Authentic Learning: A Concept Analysis

By: Mrs MG Ndawo (RN, MCur) PhD student
• Supervisor: Prof MM Chabeli; Co-Supervisor: Prof AGW Nolte
• No conflict of interest
• University of Johannesburg (employer)
• Sponsored by Thuthuka Grant - PhD Track
• Objective: To describe concept analysis by Walker and Avant (2011)
1. Brief Introductory Background

- Council on Higher Education (CHE) [1]
- South African Nursing Council (SANC) [2] philosophy
- Current state of nursing education
- Why authentic learning (AL): interesting & widely used term
- Aspiration: A model development
2. Problem statement

- AL ambiguous, abstract concept with different meanings
- Fluid nature of AL
- Nurse educators’ opinion [3]
- Inauthentic learning environment [4]
3. Research question

• What is the conceptual meaning of AL in nursing education?

4. Purpose

• The purpose of this analysis is to clarify the conceptual meaning of AL in nursing education in order to provide a common meaning and formulate a theoretical definition.
5. Definition of key concepts

• **Concept analysis**: is a systematic, rigorous, precise process of examining the attributes of concepts therefore a useful process in clarifying ambiguous and complex concepts in a theory or a model. [5]

• **Authentic learning**: AL is an approach to learning in which students work on realistic problems, participate in activities that solve real-life problems, or create products that have real-life purposes. [6]
• **Nursing education:** is a process of guiding, assisting, and providing learners with means in their quest of learning the art and science of nursing for future use in caring for their healthcare clients/patients. [7]
6. Research method

• Data sources
  ➢ 160 literature [definitions, uses, nature, characteristics of AL]
    • Dictionaries, Thesauri
    • EBSCOHost (Data saturation)

• Concept analysis method: Walker and Avant (2011) 8 steps
  ➢ Concept analysis, synthesis and derivation
Walker and Avant (2011) method of concept analysis

<table>
<thead>
<tr>
<th>Step 1: Select a concept.</th>
<th>Authentic learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2: Determine the purposes of the analysis.</td>
<td>To clarify the conceptual meaning of authentic learning in nursing education and to formulate a theoretical definition of authentic learning.</td>
</tr>
<tr>
<td>Step 3: Identify all uses of the concept that you can discover.</td>
<td>This step is described under data sources.</td>
</tr>
<tr>
<td>Step 4: Determine the defining attributes.</td>
<td>This step is described under method.</td>
</tr>
<tr>
<td>Step 5: Identify a model case.</td>
<td>Not identified, however, the attributes may be used for the construction of a model case in an authentic clinical situation.</td>
</tr>
</tbody>
</table>
| Step 6: Identify borderline, related, and contrary cases (additional cases). | The concepts of these cases were identified from the concept analysis:  
**Borderline case** would include the following concepts: credible, valid, convincing, faithful, actual, *bona fide*, indubitable, unquestionable and undoubted.  
**Related case** would include the following concepts: true, genuine and original.  
**Contrary case** would include the following concepts: inauthentic learning, fictitious, sterile teaching, memorisation of facts, regurgitation, pen-and-paper assessments, learning that require right and wrong answers, ‘uncritical sponges’ and dualistic thinking. |
### Step 7: Identify antecedents and consequences.

**Antecedents:** The identified antecedents were cognitive domain (knowledge, comprehension, application, analysis, synthesis, and evaluation), and affective domain (receptivity, responding, valuing, organisation, and internalisation).

**Consequence:** of authentic learning is a competent, critical, autonomous, independent, lifelong graduate desirable for the twenty-first century global healthcare system.

### Step 8: Define empirical referents.

The following skills were identified as empirical referents of authentic learning with their tools for empirical assessment:

- **Critical thinking:** California Critical Thinking Skills Test (CCTST); Health Sciences Reasoning Test (HSRT). [8]
- **Creative thinking:** Torrance’s Test of Creative Thinking (TTCT). [9]
- **Innovation capacities:** General Innovation Skills Aptitude Test 2.0 (GISAT2.0). [10]
- **Reflective thinking:** Questionnaire by Kember et al., 2000. [11]
- **Problem solving skills:** Problem Solving Inventory (PSI). [12]
- **Decision making skills:** Melbourne Decision Making Questionnaire (MDMQ) I-II; Decision Making Styles Scale (DMSS). [12]
- **Clinical reasoning skills:** The Script Concordance Testing (SCT). [13]
- **Clinical judgment skills:** Lasater Clinical Judgment Rubric (LCJR). [14]
7. Theoretical validity

Principles:

• Epistemologic
• Pragmatic
• Linguistic
• Logical
8. Description of results

- Categories
  - Antecedents
  - Process
  - Outcome / Consequence

Conceptual Map
Acquisition of AP demonstrated by metacognitive skills development

• Self-concept
• Metalearning
• Ability to make rational decisions and solve complex real-world and ill-defined problems open to multiple perspectives.

Engagement in interactive, integrative, & constructive approach to intentional real-life meaningful learning that involves activities:

• Dialogic, Discourse, Argumentation, & Conversational
• Collaborative, & Co-operative ; Research-based activities
• Higher order thinking skills activities
• Models to direct authentic teaching, learning and assessment activities.

Awareness of:

Lack of knowledge


Understanding

Evaluation

Internalisation

Synthesis

Analysis

Application

Responding

Receiving

Knowing

Antecedents

Process

Outcome

Cyclic
Understanding Knowledge

Responding Receptivity

Awareness of:
- Lack of knowledge
- Uncertainty
- Ambiguity
- Cognitive Dissonance

Antecedents
Process
Outcome
Engagement in interactive, integrative, & constructive approach to intentional real-life meaningful learning that involves activities:

- Dialogic, Discourse, Argumentation, & Conversational (discuss, converse, dialogue, discourse, debate, judge, engage, argue)
- Collaborative, & Co-operative (collaborate, work together, participate, co-operate, and account)
- Research-based activities (predict, inquire, hypothesise, investigate, discover, interpret results, examine, generalize, search, research)
- Higher order thinking skills activities (critically think, rethink, reflect, create, recreate, innovate, renovate, design, solve)
- Models to direct authentic teaching, learning and assessment activities.

Awareness of:
- Lack of knowledge
Acquisition of AL demonstrated by metacognitive skills development

• Self-concept
• Metalearning
• Ability to make rational decisions and solve complex real-world and ill-defined problems open to multiple perspectives.

Engagement in interactive, integrative, & constructive approach to intentional real-life meaningful learning that involves activities:

• Dialogic, Discourse, Argumentation, & Conversational
• Collaborative, & Co-operative; Research-based activities
• Higher order thinking skills activities
• Models to direct authentic teaching, learning and assessment activities.

Awareness of:

• Lack of knowledge

Uncertainty, Ambiguity, Cognitive Dissonance
Acquisition of AL demonstrated by metacognitive skills development:
- Self-concept
- Metalearning
- Ability to make rational decisions and solve complex real-world and ill-defined problems open to multiple perspectives.

Engagement in interactive, integrative, & constructive approach to intentional real-life meaningful learning that involves activities:
- Dialogic, Discourse, Argumentation, & Conversational
- Collaborative, & Co-operative ; Research-based activities
- Higher order thinking skills activities
- Models to direct authentic teaching, learning and assessment activities.

Awareness of:
- Lack of knowledge

Acquisition of AL demonstrated by metacognitive skills development
- Self-concept
- Metalearning
- Ability to make rational decisions and solve complex real-world and ill-defined problems open to multiple perspectives.

Engagement in interactive, integrative, & constructive approach to intentional real-life meaningful learning that involves activities:
- Dialogic, Discourse, Argumentation, & Conversational
- Collaborative, & Co-operative; Research-based activities
- Higher order thinking skills activities
- Models to direct authentic teaching, learning and assessment activities.

Awareness of:
Lack of knowledge
Acquisition of AP demonstrated by metacognitive skills development
- Self-concept
- Metalearning
- Ability to make rational decisions and solve complex real-world and ill-defined problems open to multiple perspectives.

Engagement in interactive, integrative, & constructive approach to intentional real-life meaningful learning that involves activities:
- Dialogic, Discourse, Argumentation, & Conversational
- Collaborative, & Co-operative; Research-based activities
- Higher order thinking skills activities
- Models to direct authentic teaching, learning and assessment activities.

Awareness of:
- Lack of knowledge

9. Theoretical Definition

“Authentic learning is a cyclic learning approach to intentional real-life meaningful learning influenced by a hierarchy of cognitive and affective thinking skills. It is triggered by uncertainty, ambiguity and cognitive dissonance bringing about a state of awareness followed by engagement in interactive, integrative, and constructive learning activities leading to the development of metacognitive skills resulting in a competent, critical, autonomous, independent, lifelong graduate desirable for the twenty-first century global healthcare system”
Clarification of the conceptual meaning of authentic learning is a key element in assisting nurse educators design authentic learning tasks that expose learners to liberal education, develop them into twenty-first graduates who appreciate diversity and transcultural nursing practice, who are research oriented, immersed in high and virtual technology, and engage in integrated learning.
11. Recommendations

• Empirical approach to explore the conceptual meaning further

• Develop models, theories, pedagogical and research tools such as educational programmes, evaluation instruments, and a questionnaire

➤ to conduct further research using the identified defining attributes of authentic learning.
12. Conclusion

• Purpose of the concept analysis

• Use defining attributes for theory development, research and practice

• Innovative facilitation skills of learning
THANK YOU !!!!

QUESTIONS
13. References


