Extending the Theoretical Framework for Curriculum Integration in Medical Education from a Contextual Perspective

John Vergel MD PhD
Diana Stentoft PhD
Juny Montoya PhD
Overview

- Backgrounds
- The problem
- Aim
- Research questions
- Context
- Methodology
- Results
- Conclusions
Emphasis on

• The researcher’s story.
• The methodology
Oportunity to

• Develop soft competences.
• Understand the quality of the doctoral program in education by seeing a student’s experience as a researcher.
0830-0845 - #10M1 - A disease-based approach to the vertical and horizontal integration of our medical curriculum

Charles Gullo*, Brian Dzwoneck, Bobby Miller (Joan C Edwards School of Medicine, Office of Medical Education, Huntington, USA)

0845-0900 - #10M2 - Extending the theoretical framework for curriculum integration in medical education from a contextual perspective

John Vergel† (Universidad de Los Andes, Center for Research and Development in Education (CIFE), Bogotá, Colombia), Diana Stentoft (Aalborg University, Department of Health Science and Technology, Centre for Health Science Education and Problem-based Learning, Aalborg, Denmark), Juny Montoya (Universidad de Los Andes, Center for Research and Development in Education (CIFE), Bogotá, Colombia)

0900-0915 - #10M3 - Evidence of 'diseases of the curriculum': recommendations for application of Harden's integration ladder to promote integrative learning
Fourth Edition
A Practical Guide for MEDICAL TEACHERS
Edited by John A. Dent • Ronald M. Harden
Foreword by Brian D. Hodges
To John
Best wishes,
[Signature]

A Practical Guide for MEDICAL TEACHERS
Doctorado en Educación
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Ip 208 a Ip 212  OFICINAS DE PROFESORES
Ip 301 a Ip 304  OFICINAS DE PROFESORES
Ip 305  SALA DE REUNIONES 5
Ip 306 a Ip 310  OFICINAS DE PROFESORES
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Ip 401 a Ip 406  OFICINAS DE PROFESORES
Ip 501 a Ip 506  OFICINAS DE PROFESORES
QUINTO PISO
Entendiendo la integración curricular en la educación médica

Van Vergel MD

Visiting Scholar

Anna Montoya PhD

Karen Stentoft PhD
Este será mi próximo reto para el 2015 y será en Glasgow, Escocia
everything will be okay
in the end.

if it's not okay,
it's not the end.

Sasha Bronner
AMEE 2015
AN INTERNATIONAL ASSOCIATION FOR MEDICAL EDUCATION
Backgrounds

- The meaning of Curriculum Integration (CI) is unclear (Brauer & Ferguson, 2015).
- CI has multiple definitions (Posner, 2004).
- Definitions are anchored on varied learning theories: spiral, PBL, integrated system, core curriculum, etcetera. (Harden et al., 2000; Kemahly et al., 2004; McNeil et al., 2006; Schmidt et al., 1996).
- CI is used as an instrument.
- Emphasizing on the curriculum structural elements instead of the stakeholders’ conceptions of learning (Hopkins et al., 2015; Haramati, 2015; Hooper et al., 2014).
The Problem

- Medical schools may struggle with CI (Schmidt, 1998).
- We miss an extension of what we understand by CI.
- We need information about the implementation of CI taking in consideration the contextual issues.
Aim

- To extend the CI theoretical framework from a contextual angle.
- What stakeholders understand by CI in a particular setting.
- It may provide the lacking concepts to understand CI.
Research Questions

(1) How does this medical program integrate the curriculum?
(2) What does this learning context understand by CI?
(3) What is the meaning of the contextual understandings of CI?
Context at AAU medical school

Knowledge, skills and competences achieved in relation to learning objectives

Lectures
Classroom exercises
Clinical skills practice
Clinical placement

Taken from AAU Official Curriculum
Methodology
Introducing Qualitative Hypothesis-Generating Research

The Yeshiva University Fatherhood Project

“The grounded theory method uses two basic principles: (1) questioning rather than measuring, and (2) generating hypotheses using theoretical coding.”
Hypothesis-Generating Research Design Using Grounded Theory

- “Step 1. Research Problems versus Research Issues
- Step 2. Research Hypotheses versus Research Concerns
- Step 3. Operationalizing Variables versus Narrative INTERviewing
- Step 4. Random Sampling versus Theoretical Sampling
- Step 5. Statistical Significance versus Theoretical Saturation”
Understanding the Data

- “Research Concerns: is what you want to learn about and why.

- Theoretical Narrative: describes the process that the research participants reported in terms of your theoretical constructs. It uses your theoretical constructs to organize people’s subjective experience into a coherent story. It employs people’s own language to make their story vivid and real.

- Theoretical Constructs: is an abstract concept that organizes a group of themes by fitting them into a theoretical framework.

- Themes: is an implicit topic that organizes a group of repeating ideas.”
Understanding the Data

• “Repeating Ideas: is an idea expressed in relevant text by two or more research participants.

• Relevant Text: refers to passages of your transcript that express a distinct idea related to your research concerns.

• Raw Text/ “. 
Main Issue:
What is the meaning of CI from a contextual perspective?

AAU MEDICAL PROGRAM

Activity #1
Curricular documents analysis

Activity #2
Curriculum designers and faculty members’ interviews

Activity #3
Learning activities observations
- Case start - Case close
- Lectures
- Projects

Activity #4
Stakeholders’ interviews
- 2 - year students
- 3 - year students
- Teachers

¿How does the program integrates the curriculum?
¿What do they understand by CI?

Adapted from Stake (2010). Designer: David Dominguez
Bottom-Up Analysis

1. Raw information
2. Select relevant segments of text
3. Interpret segments into themes
4. Arrange themes into theoretical constructs
Results

- Complexity of CI embedded in the institutional learning perspectives
- CI as a tool to harmonize conflicting learning perspectives in the practice of the curriculum
- CI both creates tensions and self-organizes its structure
- CI renders itself visible in collaborative learning spaces
Conclusions

◆ The four theoretical constructs provide a broader understanding of CI in medical education.
◆ They may serve as a method for analyzing issues of CI in its contextual practice.
◆ It requires a shift of perspective from instrumental, static, and reductionist to dynamic and complex.
Thanks

John Vergel
jvergel@uniandes.edu.co