Course Content that Counts

Preparing Graduates for the Job Market

Dr. Valerie Lopes
What must the graduates be able to know, think, and do in order to get a job?
Outcomes Based Program Development Process

Guided by Ministry of Education and Regulatory Bodies

1. New Program Idea
   - Labour Market Data and Competitor Analysis
   - Job Analysis – knowledge, skills and attributes
   - Concept note for Program
   - Program Advisory and Quality Assurance Committees validate program
   - SMART Program Outcomes that are linked to job requirements
   - SMART Learning Outcomes mapped to program outcomes
   - Define Assessments and learning activities linked to Outcomes = teach/practice/assess job skills and knowledge
   - Jobs available for Graduates

   Directed by Ministry of Education and Regulatory Bodies
Program development vs. Program Review

Jobs available for Graduates
Assessments and learning activities
SMART Course Learning Outcomes
SMART Program Outcomes
Program Advisory and QA Committees
Concept note for Program
Labour Market Data and Competitor Analysis
Job Analysis – knowledge, skills and attributes
New Program Plan
## SMART Outcomes

**Specific**
- State clear and specific outcomes – no vague or unnecessary words

**Measurable**
- Can be measured through assessment/evaluation

**Achievable**
- Can be achieved based on prior knowledge of learners and resources available for T and L

**Relevant**
- Relevant in relation to the program description and field/discipline

**Time-limited**
- Can be achieved within the time available for the course and/or program
What are SMART outcomes?

Three parts to every learning outcome statement:

When writing outcomes, ask 2 questions about each outcome:

• Is there a “specific” focus for the learning?
• Can it be measured? – Is there a specific behavior or performance that can be associated with the achievement of the outcomes?

<table>
<thead>
<tr>
<th>Action Verb</th>
<th>Content/Process – the focus of Learning</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explain</strong></td>
<td>the steps required to create outcomes based programs</td>
<td>focused on enhancing job prospects for its graduates</td>
</tr>
</tbody>
</table>

| One verb reflecting the level of learning – e.g., identify, explain, analyze, create | What is the focus of the learning? This part of the statement specifies the learning to be demonstrated (the what). | The criteria that determines the context of the learning. This gives disciplinary perspective and describes the intent of the learning (this is the why or what for). |

When writing outcomes, ask 2 questions about each outcome:
Program: Public Health Practitioner

Program Learning Outcome:
1. Analyze the relationship between social determinants of health, health policies, and practices in community settings to inform services provided to individuals and communities.

Courses in the Program

Public Health Policies and Practices

Social Determinants of Health

Community Health Networks

Course Learning Outcomes

• Discuss Public Health Policies that guide the ways vaccines are administered
• Explain the ways in which local public health units ......
Mission, Vision and Values of the University

Teaching and Learning Center – Program Quality Unit

Outcomes Based Programs and Courses

Career Services
Applied Research
WIL

Essential Employability Skills

Quality Assurance – Program Review and Development Processes
Faculty Development Programs

Course Content that Counts – Preparing Graduates for the Job Market

Key performance Indicators and Measures of Success
“Great projects should always start in the simplest way.”

Eugenio Garza Sada

Tecnológico de Monterrey was founded in 1943 by visionary entrepreneur and philanthropist Eugenio Garza Sada, who led a group of Mexican business leaders to create an innovative educational institution in Mexico as a non-profit institution from society and for society.
280,000 alumni

23% EXATEC owners or partners after 3 months of graduation

57% Alumni with int. experience

Top 155 QS World University Ranking

Top 10 Princeton Review University Ranking

22% CEOs in companies in Mexico

+7,000 faculty

+90,000 students

+7,000 faculty

Presence in 26 cities

~90,000 students

+7,000 faculty

57% Alumni with int. experience

Engineering, Business, Health, Humanities, Architecture, Government, Social Sciences, Education

~90,000 students

Top 10 Entrepreneurship

National Research System

Top 155 QS World University Ranking

Graduate

Undergrad

Highschool

Engineering, Business, Health, Humanities, Architecture, Government, Social Sciences, Education

+500 Researchers

Graduate

Undergrad

Highschool

22% CEOs in companies in Mexico

Top 10 Entrepreneurship

National Research System

Graduate

Undergrad

Highschool

22% CEOs in companies in Mexico

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National Research System

Graduate

Undergrad

Highschool

22% CEOs in companies in Mexico

Top 10 Entrepreneurship

National Research System

Graduate

Undergrad

Highschool

22% CEOs in companies in Mexico

Top 10 Entrepreneurship

National Research System

Graduate

Undergrad

Highschool

22% CEOs in companies in Mexico
In 2012 the Board of Directors defined its mandate:
To continue increasing and strengthening academic quality.

Our societies, occupations, and the ways in which we interact, communicate and make decisions are being revolutionized. The educational field is one of the main areas where changes are taking place. We started by designing new learning models and platforms, which thanks to Internet and new technologies, are revolutionizing education.

“We are preparing students for jobs that don’t exist yet...using technologies that have not been invented...to solve problems we don’t know of yet.”

-Karl Fisch y Scott McLeod authors of Did You Know? (Shift Happens), 2011.
Tecnológico de Monterrey has decided to evolve into a new educational model that allows students to become leaders who are prepared to face the challenges and opportunities of the 21st century.

This model, known as Tec21, bases its success on improving competitiveness by boosting skills and developing the competencies required in the different professional fields.
Our educational model is based on 4 components:

1. **Challenge-based Learning**
2. **Flexibility**
3. **Inspiring Faculty**
4. **Memorable Experience**
Introduces students to real problems, allowing the development of transformational leadership competencies, helping them become more competitive in the current world.

It generates motivation and a sense of achievement. It connects students to their environment, generating tangible value.

It provides challenging experiences that develop entrepreneurship and a feeling of humanity. It is experiential, collaborative, and integrative of knowledge.
CHALLENGE-BASED LEARNING
How are we living it at TEC?
CHALLENGE-BASED LEARNING
How are we living it at TEC?

+ 1000 Development Partners
OUR BUILDING BLOCKS

FOR SKILLS REQUIRED, WE DECIDED TO SURVEY ALUMNI, UNIVERSITIES, AND DEVELOPMENT PARTNERS ABOUT WHAT THEY CONSIDERED IMPORTANT.

TRANSVERSAL COMPETENCIES

1. Self-awareness
2. Entrepreneurship & innovation
3. Social Intelligence
4. Ethical commitment and citizenship
5. Complex reasoning
6. Communication
7. Digital transformation

BUSINESS AREA COMPETENCIES

1. Responsible management
2. Talent management
3. Innovation & creativity
4. Business Intelligence
5. Strategy and global vision
6. Financial vision
7. Markets and business opportunities

PROGRAM COMPETENCIES
## Challenge-Based Learning

**How are we living it at TEC?**

### CHALLENGE

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>SEMESTER 2</th>
<th>SEMESTER 3</th>
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</thead>
<tbody>
<tr>
<td>Elective Course Mathematics and Science</td>
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</tr>
<tr>
<td>Financial Analysis</td>
<td>Business Leadership</td>
<td>Decision Support Analyst</td>
</tr>
<tr>
<td>Enterprise Economy</td>
<td>Business Decision</td>
<td>Business Model Innovation</td>
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<tr>
<td>Business Role in Society</td>
<td>Business Programming</td>
<td>Talent Management Process</td>
</tr>
<tr>
<td>Business Globalization</td>
<td>Strategy and Talent</td>
<td>Creating Prototypes</td>
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<tr>
<td>Elective Course Humanities and Fine Arts</td>
<td>Financial Management</td>
<td>Marketing Insight to Develop Strategies</td>
</tr>
<tr>
<td>Elective Course Humanities and Fine Arts</td>
<td>Elective Course Humanities and Fine Arts</td>
<td>Decision Support Analyst</td>
</tr>
<tr>
<td>Elective Course Mathematics and Science</td>
<td>Elective Course Social and Behavioral Sciences</td>
<td>Culture, Organization and Human Talent</td>
</tr>
<tr>
<td>Elective Course Mathematics and Science</td>
<td>Elective Course Social and Behavioral Sciences</td>
<td>International Sales &amp; Contracts</td>
</tr>
<tr>
<td>Elective Course Humanities and Fine Arts</td>
<td>Elective Course Social and Behavioral Sciences</td>
<td>International Logistics Operations</td>
</tr>
<tr>
<td>Elective Course Humanities and Fine Arts</td>
<td>Elective Course Social and Behavioral Sciences</td>
<td>Import Management &amp; Compliance</td>
</tr>
</tbody>
</table>

### SEMESTER 4

<table>
<thead>
<tr>
<th>SEMESTER 4</th>
<th>SEMESTER 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective Course Leadership, Entrepreneurship and Innovation</td>
<td>Elective Course Ethics and Citizenship</td>
</tr>
<tr>
<td>Global Business Trends &amp; Risks Detection</td>
<td>International Service Development: Trading Intangibles</td>
</tr>
<tr>
<td>International Business Panorama</td>
<td>International Logistics Operations</td>
</tr>
<tr>
<td>Negotiation Across Cultures</td>
<td>Import Management &amp; Compliance</td>
</tr>
<tr>
<td>Exportation Plan</td>
<td>TEC Week</td>
</tr>
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<td>TEC Week</td>
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</tbody>
</table>

### SEMESTER 6

<table>
<thead>
<tr>
<th>SEMESTER 6</th>
<th>SEMESTER 7</th>
<th>SEMESTER 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEC Semester (Professional Elective I-VI)</td>
<td>TEC Semester (Topics I-VI)</td>
<td>Elective Multidisciplinary Professional</td>
</tr>
<tr>
<td>International Strategy Development for the XXI Century</td>
<td>International Strategy Development for the XXI Century</td>
<td>Elective Course Ethics and Citizenship</td>
</tr>
</tbody>
</table>
AN EXAMPLE: RETO COPPEL

- One of the most important retailers in Mexico
- 100,000+ employees nation wide
- 500+ stores in Mexico and LATAM

CHALLENGE

¿How should Coppel has to modified its business model in order to attract millennials, centennials to the stores so they can have a sustainable company?
AN EXAMPLE: RETO COPPEL

THE CHALLENGES ARE:

1. COMPANY SITUATIONAL ANALYSIS
2. BUSINESS MODEL IMPROVEMENT

MODULES

- Introduction to TEC 21
- Principles of project management
- Business roles in society
- Fundamentals of management theory

- Business models
AN EXAMPLE: RETO COPPEL

~4,000 students  26 campus  700+ projects  3 selection stages

Section Campus Region

13 judges Coppel Corporate Office

National Competition

Corporativo Coppel
Culiacán, Sinaloa

5 teams

Santa Fe
Querétaro
Saltillo
Veracruz
Cd. Obregón

Santa Fe Wining Team

Evaluation

Bloque: 9.4
Professor: 9.3

TEC: 9.05
Ashesi University: Experiences with career preparation
2002: Started with a mission to educate ethical, entrepreneurial leaders in Africa.
2011: Inaugurated permanent campus in Berekuso.
2015: Continued growth with Engineering programme started.
2018: Ashesi granted top honour by President of Ghana
Today:
Ashesi recognised as a leader in African Higher Education
90% Start careers within six months

8% Manage their own business

600+ Companies employing from Ashesi
Employer Engagement

Connecting students to industry and career learning opportunities; and exploring possible future pathways in line with the skills being learned on campus.
Employer feedback across learning goals

<table>
<thead>
<tr>
<th>Skill</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technologically Competent</td>
<td>95%</td>
<td>97%</td>
<td>90%</td>
<td>97%</td>
</tr>
<tr>
<td>Critical Thinking &amp; Quantitative Reasoning</td>
<td>88%</td>
<td>91%</td>
<td>82%</td>
<td>91%</td>
</tr>
<tr>
<td>Ethics &amp; Civic Engagement</td>
<td>88%</td>
<td>93%</td>
<td>91%</td>
<td>93%</td>
</tr>
<tr>
<td>Curiosity &amp; Skills</td>
<td>87%</td>
<td>91%</td>
<td>92%</td>
<td>93%</td>
</tr>
<tr>
<td>Innovative &amp; Action Oriented</td>
<td>86%</td>
<td>91%</td>
<td>87%</td>
<td>91%</td>
</tr>
<tr>
<td>Team work and Leadership</td>
<td>87%</td>
<td>94%</td>
<td>87%</td>
<td>94%</td>
</tr>
<tr>
<td>Communication</td>
<td>84%</td>
<td>92%</td>
<td>84%</td>
<td>92%</td>
</tr>
<tr>
<td>Professionalism</td>
<td>83%</td>
<td>91%</td>
<td>82%</td>
<td>91%</td>
</tr>
</tbody>
</table>
Experiential Learning

Internships

Service Learning & Capstone Projects

Career Mentoring

Job Shadowing
Graduate placement within 6 months

- 90% (2005)
- 97% (2006)
- 97% (2007)
- 97% (2008)
- 98% (2009)
- 99% (2010)
- 91% (2011)
- 92% (2012)
- 90% (2013)
- 92% (2014)
- 91% (2015)
- 96% (2016)
- 90% (2017)
- 90% (2018)