Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

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Agenda

1. Introduction
2. Considerations
3. C/OBE Model: Overview
4. Case Study: Universidades Politécnicas
5. Conclusions
What I bring to the UOC?

### Successful practices

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<td>Canadian education is OBE oriented, flexible and student centered</td>
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What I bring to the UOC?

Professional Experience in Canada (Continue)

Canadian education is OBE oriented, flexible and student centered.

Learning designer at Athabasca University:

- Online Education at distance
- Learning design
- Faculty development
- Educational Technology
- Learning Management Systems (Moodle)
- Instructional technologies assessment and evaluation
- Interface design
- Evaluation

Projects in progress at Athabasca university:

- Learning design methodology - Evaluation (proposal)
- Literacy Information Skills Integrated into the curriculum Evaluation (proposal)
- Video/audio advance organizers – Evaluation
- Automated Written Quiz Exercises – Evaluation
- Dynamic online 3-D and 2-D maps - cooperative learning - Evaluation
What I bring to the UOC?

• **Professional Experience in Canada (Continue)**

Learning designer at Athabasca University:

• leads the course design and/or educational development process.
• conducts needs assessments as appropriate
• creates course planning documents, aligning outcomes, resources, activities and assessments
• discusses with subject matter experts about methods for online teaching and learning
• analyses learners and learning context for courses and educational development activities
• offers expertise in learning design and student-centred instructional design to teams working on courses, programs, learning activities, workshops, presentations, consultations etc.
• gathers feedback from multiple sources to influence learning design activities
• locates, evaluates and recommends assessment strategies for courses
• participates in discussions related to the alignment of course level outcomes with program outcomes
• explores and analyzes the benefits of existing and evolving educational technologies, and offer suggestions for maximizing their effectiveness in AU systems
• monitors course design progress
Considerations

**C/OBE in the Literature**

An Emerging Model

**Educación Basada en Competencias**

Competencies/Outcomes Based Education
Considerations

C/OBE in the Literature
An Emerging Model

Educación Basada en Competencias
Competencies/Outcomes Based Education
Outcomes Based Education
Considerations

C/OBE in the Literature
An Emerging Model

Educación Basada en Competencias
Competencies/Outcomes Based Education
Outcomes Based Education
Outcomes (Labor) Based Education (Training)
Considerations

C/OBE in the Literature
An Emerging Model

Educación Basada en Competencias
Competencies/Outcomes Based Education

Outcomes Based Education

Professional Competencies Based Education

Outcomes (Labor) Based Education (Training)
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

Considerations

C/OBE in the Literature
An Emerging Model

Educación Basada en Competencias Profesionales

Outcomes Based Education

Professional Competencies Based Education

Outcomes (Labor) Based Education
(Training)
Considerations

C/OBE in the Literature
An Emerging Model

Éducation Basée sur les Compétences
Educación Basada en Competencias Profesionales
Educación Basada en Competencias

Competencies/Outcomes Based Education

Outcomes Based Education

Professional Competencies Based Education

Outcomes (Labor) Based Education
(Training)
Considerations

C/OBE in the Literature
An Emerging Model

L'approche par les compétences
Éducation Basée sur les Compétences
Educación Basada en Competencias Profesionales
Educación Basada en Competencias

Competencies/Outcomes Based Education

Outcomes Based Education
Professional Competencies Based Education

Outcomes (Labor) Based Education
(Training)
Considerations

It is important to acknowledge:

- C/OBE is still an emerging pedagogical model in higher education, and yet it is a very dynamic
- The different interpretations of the model in order to have an overall and systemic understanding of C/OBE
- In different educational contexts and countries C/OBE has been applied slightly differently
- The main concepts and components that integrate the C/OBE’s framework and how they interrelate and impact one another
- The different experiences in C/OBE to identify and adapt successful practices that might be suitable in your context
- C/OBE is ultimately adapted to your own context taking into account your own practices and the system’s demands
C/OBE Framework

A Systemic View

Part II

Student Centered Education

- Books
- Computer
- Camera
- Laptop
- Test tube
- Whiteboard
Collaborative learning

Student role:
- Active learner
- Self directed in a paced environment
- Independent learner
- Total control
- Information - technology literate
- Critical thinker
- Multidisciplinary group work/research

A Systemic View
C/OBE Framework

A Systemic View

Collaborative learning

Cooperative learning

Student Centered Education

Students
Facilitator role:

- Facilitates learning
- Orients, guides, supports students
- Introduces topics/themes
- Facilitates/moderates discussion
- Addresses students questions
- Provides formative input
- Conducts formative evaluation
- Evaluates students’ competencies
- Works in consultation with Tutors
C/OBE Framework

**A Systemic View**

- **Tutor role:**
  - Orients and guides students throughout their program
  - Provides academic advice to students
  - Assists students on planning their studies and selecting courses
  - Assists students who undertake remedial learning activities
  - Orients students to identify and plan internships
  - Is the liaison between facilitators, students, and the labor market
  - Works in consultation with Facilitators
C/OBE Framework

A Systemic View

- Tutor role:
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C/OBE Framework

A Systemic View

Learning Designer:

- Plans, designs and evaluates programs (curriculum design)
- Plans, designs, produces, implements and evaluates (online) courses (learning design)
- Identifies competencies and capacities (programs, courses)
- Designs evaluations, learning activities
- Identifies, designs, and/or produces learning materials and content
C/OBE Framework

A Systemic View

Student Centered Education

- Students
- Learning Designer
- Facilitator
- Tutor
- Professional Environment/Workplace
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

C/OBE Framework

A Systemic View

C/OBE Learning Theories:
- Collaborative Learning
- Cooperative Learning
- Situated Cognition
- Meta-cognition
- Active Learning
- Social Learning
- Critical Thinking
- Individual Learning
- Adult Education

Professional Environment/Workplace

Students

Learning Designer

Facilitator

Tutor

Student Centered Education

A Systemic View
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

C/OBE Framework

A Systemic View

Student Centered Education

Students

Learning Designer

Facilitator

Tutor

Learning Design

Courses

Programs

Skills, Abilities

Knowledge, Aptitude Learning Activities

Professional Environment/Workplace

Curriculum Design
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

C/OBE Framework

A Systemic View

Student
Learning Designer
Facilitator
Tutor
Students
Learning Designer
Facilitator
Tutor
Student

Capabilities
Skills, Abilities
Assessments
Knowledge, Aptitude
Learning Activities
Courses
Programs
Professional Environment/Workplace
Learning Design
Curriculum Design
C/OBE Framework

A Systemic View

Competencies

Students

Learning Designer

Facilitator

Tutor

Skills, Abilities

Knowledge, Aptitude

Learning Activities

Assignments

Courses

Programs

Curriculum Design

Learning Design

Professional Environment/Workplace

Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

C/OBE Framework

A Systemic View

Learning Design
Curriculum Design
Student Centered Education
Learning Designer
Facilitator
Tutor
Students
Competencies
Skills, Abilities
Professional Environment/Workplace
Programs
Courses
Assignments
Knowledge, Aptitude Learning Activities
Learning Design
Curriculum Design
Student Centered Education
Learning Designer
Facilitator
Tutor
Students
Competencies
Skills, Abilities
Professional Environment/Workplace
Programs
Courses
Assignments
Knowledge, Aptitude Learning Activities
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

Learning Outcomes

Competencies

Integrative Capacities

Learning Capacities

Skills, Abilities

Activities

Student Centered Education

Students

Learning Designer

Facilitator

Tutor

Assignments

Knowledge, Aptitude Learning Activities

Courses

Programs

Professional Environment/Workplace

Curriculum Design

Learning Design
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

Integrative Learning Activities

Unit 1
- Learning Activities
- Learning Activities
- Learning Activities
- Learning Outcomes

Unit 2
- Learning Activities
- Learning Activities
- Learning Activities
- Learning Outcomes

Unit N
- Learning Activities
- Learning Activities
- Learning Activities
- Learning Outcomes

Final Project

Professional Environment/Workplace

Curriculum Design

Programs

Learning Design

Student Centered Education

Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View
C/OBE Learning Strategies

- Diagnostic Evaluation,
- Research Journals, Portfolios,
- Concept/Mental Maps,
- Debate/Discussions,
- (Position/Discussion) Academic Papers,
- Problem-Solving,
- Group Work,
- Presentations,
- Evaluation,
- Research Peer Review,
- Formative Evaluation,
- Work Place Practices,
- Internships,
- etc.
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

- Learning Outcomes
- Competencies
- Integrative Capacities
- Learning Capacities
- Skills, Abilities Capacities
- Activities Capacities
- Cross Competencies
- Professional Environment/Workplace
- Learning Design
- Courses
- Programs
- Assignments
- Knowledge, Aptitude Learning Activities
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

Diagram showing the integration of cross competences across years 1 to 4.
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

- **Learning Outcomes**
- **Competencies**
- **Student Centered Education**
- **Learning Designer**
- **Tutor**
- **Facilitator**
- **Cross Competencies**
- **Integrative Learning**
- **Professional Environment/Workplace**
- **Curriculum Design**
- **Programs**
- **Courses**
- **Learning Activities**
- **Assignments**

- **Student Centered Education** connects to:
  - **Learning Designer**
  - **Tutor**
  - **Facilitator**
  - **Cross Competencies**

- **Competencies**:
  - **Integrative Learning**
  - **Skills, Abilities**
  - **Activities**

- **Professional Environment/Workplace**

- **Curriculum Design**
  - **Cross Competencies**
  - **Integrative Learning**
  - **Skills, Abilities**
  - **Activities**
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View
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Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

- Competencies
- System
- Institution
- Program
- Professional Environment/Workplace
- Learning Design
- Curriculum Design
- Student Centered Education
- Student
- Learning Designer
- Facilitator
- Tutor
- Rubrics
- Formative Evaluation
- Assignments
- Knowledge, Aptitude Learning Activities
- Cross Competencies
- Integrative Learning Activities
- Portfolio
- Program Competencies
- System Competencies
- Courses
- Programs
- Integrative Skills, Abilities Activities
- Professional Environment/Workplace
- Learning Design
- Curriculum Design
- Student Centered Education
Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

- Learning Design
- Curriculum Design
- Student Centered Education
- Integrative Learning Activities
- Cross Competencies
- Portfolio
- Professional Environment/Workplace
- System Competencies
- Program Competencies
- Courses
- Assignments
- Formative Evaluation
- Knowledge, Aptitude Learning Activities
- Facilitator
- Tutor
- Students
- Learning Designer
- Rubrics
- Competencies
- Courses
- Programs
- Competencies
- System
- Institution
- Environment
- WorkPlace
- Learning
- Skills, Abilities
- Activities
- Evaluation
### Instructional Design

<table>
<thead>
<tr>
<th>Elementos principales del diseño del aprendizaje</th>
<th>Unidades</th>
<th>Competencia(s) específicas del módulo (en qué áreas competentes?) (de manera global, qué es lo que sabe hacer?) (Qué hace, qué implica...)</th>
<th>Capacidades (de qué áreas competentes? Unidades de competencia imprescindibles en términos de capacidades - conocimientos, habilidades, destrezas, actitudes, valores - corresponden al diseño de la competencia misma)</th>
<th>Contenidos temáticos (conocimientos que necesitas para poder aprender algo - toda la teoría que corresponde a lo que vas a saber hacer)</th>
<th>Actividades de enseñanza y aprendizaje (qué actividades de aprendizaje centradas en el alumno se realizan para el desarrollo de las capacidades identificadas, cómo interacciona el alumno con el ambiente de aprendizaje para apropiarse del conocimiento)</th>
<th>Resultados de Aprendizaje (Evidencias) (Learning Outcomes) (productos comprometidos para demostrar que el alumno es competente a partir de sus aprendizajes en los tres niveles saber, saber hacer, y ser) (las evidencias son medidas)</th>
<th>Tiempo Estimado que toma al estudiante desarrollar el diseño del aprendizaje</th>
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<td>Secuencia en que se realiza el diseño del aprendizaje</td>
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<td>3</td>
<td>6</td>
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Curriculum and Learning Design for Competencies/Outcomes Based Education: A Systemic View

Competencies
Student role
Facilitator role
Study Methods
C/OBE Learning Strategies
Marking scale
Pre-requisites
General Information (Institution-Program)
Cross Competencies (Program)
Competencies (Modules)
Curriculum Map (Collegial work)
Course Map (Learning Design)
Module 3 (Learning Design)  Alignment
Guide (Learning Design - SMEs)
Module 3- Study Guide
Rubrics (Example 1)
Rubrics (Example 2)
Rubrics (Example 3 - AU)
Graduation

AU Competencies: System - Institution

AU Guide (Learning Design - SMEs)
Conclusions:

- C/OBE is still an emerging model
- It is important to know the different interpretations in the literature of the model to have an overall and systemic understanding of C/OBE
- It is crucial to understand C/OBE framework, its main components, and how they relate to one another
- The model has to be adapted to your own context, system and your own goals
- The way the model works permeates not only curriculum (program) but also learning design (course design)
  - It is relevant to design all level competencies and break them down accordingly
  - Collegial work is a must
  - It is helpful to know successful practices that might be adapted to your own context
- Guidance and orientation facilitate curriculum and learning design
- Curriculum/learning design is an iterative process
- Involving all the academic community (tutors, professors, facilitators, administrative) in discussion and conversations about the model is very helpful to ground the model
Thank you for your attention:

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