Developing future-ready students through WIL: the role of competency frameworks

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WHY DO WE NEED TO FUTURE PROOF OUR GRADUATES?

Future conditions facing us

Climate change, globalization, technological advancements and disruption, shifting economic and political landscapes, aging populations, social and economic divides has led to:

A "VUCA" WORLD











SHIFTING TO INDUSTRY 4.0

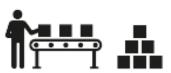


INDUSTRY 1.0

1760 - 1840

Mechanization, steam power, weaving loom





INDUSTRY 2.0

1870 - 1914

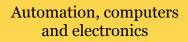
Mass production, assembly line, electrical energy





INDUSTRY 3.0

1969 - 2000







INDUSTRY 4.0

2000 - PRESENT

Cyber physical systems, internet of things, networks



5 BIG TRENDS:

- Fluid gigs (gig economy)
- Decentralized teams
- Motivation to work
- Lifelong learning
- Human augmented automation

Source: Forbes, July 2019





WHAT STEPS ARE YOU TAKING TO PREPARE YOUR STUDENTS FOR THE VUCA WORLD?

HOW CAN WORK-INTEGRATED LEARNING BE A STRATEGY?

HOW DO YOU CURRENTLY TEACH AND ASSESS STUDENT SKILL AND COMPETENCY DEVELOPMENT THOUGH WILP

University of Waterloo's FUTURE READY TALENT FRAMEWORK



A **competency framework** "outlines the skills, knowledge, and behaviours required to succeed in a course, program, role, or career."

Competency Frameworks: A Report Prepared by the Waterloo Centre for the Advancement of Co-operative Education (WatCACE) for the Future Skills Centre, May 2019

31,000+ students across
ALL DISCIPLINES have
access to WIL



#1 in Canada

for venture-backed capital enterprise (Pitchbook 2018)



Largest co-op program

of its kind in the world with

21,000+ students



1,100+ startups

in our 'Innovation Corridor'



\$270+ Million

in student earnings in 2018





Co-operative and Experiential Education Portfolio

- Centre for Career Action
- Co-op Education
- **CEE Services** (data, technology and project management)
- Communications and Marketing
- WatPD (curriculum including EDGE)
- WatCACE (research and thought leadership on WIL)
- Current competency assessment:
 - student performance evaluation; data collected by each























Expand expertise

Develop Self

Build relationships

Design and deliver solutions

Future Ready Talent

University of Waterloo's Future Ready Talent Framework

Expand Expertise	Develop Self	Build Relationships	Design and Deliver Solutions
information and data literacy	self-assessment	communication	critical thinking
technological literacy	self-management	collaboration	innovation mindset
context-specific knowledge & skills	lifelong learning & career development	cross-cultural agility	implementation



Development – Competencies and Behaviours

19 -> 57 -> 15 -> 12 + 51

competency competencies appeared in these analyzed frameworks

Competencies competencies appeared in at least half of all frameworks

Competencies behaviours

Included in our Future Ready

Talent Framework



Validation

Phase 1: Validation with CEE staff and employers

Checking alignment between behaviours, competencies and categories

Phase 2: Validation with employers

 Employers assessing a student on the behaviours and overall performance statements

Phase 3: Validation with students

Students self-assessing on behaviours



Future state – Talent Framework

- All students introduced to talent framework
 - Pre-first work experience (e.g. CFE, PD1, workshops)
- PD courses: content/assessment aligned with FRTF and supports students in talent development
 - Including new courses and content that isn't currently provided
- Co-op site visits: student advisors reinforce opportunities for talent development
- CCA programming: advisors help students identify and provide evidence for talent development
- Employers: assess students on talents through student performance evaluation; use talent framework for job postings



Goals

- Improved student learning experience focused on future-ready skills
- Better integration across CEE portfolio
- Framework for integration between classroom and work experiences
- Improved evidence for all stakeholders on skills developed through WIL
 - Better reporting
 - Enhanced continuous improvement processes



COMPETENCY FRAMEWORKS: YOUR SUCCESSES AND CHALLENGES?

