZN and surrounding provinces. One hundred and five of these students were registered at DUT for the second year of the programme during 2013. However, five students were repeating their second year, and therefore only 100 were registered as first time second year students.

Reflective learning journals form part of the learning assessment strategies for clinical nursing practice as from the second year of study. Reflective journals are written by the student nurses and submitted to specific clinical facilitators for assessment. The student is required to submit one reflective journal per placement cycle. Only students who were introduced to reflective journals during their first year of study were eligible for selection to maintain internal validity as these students were not ready to participate. Polit and Beck (2012) suggest that if the group is homogeneous, confounding variables are controlled and internal validity is maintained. Only students who signed letters of information and consent were considered for participation in the current study.

A purposive sampling strategy was followed to obtain an appropriate sample for the study. The study population included only 100 first time second year undergraduate students who were on campus and who had been introduced to reflective journaling during their first year of study. All 100 students were invited to participate in this study. The aims of the research and the rights of the students were explained to individual students. The list (or census) of all the first time second year students was obtained from the relevant level coordinator. Each name was allocated a number and using a table of random numbers, 50% of the students were selected. Closing her eyes, the researcher used a pencil to point on the table of random numbers and stopped when 50% of corresponding numbers had been reached. At the end of the selection process, 40 students returned their written consent to participate in the study, implying that 10 students were unwilling to participate in the study.

Quantitative data were collected from two reflective journals submitted by each participant following each period of clinical placement. The first journal was written after the clinical placements took place in June 2013. The second journal was written in August 2013. During this time the first journal was marked, students were given feedback and guidance. Each journal was analysed and graded according to the six steps of Gibbs’ Reflective Cycle (as discussed under the theoretical framework section of this article). The students were at liberty to write on any chosen clinical incident encountered during their clinical placements as long as they wrote according to Gibbs’ Reflective Cycle. Oral and
written guidelines were given before the students commenced their first journal and reinforced after submission before they wrote the second journal. The marking rubric used to grade the journals was adapted from the six steps of Gibbs’ Reflective Cycle. Participants were introduced to the rubric before they commenced writing their reflective journals. The students were rated according to their responses and classified as being critically reflective, reflective and non-reflective. Non-reflective students scored below 50%; reflective students scored between 50 and 74%; critically reflective students scored 75% and above.

The guiding process

Orientation to the reflective journaling process was carried out in a classroom session before of the students’ clinical placements. The process and timeframes were discussed with the students. Oral and written guidelines were explained to the students. The marking rubric was explained with regards to the grading process. Questions and misconceptions arising from the discussion were addressed. It was explained to the students that the overall purpose of keeping a reflective journal was to record their experiences and to reflect on what they had learned. Written instructions for completing the journals were distributed to the students a week before their initial clinical placements. This was done together with an oral summary of the guided reflective journal writing process to reinforce the information. The students were instructed to write a reflective journal on any one critical incident or experience that occurred during their clinical learning experience in their clinical placement situations.

The first reflective journal was collected after the students had completed their first two weeks of clinical placement. This journal was graded according to the rubric adapted from Gibbs’ Reflective Cycle. Feedback was given to the participants on their performance in reflective journaling to further guide them. Identified challenges and misunderstandings were again discussed; students were further guided on how to improve from being descriptive to engaging in reflective analysis of their critical incidents. The second reflective journal was collected two months after the first journal. The students had spent two weeks at mental health clinical facilities. This journal was also graded. The purpose and guidelines were reinforced and the marking rubric was revisited to encourage students to fully reflect on their experiences. Feedback on overall performance was provided to the students.

Trustworthiness

The study was done under the watchful eye of two supervisors, a statistician was consulted and two clinical instructors. The clinical instructors are seasoned nurse educators with more than ten years of experience between them. They specialize in clinical training of midwifery and mental health at DUT.
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Results and Discussion

The rubric used for grading the reflective journals was adapted from the theoretical framework by Gibbs’ (1988) six steps of reflection namely; description, feelings, evaluation, analysis, conclusion and action plan.

Reflective Journal 1: Levels of reflection

The highest score obtained in the first reflective journal was 67% and the lowest was 20%. Of the 40 participating students, 37.5% (n=15) obtained scores between 50-74% indicating that they were reflective; 62.5%, (n=25) scored below 50% indicating that they were non-reflective at the initial phase of journal writings. No participant scored above 75% (n=0) to reach the level of critical reflection (Table 1).

<table>
<thead>
<tr>
<th>Reflective journal</th>
<th>Critical reflective</th>
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<th>Non-Reflective</th>
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<tr>
<td>1</td>
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<td>15</td>
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<td>2</td>
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<td>5</td>
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The overall reflective level of the first reflective journal was 42.43%. This is also supported by Wong et al. (1995); Fakude and Bruce (2003); Epp (2008) and Bagnato et al. (2013) who reiterated the same observations in their studies where a high proportion of second and third year students demonstrated descriptive journaling but at low levels of critical reflection. Wong et al. (1995) further explained that the students displayed little awareness of the contextual factors with concrete thinking and showed minimal evidence of abstract thinking. Wong et al. (1995) cautioned educators that the group of students who were unable to demonstrate evidence of reflective elements was not a ‘lost case’ as they had learned to devise plans, and implement thoughtful actions. Their downfall was their inability to turn the experience into another potential learning opportunity. Makhathini and Uys (1996) and Botes, as cited by Mangena and Chabeli (2005) identified was a tendency among students not to fully engage with problems in their everyday practice, resulting in a lack of deep reflection. Makhathini and Uys (1996) added that the emotional engagement with the problem at hand sometimes overshadowed the problem solving attitudes of students. Gustafson and Bennett (2002) and Chong (2009) argued that it is ultimately up to the student who is motivated and mentally prepared to take on reflective tasks and enjoy the benefits that come with it.
Reflective Journal 2: Levels of reflection

After analysing the first reflective journals, participants were given feedback on their performance. During this session the questions and confusions regarding the writing of the journals were addressed. Participants were commended on their good performance on the ‘descriptive’ and ‘feelings’ aspects of their journals. The guidelines were revisited on how to improve the other four stages where they had performed poorly. The grading of the second reflective journals was done in the same manner as used for the first reflective journals.

The overall levels of reflection show that only one participant scored above 75% and therefore reached the level of critical reflection. The highest score was 80% and the lowest was 33%. A significant number (85%; n=34) of the 40 participants reached the reflective level as their scores were between 50-74%. A few participants (13%; n=5) scored below 50% and were considered non-reflectors. This indicates that there were higher overall levels of reflection in the participants’ second reflective journals. The results indicate that at the end of the second reflective journal, the number of reflective participants increased by approximately 48%.

Comparison of levels of reflection for the two journals

The Wilcoxon Signed Ranks test performed on the data showed significant difference between the total percentage of the scores before and after (Z (N=40) =-5.154, p<0.0005). The average/mean scores for reflective journal one was 42.30, and 59.30 for reflective journal two. This indicates that participants scored significantly higher in their second reflective journal. Approximately 47.5% (n=19) of participants who were previously non-reflective improved to the reflective level by the end of the second reflective journal. Of the participants 12.5% (n=5) remained non-reflective by the end of the study as their scores were below 50%. However, although still below reflective level, 10% (n=4) of the participants showed a steady improvement from their original scores (See Table 3).

Performance in the first journal indicated that 62.5% (n=25) of the participants achieved below 50%. The second journal’s scores indicated that 85% (n=34) of participants achieved above 50%. Performances in the second journal demonstrated that 2.5% (n=1) of participants obtained a score of 80% indicating critical reflection (75%-100%) whereas 0% (n=0) obtained critical reflection in the first journal.
There was a noticeable improvement of reflection from 37.5% (n=15) in the students’ first reflective journals to 85% (n=34) in their second journals. The feedback provided to the students helped students to obtain better scores for their second reflective journals. This is congruent with studies by Taylor-Haslip.
(2010) and De Swardt et al. (2012) who also witnessed improved levels of reflection after guided reflection with feedback. Consequently in this study, the number of reflective participants increased by 47.5%. Only one participant, 2.5% (n=1) obtained a score of 80% reaching critical reflection (75-100 %) in the second reflective journal. Critical reflectors give a broader perspective on the experience; displayed a clear analysis of the experience and its contribution to their personal, professional and knowledge enhancement (Wong et al., 1995).

The critical reflector participant’s analysis clearly stated and reflected on what could have been done to prevent the situation and what could be done to achieve improved readiness for future similar occurrences. In addition, this participant was able to describe various strategies to improve performance and clearly displayed a changed perspective on the situation and offered future action plans and readiness should similar events occur. This is supported by Wong et al. (1995) who stated that critical reflectors were able to critically examine the experience and themselves and frame the problem within a context, while “adopting a wide and multidimensional perspective in dealing with the issue at hand”. The highest number of participants 85% (n=34) scored between 50-74% for their second journals, indicating that they were reflective. This is supported by Wong et al. (1995) where the students were able to give adequate information about their experiences, and sometimes turned them into new learning opportunities. Relationships between prior knowledge and/or feelings about new knowledge and/or feelings were explained and they were able to modify what was known to new situations, arriving at insights and possible ideas where necessary (Wong et al., 1995).

At the end of the current study, a significant number of students (85.0%; n=34) reached reflective levels. This positive result is encouraging as the researcher succeeded in elevating these students from reflective journals which were merely descriptive and lacked reflection to a reflective level. These students were only in their second year of training and it is envisaged that they would continue to develop and reach critical levels of reflection during their four year undergraduate programme to become truly reflective nurse practitioners after graduation.

**Limitations**

The study was conducted in one university with one group of second year students. Thus the study’s findings might not be generalised to other universities or to students registered for other years of the undergraduate programme. However, the results will be used within the same university to increase students’ reflective levels. Two reflective journals appeared inadequate at the end of the study. Most students progressed from non-reflection to reflection by the end of the study. A third journal might have given a clearer picture regarding the reflective levels of students as most
students might have reached critical reflection levels. Reflective journals were evaluated from 40 first time second year student nurses who were willing to participate in the study. There can be no guarantees that students who refused to participate would have had similar or different experiences. All reflective journals were graded by the researcher. Consequently, different evaluators might have arrived at different scores although this would be unlikely because Gibb’s framework was used consistently. The current study did not involve lecturers and/or clinical facilitators so their levels of reflective thinking and of encouraging students’ development of reflective thinking through writing their reflective journals remain unknown.

Recommendations

As writing reflective journals is expected from undergraduate student nurses at DUT, students’ progress should be monitored throughout the four years of their programme, based on Gibb’s framework. Different clinical evaluators should score the same students’ reflective journals in future and the scores awarded to the same journal by different evaluators should be compared. Potential misunderstandings should be identified and addressed.

In order to enhance the lecturers’ understanding of the process of reflective journal writing, the lecturers should be encouraged to write their own reflective journals about specific incidents during their classroom and/or clinical teaching situations and these journals should be evaluated by their peer lecturers under the guidance of an experienced person, such as the researcher. This would seem to provide an avenue for teaching as a “…facilitative supportive process…demanding acceptable performance of the teacher and the learner… This perspective enables learners and teachers to engage in a sharing experience which highlights problem solving, experiential learning, and caring actions, is appropriate for meeting the multiple goals of clinical practice in the nursing program; and forms the basis for the learners’ eventual development of their own theory of practice” (Reilly & Oermann, 1999).

Conclusion

Guiding, supporting and giving constructive feedback to students embarking on writing reflective journals proved valuable in improving levels of reflection. Gibbs’ Reflective Cycle of 1988 proved to be user-friendly with students and they found it easy to follow when they were guided. It helped to identify the areas of reflection where the students are stronger and areas where they had challenges. This information could be used during guidance of students, and it might prove successful for improving students’ reflective levels in their second journals.
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