Perceived improvement of postgraduate students’ fundamental human virtues through a research proposal refinement course

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Abstract

An authentic learning opportunity was presented to twelve postgraduate students in the format of a well-planned course over five days by experts to refine their research proposals for submission to various committees at the university. The purpose of the authentic learning opportunity was to improve the students’ fundamental human virtues, which in turn was expected to contribute to personal and professional development of the postgraduate students in terms of their research progress and research output. The perceived improvement of fundamental human virtues was described through Zuber-Skerrit’s CRASP model of action research. The students used a Likert-scale to indicate their perception of improvement in fundamental human virtues, and reflective notes on their experiences of the course. The researcher kept a reflective diary to note observations during the facilitation of the course. The results indicated that all the students perceived their fundamental human virtues to have improved, especially motivation, perseverance, common sense and responsibility, and that they found the course beneficial to their research progress. It was concluded that the research proposal refinement course contributed to the students’ perceived fundamental human virtues. A follow-up study needs to be done to describe the association between the results of this study and the actual research progress and output.

Keywords: Authentic learning opportunity, fundamental human virtues, personal and professional development, research progress.

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Introduction

The perceived improvement of fundamental human virtues, during an authentic learning opportunity to refine research proposals, forms part of personal and professional development of postgraduate students. Research forms an important part of postgraduate studies, though the research progress and throughput of students are often a headache for supervisors and faculty management. In an attempt to enhance the students’ research progress the Faculty of Health Sciences at the university presents research proposal refinement opportunities for postgraduate students. Except for enhancing research progress, these opportunities also have the potential for authentic learning that improves
Slabbert, de Kock and Hattingh (2011) describe a fundamental virtue or an acquired human quality as “an ethical competence of moral excellence that sources and integrates all intelligence domains. However, a virtue recognises the transcendent intelligence to access wisdom that provides the power and freedom of choice to always do the right thing irrespective of adversity, conditions or circumstances. This constitutes moral character and practical, spiritual wisdom. A virtue cannot be taught or learned, it is acquired through real life experiences.” Slabbert et al. went on to say intrapersonal virtues refer to human qualities such as self-confidence, motivation, initiative, effort, perseverance, common sense, responsibility, independence and joy. Interpersonal virtues include human qualities such as humanization, communication, dealing with feelings, justice, forgiveness and leadership (Slabbert et al., 2011).

The research proposal refinement week is planned as an authentic learning opportunity for postgraduate students from different healthcare disciplines who have already developed research proposals. The purpose is refinement of proposals before submission to the various committees for formal approval. By the time the students attend the scheduled opportunity, they have already completed a course in research methodology presented by the respective departments, have dedicated study supervisor(s) appointed and made sufficient progress to have a concept proposal.

The proposals are based on a real life research problem that they have an interest in and have ownership of. The students have the opportunity to obtain information from experts, of which they have to decide what thereof they can use, adjust or ignore in the process of refining their own proposals, either on their ‘own or with input from co-learners. They get the opportunity to review and give input into co-learners’ proposals as well as being on the receiving end of criticism and input.

A supervisor influences the students’ experience of supervision and research. In this case supervision is seen as a personal journey of discovery that leads to transformation through mentoring as described by Brew (cited in Lee, 2007). Furthermore Lee (2007) indicates that supervision is a facilitative process requiring support and challenge, which is achieved through a mentoring process.

Muller (1998) described facilitative elements and stumbling blocks in her model for research supervision. Facilitative elements are the qualities leading to successful supervision and stumbling blocks are those obstructing and precluding the successful development of the student, while research supervision is a goal-directed interpersonal engagement between a supervisor and a postgraduate.
The research process is the way that the supervisor and student deal with the facilitative elements and the stumbling blocks through their engagement for the student to develop from a novice scientist along a continuum of scientific development (Muller, 1998). The facilitative elements were kept in mind and the stumbling blocks avoided as far as possible during the facilitation of the research proposal refinement week.

The educational approach during this week was to facilitate holistic, situated learning opportunities with acknowledgement of wholebrain learning as described by Hermann (2007) and De Boer, Bothma, du Toit and Scheepers (2012) as well as the complexity of continuous learning as described by Webster-Wright (2009).

The principles of wholebrain learning are seen as fundamental with recognition that students think, experience and respond differently to opportunities and that they have different learning style preferences depending on the dominance of a particular quadrant(s) of the brain. Dominance of the left cerebral hemisphere results in analytical, logical, quantitative and factual thinking, while left limbic dominance focuses more on sequential, detailed, organised and planned thinking patterns. Right cerebral hemisphere dominance prefers holistic, intuitive, synthesising and integrating thinking, and right limbic dominance results in a kinesthetic, sympathetic, interpersonal and emotional style of thinking (Hermann, 2007; De Boer et al., 2012). The research refinement opportunity was therefore deliberately planned to include factual and statistical information, sessions with detailed, well-planned and logical presentations, opportunities for group discussions and unstructured individual and group assignments.

It was further recognised that knowing is embodied, contextual and embedded in previous experience and that it is most often socially constructed as discussed by Webster-Wright (2009). Authentic learning opportunities should therefore be situated or contextual and should be socially constructed (Herrington, Parker & Boase-Jelinek, 2014). The authentic learning opportunity was expected to improve fundamental human virtues with resultant personal and professional development and progress in research.

The research question for this study was derived from this expectation, namely: ‘How did the students perceive their own improvement in fundamental human virtues as a result of the research proposal refinement course?’ The aim of the study was to describe the postgraduate students’ perception of their own improvement in fundamental human virtues as a result of the research proposal refinement course.
Methodology

Zuber-Skerrit’s CRASP model (1992) was seen as a suitable approach to describe the students’ perception of their own improvement in fundamental human virtues, which is associated with personal and professional development. The CRASP model (illustrated in Figure 1) describes action research as Critical collaborative enquiry by Reflective practitioners being Accountable and making the results of their enquiry public, Self-evaluating their practice and engaged in Participative problem-solving and continuing professional development. The outcome thereof is expected to be professional development through authentic learning.

It should be noted that multi-methods (quantitative and qualitative methods) have been used to collect and analyse data to complement each other. The implementation of action research in this study is described in the following section.

Plan

The first author of the study was the facilitator of the course (also referred to as the researcher), while the second author was a mentor with regard to facilitation of authentic teaching and learning, and a contributor to the article.
As facilitator the researcher had to clarify her position regarding education as well as research prior to the planning and facilitation of the course. The point of departure for this study was that there is not only one truth, but there is a dynamic world where multiple truths exist. The implication thereof for research and education practice is that theory and practice influence each other – theory is derived from practice and practice is informed by theory.

The course was presented to twelve postgraduate students from the Faculty of Health Sciences from different departments. They submitted a draft proposal prior to attendance. The course was presented for five consecutive days and included presentations by various experts on selected research topics. These topics included principles of academic writing, literature review, problem statement, overview of qualitative research process, overview of quantitative research process, mixed methods research, and ethics in research.

The students refined specific sections of their proposals each day which they presented the following morning. On the last day they presented the full proposal in the format of a defence to a panel of co-students, supervisors and presenters.

During the planning phase, the researcher did critical self-evaluation in terms of her aim, values and beliefs, and how to address the facilitative elements of supervision, avoid the stumbling blocks, accommodate all learning style preferences and creating meaningful situated learning opportunities. This critical self-evaluation was done in the format of a reflective diary.

Act

Based on self-evaluation and the various identified aspects discussed in the introduction, the course was planned and facilitated to create authentic learning opportunities. The programme included sessions of formal teaching, discussions, group work, individual contact, presentations of own work and peer review. The students also had to refine their own proposals.

Observe

The researcher continued to keep a reflective diary up to date to be able to keep track of the extent that facilitation of authentic learning was adhered to. Real-life examples and the students own research topics where used when asking guiding questions or explaining concepts to facilitate learning where the students could link and apply abstract research concepts to authentic knowledge.

Reflect

In this step the students were requested to reflect on their own perceived improvement in fundamental human virtues during the course. The one part of
the instrument was a Likert scale from 0 to 4 (0=none; 1=limited; 2=reasonable; 3=sufficient; 4=more than expected) with the listed fundamental human virtues as described by Slabbert et al. (2011). The other section was to reflect on their experiences. A discussion was held and field notes were used to capture the information as detailed as possible. The researcher used her reflective diary to critically reflect on the changes, dynamics and other observations made.

Ethical considerations

All ethical principles were adhered to. The students gave informed consent at the beginning of the course that information gathered during the course can be published. They were assured that confidentiality will be maintained and that they could withdraw participation regarding feedback on teaching and learning practices at any time without any penalty. None withdrew at any time.

Rigour

Rigour was enhanced using the framework for trustworthiness of Lincoln and Guba, as described by Polit and Beck (2012). Strategies to enhance credibility included prolonged engagement of the researcher in the topic and the field of education, detailed notes on actions and observations during the course, as well as mentorship of the co-author in facilitation of authentic teaching and learning. An auditable trail was left to increase dependability and confirmability. Transferability was not the focus of the study, but the process will be repeated to explore transferability, as well as to enhance the dependability.

The instrument used to describe the students’ perceived improvement in fundamental human virtues, was derived from the virtues described by Slabbert et al. (2011). Five options for responses were included ranging from no improvement (0) to improvement that was more than expected (4), distributed with intervals that allow space for various options. The instrument was considered as valuable to quantify the students’ perceptions of their improvement in fundamental human virtues which is a subjective qualitative phenomenon, and by doing so contribute to the rigour of the study.

Results

The results on the question of how the students perceived their own improvement regarding fundamental human virtues are included in Table 2. Eleven respondents returned the questionnaire (the twelfth person was absent on the last day due to illness).

Based on the results (Table 1), it can be concluded that the proposal refinement course contributed to students’ perceived improvement of all the fundamental human virtues to various degrees. The virtues indicated as most improvement
Maree and Wolvaardt were motivation, perseverance, common sense and responsibility. None of the virtues were indicated by more than half of the respondents as ‘reasonable’, ‘limited’ or ‘no’ growth. It can therefore be deduced that all respondents experienced improvement of the fundamental human virtues as an outcome.

Examples of the comments added by the students were as follows: “Very insightful”; “After this course feel so relaxed and actually enjoying research”; “It really helped with focusing and correcting my protocol. It was very informative”; “It was a very stimulating course”. There were no contradicting comments.

Table 2: Results of questionnaire on perceived improvement in fundamental human virtues

<table>
<thead>
<tr>
<th>Own development (fundamental human virtues)</th>
<th>Number of respondents (n=11)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>(None)</td>
</tr>
<tr>
<td>Self-confidence</td>
<td>-</td>
</tr>
<tr>
<td>Motivation</td>
<td>-</td>
</tr>
<tr>
<td>Initiative</td>
<td>-</td>
</tr>
<tr>
<td>Effort</td>
<td>-</td>
</tr>
<tr>
<td>Perseverance</td>
<td>-</td>
</tr>
<tr>
<td>Common sense</td>
<td>-</td>
</tr>
<tr>
<td>Responsibility</td>
<td>-</td>
</tr>
<tr>
<td>Independence</td>
<td>-</td>
</tr>
<tr>
<td>Joy</td>
<td>-</td>
</tr>
<tr>
<td>Caring</td>
<td>-</td>
</tr>
<tr>
<td>Understanding of other human beings</td>
<td>-</td>
</tr>
<tr>
<td>Communication</td>
<td>-</td>
</tr>
<tr>
<td>Dealing with feelings</td>
<td>-</td>
</tr>
<tr>
<td>Justice and forgiveness</td>
<td>-</td>
</tr>
<tr>
<td>Leadership</td>
<td>-</td>
</tr>
<tr>
<td>Other:</td>
<td>-</td>
</tr>
</tbody>
</table>

Discussion

The research proposal refinement course contributed to the development of fundamental human virtues as perceived by the students. It is expected that in turn it would contribute to personal and professional development, of which last mentioned is related to development in research.

This finding correlates with the argument of Slabbert et al. (2011) that by engaging in a real life challenge or authentic learning opportunity, transformation occurs in practical, creative and spiritual wisdom through acquiring fundamental intrapersonal human virtues. The person is challenged by a real life situation that he/she actually does not know how to deal with, and experiencing uncertainty for not having the required knowledge and skills to
resolve the challenge. The situation is presented with all complexities of real life and creates a need for growth and improvement, and as a result demands personal transformation. Part of the authentic learning challenge requires of the person to engage and collaborate with other persons to resolve the problem, which facilitates the process of acquiring fundamental interpersonal human virtues, as learning occurs co-operatively.

Webster-Wright (2009) agrees with the value of authentic learning opportunities in a particular context to facilitate meaningful learning and professional development.

Herrington et al. (2014) indicate that for an authentic learning opportunity to be worthwhile, it has to be well-planned and that the task(s) expects of students to think, decide and act without explicit instructions on how the task should be completed. It commonly results in feelings of apprehension and confusion at first as they take control of their learning to create authentic products. The facilitator’s role is to provide scaffolding and support rather than to provide step-by-step instructions.

In this case, the research proposal refinement course is seen as an authentic learning opportunity that contributed to improve the students’ fundamental human virtues and their personal and professional development. It is important to take note that the course exist among other activities and opportunities and that it is not done in isolation, but that it is seen as a timely opportunity to make a difference.

What is not yet known and needs to be followed up, is if there is a correlation between self-perceived improvement of fundamental human virtues and research progress and output.

Limitations

The limitations of the study are related to the contextual nature thereof, which limits generalisation. It though will be possible to repeat the study with a larger sample size and in another context to increase transferability or generalizability.

Conclusion

Creating an authentic learning opportunities for postgraduate students as part of a research proposal refinement course, contributed to the students’ perception of their own improvement in fundamental human virtues. The enhanced development of fundamental human virtues is expected to contribute to their progress in research and research output.
References


