



An exploratory trial exploring the use of a multiple intelligences teaching approach (MITA) for teaching clinical skills to first year undergraduate nursing students



Linda Sheahan^{a,*}, Alison While^b, Jacqueline Bloomfield^c

^a Waterford Institute of Technology, Ireland, Ireland

^b King's College London, United Kingdom

^c The University of Sydney, Australia

ARTICLE INFO

Article history:
Accepted 1 May 2015

Keywords:
Clinical skills learning and teaching
MITA
Nursing students
Learning preferences

SUMMARY

Background: The teaching and learning of clinical skills is a key component of nurse education programmes. The clinical competency of pre-registration nursing students has raised questions about the proficiency of teaching strategies for clinical skill acquisition within pre-registration education.

Objectives: This study aimed to test the effectiveness of teaching clinical skills using a multiple intelligences teaching approach (MITA) compared with the conventional teaching approach.

Design: A randomised controlled trial was conducted. Participants were randomly allocated to an experimental group (MITA intervention) (n = 46) and a control group (conventional teaching) (n = 44) to learn clinical skills. *Setting:* Setting was in one Irish third-level educational institution.

Participants: Participants were all first year nursing students (n = 90) in one institution.

Methods: The experimental group was taught using MITA delivered by the researcher while the control group was taught by a team of six experienced lecturers. Participant preference for learning was measured by the Index of Learning Styles (ILS). Participants' multiple intelligence (MI) preferences were measured with a multiple intelligences development assessment scale (MIDAS). All participants were assessed using the same objective structured clinical examination (OSCE) at the end of semester one and semester two. MI assessment preferences were measured by a multiple intelligences assessment preferences questionnaire. The MITA intervention was evaluated using a questionnaire.

Results: The strongest preference on ILS for both groups was the sensing style. The highest MI was interpersonal intelligence. Participants in the experimental group had higher scores in all three OSCEs (p < 0.05) at Time 1, suggesting that MITA had a positive effect on clinical skill acquisition. Most participants favoured practical examinations, followed by multiple choice questions as methods of assessment. MITA was evaluated positively.

Conclusion: The study findings support the use of MITA for clinical skills teaching and advance the understanding of how MI teaching approaches may be used in nursing education.

© 2015 Elsevier Ltd. All rights reserved.

Introduction

Clinical skills education is a core component of nursing education internationally. The role of nurse educators is to prepare nursing students, both theoretically and clinically, for professional practice (Stayt, 2011). The most common approach to teaching clinical skills has been the didactic approach with the lecturer providing the theory in relation to the skill followed by a demonstration of the skill to a large group of students (Jeffries et al., 2002; Khan et al., 2012). Didactic teaching and demonstration may leave a void in relation to the cognitive and affective

domains of learning, which collectively constitute competency in skill and theory acquisition. The didactic approach is considered teacher focused and does not always accommodate the diverse learning styles or learning needs of the students (Khan et al., 2012). Further, the didactic approach may result in a lack of consistency in how the skills are demonstrated and how the theoretical information is provided by lecturers (Corbally, 2005).

The multiple intelligences teaching approach (MITA) presents a unique opportunity to enhance the learning experience based on unique abilities and characteristics of the learner (Weber, 2005). MITA has five phases comprising question, target, expect, move and reflect (Table 1) and is based on Gardner's (1983) Multiple Intelligences theory (Table 2) (Weber, 2005). MITA techniques are shown to enhance critical inquiry and discussion for problem-solving (Weber, 2005; Denny, 2007). It is intended to stimulate the students' interest and abilities

* Corresponding author. Tel.: +353 51306170
E-mail addresses: lsheahan@wit.ie (L. Sheahan), alison.while@kcl.ac.uk (A. While), jacqueline.bloomfield@sydney.edu.au (J. Bloomfield).

Table 1
MITA phases.

MITA phases	Education	Assumption
Phase 1. Question possibilities. Pose meaningful questions	An opening question describes the lesson topics and relates content to learners' interests and abilities.	High quality questions help motivate learners to explore new meanings.
Phase 2. Target improvements. Identify objectives	Use clearly defined objectives for each lesson to ensure deeper understanding of content topic.	When learners know exactly where they are going it is more likely they will arrive there successfully.
Phase 3. Expect quality. Create rubrics	Expectations provide a tool to guide evaluation of learners' work by adding precision about specific criteria used for evaluating learner work.	When given specific signposts learners are guaranteed to reach their destination.
Phase 4. Move resources. Move students to learn using all their MIs	Assessment tasks match related learning approaches, cover content, solve real life problems, create meaningful challenges, and motivate learners to explore related issues using MI approaches.	MITA activates learner resources to ensure multiple approaches to learning.
Phase 5. Reflect for growth. Reflect to adjust new learning	Reflective tasks are given to students at the end of the lecture to give closure to topic.	Reflection is a regular commitment that encourages the learner to critically evaluate.

and provides an opportunity for probing content more deeply. Finally, it presents an opportunity for reflection on the learning experience with these reflections forming a platform for future learning. MITA asks the question, "How am I smart?" as opposed to "how smart am I?" (Weber, 2005).

The use of MITA in teaching clinical skills to undergraduate nursing students is not well researched. It is thought that MITA has the capacity to improve the competency of nursing students regardless of their ability and to encourage independent, self-directed and active uptake of knowledge in the skills laboratory, classroom and beyond (Weber, 2005; Denny et al., 2008). It is claimed that MITA can help nursing students to engage with learning by engaging their differing intellectual strengths, abilities or dispositions (Weber, 2005; Denny, 2007). Therefore, the study aimed to conduct a randomised controlled trial (RCT) to assess whether MITA is an effective method of teaching clinical skills to first year undergraduate nursing students.

Methods

Study Hypotheses

It was hypothesized that there would be an increase in Objective Clinical Skills Examination (OSCE) scores as a result of teaching clinical skills using MITA.

Design and Sample Population

The RCT was conducted between September 2011 and May 2012 at one nursing school located in the South of Ireland. All students enrolled on a first year BSc nursing degree were eligible for inclusion. Students were invited to participate on a voluntary basis, and were informed of their rights as a participant, including the right to withdraw from the study at any time (LoBiondo-Wood and Haber, 2010). All participants were then provided with detailed information, in verbal and written format. Following recruitment each participant was asked to give written consent and were then assigned an individual code to ensure confidentiality. In total 90 students agreed to participate which represented the entire enrolled cohort (Fig. 1).

Students were randomly assigned to either the experimental ($n = 46$) or control ($n = 44$) group. This was achieved using computer generated number sequence (each student was identified by a number and discipline, for example, G1, P5, ID7). Blinding was not possible for operational reasons and each participant was aware of their assignment into either the experimental or control group. Control group participants were taught by a team of six lecturers while participants in the experimental group were taught by the researcher who was trained in MITA techniques (Table 3).

Table 2
Multiple intelligences (Gardner, 1983).

Intelligence	Description of intelligence
Linguistic intelligence	The ability to use words effectively whether orally or in written format. This intelligence also relates to the ability to learn languages and to an understanding of spoken and written language.
Logical-mathematical intelligence	The ability to use numbers effectively, to solve and analyse problems and use analytical skills. It is the ability to think of cause and effect connections.
Musical intelligence	The ability to appreciate music, song, tone, pitch. This also relates to the capacity to hear and recognise patterns. It considers active listening with a connection between music and emotions.
Spatial intelligence	The ability to perceive the visual world. It includes the capacity to visualize and to graphically represent visual ideas. It includes the use of visual aids and colour to aid learning and the ability to work with objects effectively.
Interpersonal intelligence	Having an awareness of others and the ability to respond effectively to those cues in a pragmatic way. This also relates to peer and co-operative learning. It involves interacting effectively with one or more people in familiar or working circumstances.
Intrapersonal intelligence	This intelligence involves the ability to think about and understand one's self, to have an awareness of self-knowledge and have the ability to act on the basis of that knowledge. It also involves being aware of one's own capacities and to use such information effectively.
Bodily-kinesthetic intelligence	The ability to control body movement that includes co-ordination, dexterity and speed for goal directed activity. This involves having a sense of timing.
Naturalistic intelligence	This intelligence relates to recognition of an individual's environment and to have the ability to understand patterns and sequences in everyday life. (Gardner added this intelligence in 2000.)

Download English Version:

<https://daneshyari.com/en/article/367931>

Download Persian Version:

<https://daneshyari.com/article/367931>

[Daneshyari.com](https://daneshyari.com)