

Work-Integrated Learning: A Strategy for Future Proofing the Global Economy

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**WHY DO WE NEED TO FUTURE
PROOF THE GLOBAL ECONOMY?**

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:

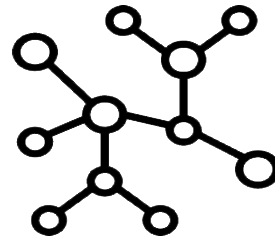
A “VUCA” WORLD



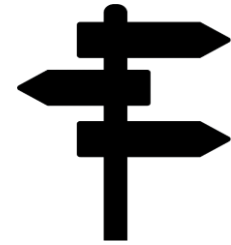
VOLATILITY



UNCERTAINTY

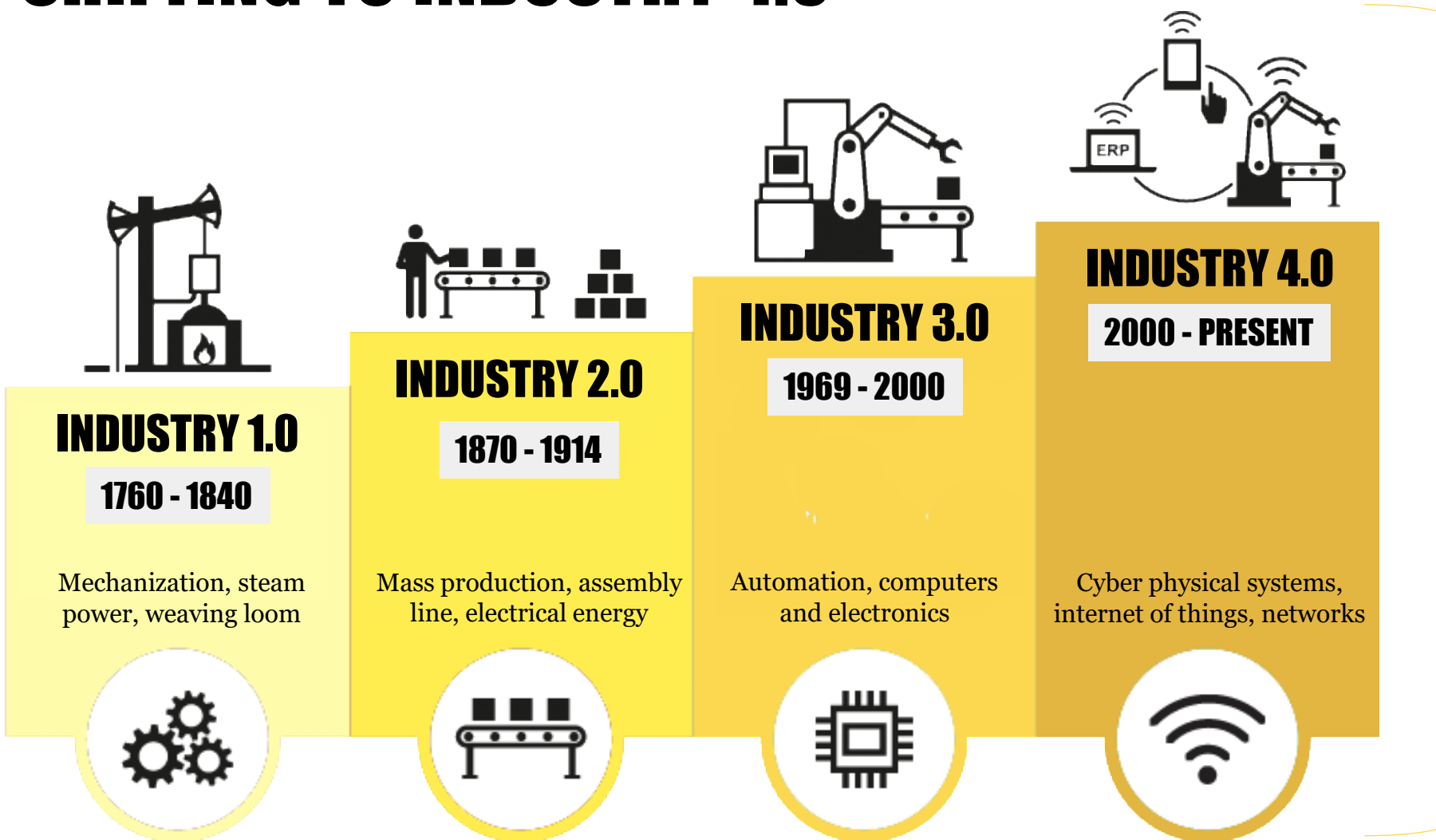


COMPLEXITY



AMBIGUITY

SHIFTING TO INDUSTRY 4.0



Source: A Medium Corporation (2017)

5 BIG TRENDS:

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

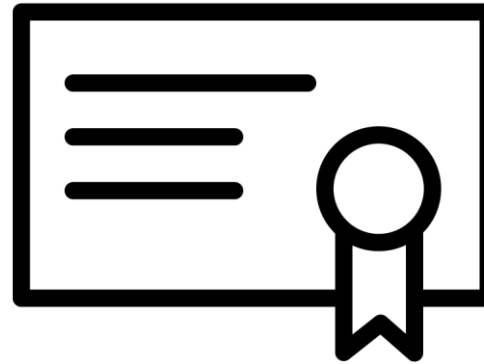
Source: Forbes, July 2019

HOW CAN WORK-INTEGRATED LEARNING BE A STRATEGY?

A QUICK PRIMER...

EXPERIENTIAL LEARNING

Experiential learning is the process of **learning** through **experience**, and is more specifically defined as "learning through reflection on doing".

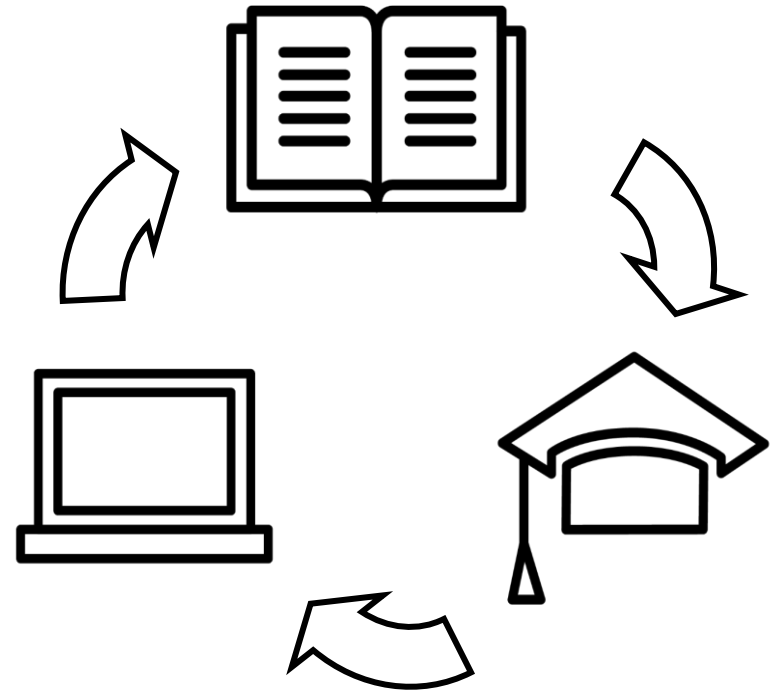


WORK-INTEGRATED LEARNING

Work-integrated learning (WIL) is a sub-set of experiential learning. WIL formally and intentionally integrates a student's academic studies with learning in a workplace or practice setting.

WIL experiences normally include an engaged partnership between an academic institution, a host organization/employer and a student.

(CEWIL, 2019)



**WIL THAT IS QUALITY, INTENSE AND
MAKES AN IMPACT WILL HELP FUTURE
PROOF OUR COUNTRIES FOR
GLOBAL ECONOMIC SUCCESS.**



...SO HOW DO WE GET THERE?

**A QUALITY
WIL FRAMEWORK:**

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FIRST: CLARITY AND QUALITY MATTER

This is key especially when there is an increased demand for WIL, and when we are unsure about what constitutes WIL – conflation with EL:

- Know what we are talking about
- Enable standards
- Allow for data collection and research
- Provide guidance for stakeholders
- Protect stakeholders

HOW DO YOU DEVELOP A QUALITY WIL FRAMEWORK?

Waterloo Centre for the Advancement of Co-operative Education (WatCACE)

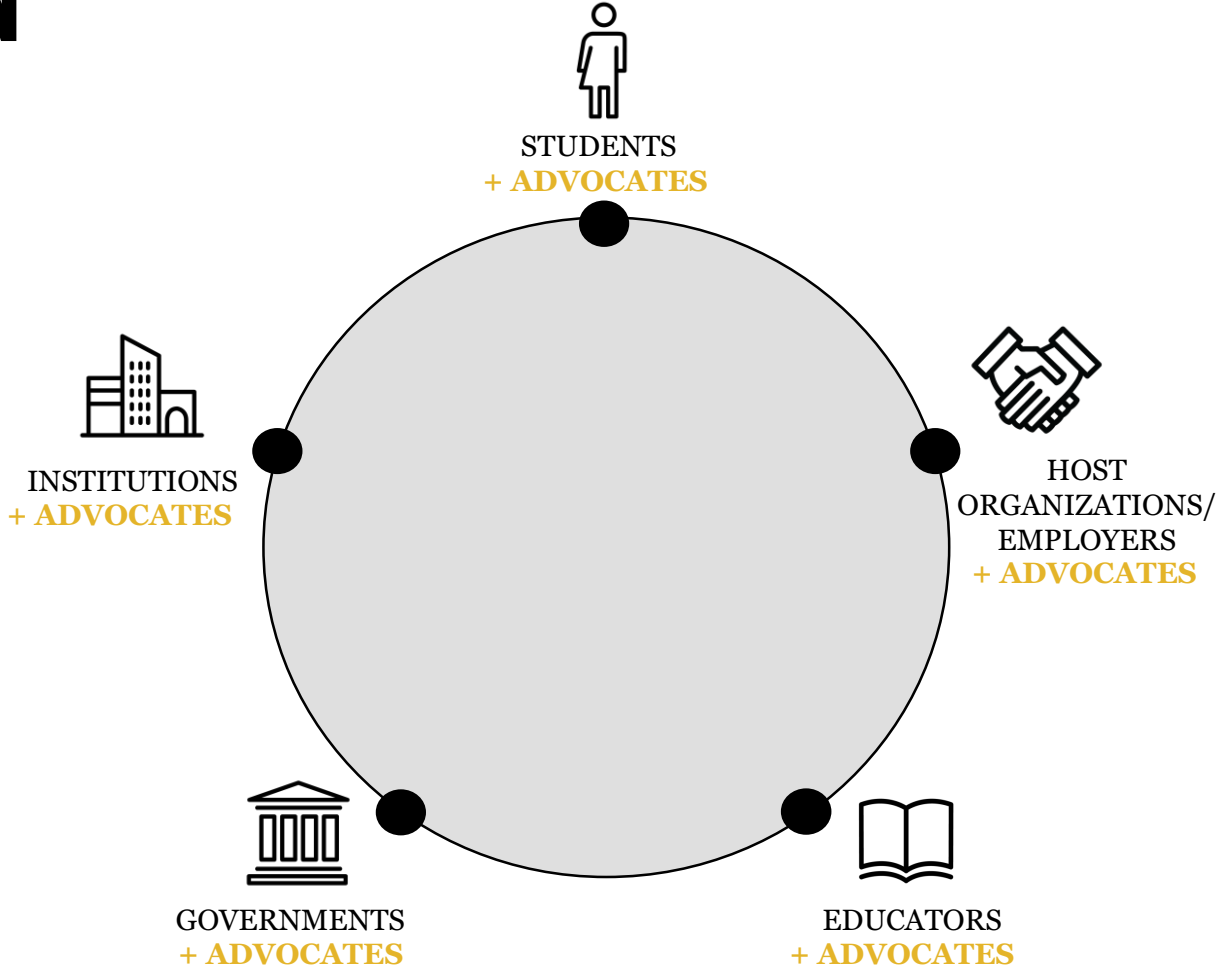
- Literature review on quality in WIL and quality assurance frameworks
- Discussions with:
 - research team and experts in field
 - practitioners and leaders
 - stakeholders and advocates

Publication of white paper November 2018

**A QUALITY
WIL FRAMEWORK:**

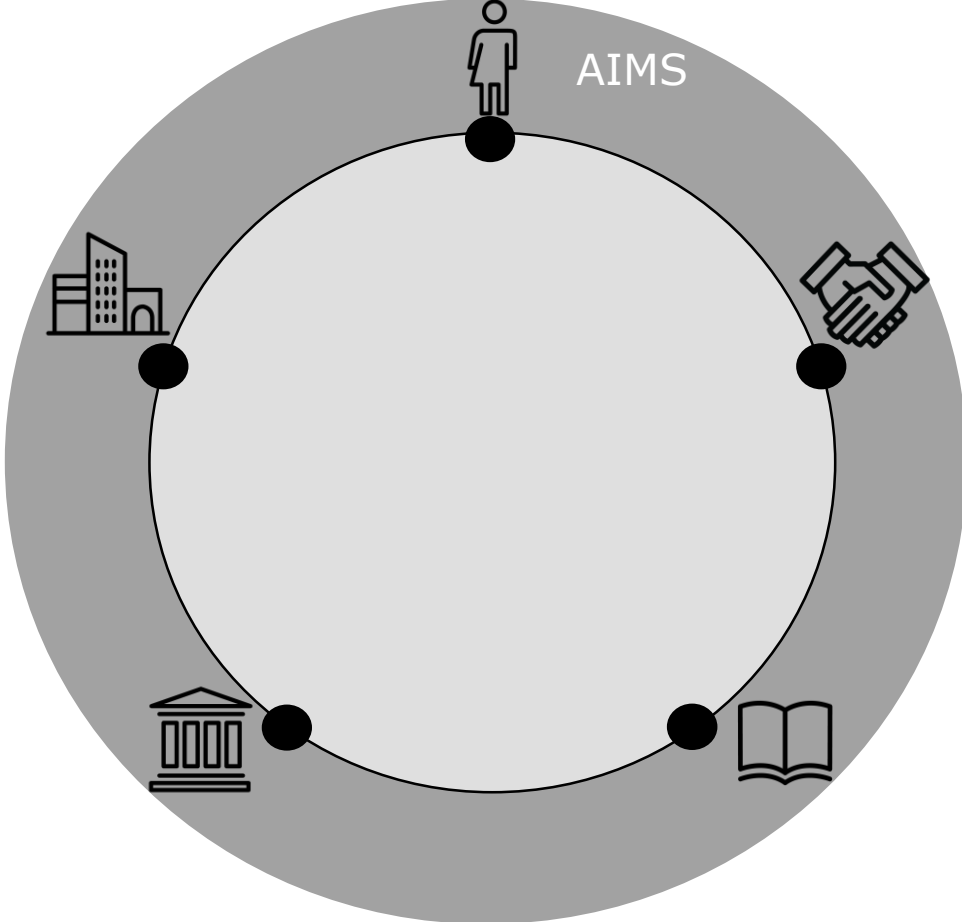
**AIMS
ACTIONS
ACHIEVEMENTS**

WHO ARE THE MAIN STAKEHOLDERS?



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WHAT ARE THE AIMS FOR EACH STAKEHOLDER?



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AIMS

STUDENTS	INSTITUTIONS	GOVERNMENT
Hands-on learning	Recruitment	Graduate employability
Application of theory in practical settings	Retention	Community university connectivity
Development of technical, soft and meta skills	Engaging pedagogy	Closing the skills gap
Career and purpose clarity	Connections with industry and community	Economic development and productivity
Employability	Successful graduates and stronger alumni links	
Offset costs of education	Relevance to government and funders	

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AIMS

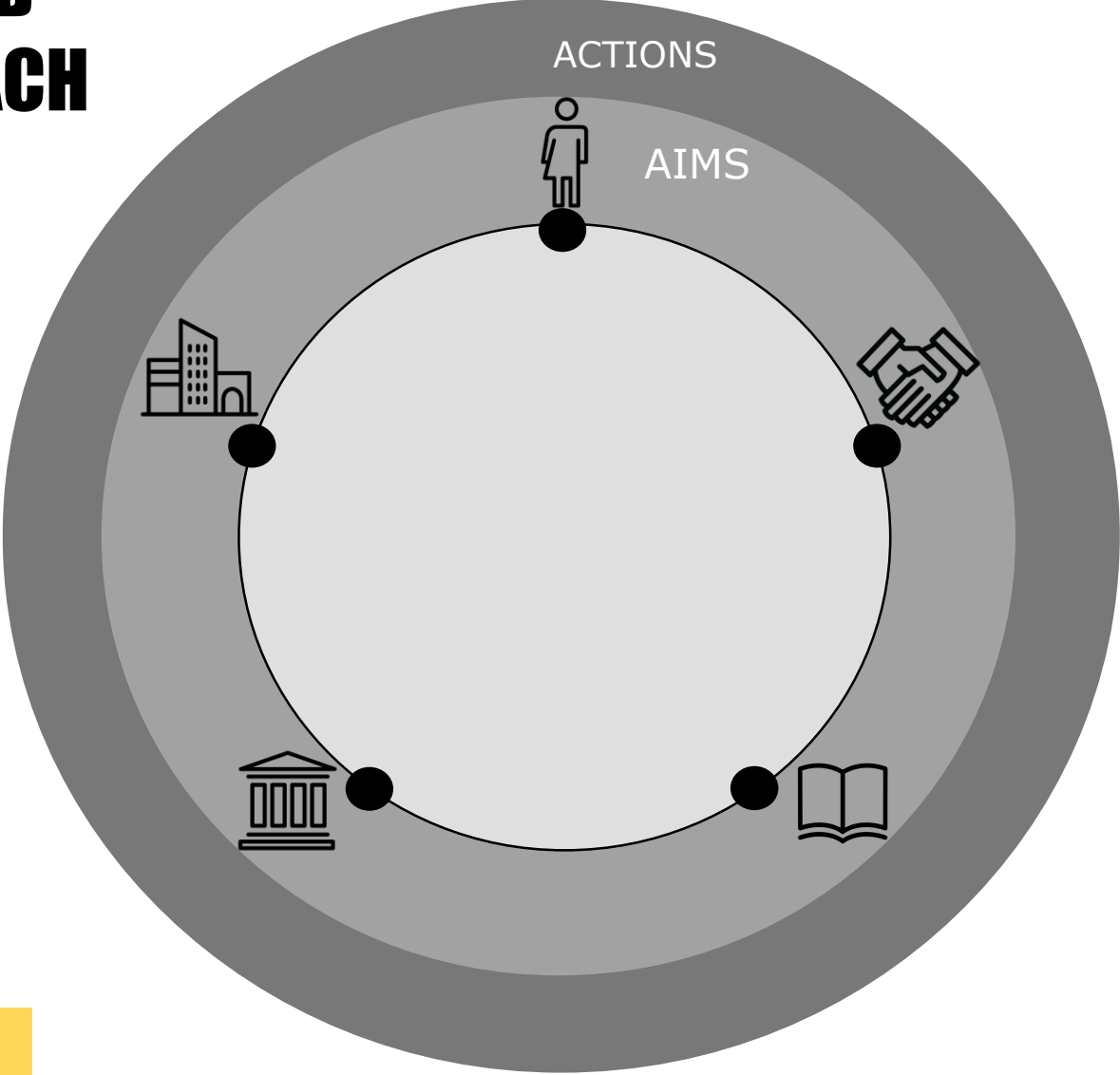


EMPLOYER	EDUCATOR
Recruitment of talent	Recruitment of talent
Exposure to current research, technology and ideas	Engagement in discipline
Engaging staff	Development of skills and personal capabilities that strengthen academic achievement
Innovation	Development of purpose and career clarity
Project completion	Opportunity to renew curriculum
Connections to academic institution	Connections to industry and community

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AIMS



WHAT ACTIONS NEED TO BE TAKEN TO REACH THE AIMS?



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ACTIONS**

ACTIONS: P.E.A.R.

Pedagogy

Experience

Assessment

Reflection

Whatever the type of WIL program, the quality practices of P.E.A.R. apply to the actions.

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ACTIONS

ACTION	TIMING	
PEDAGOGY	Before	Skill development related to job readiness and preparation for experience
	During	Additional training/content to address needs during experience and job training
	After	Next phase of content and technical skill development, additional skill training for further work experiences, career development and capstone

ACTION	TIMING	
EXPERIENCE	Before	<p>Student: needs to be identified, qualified and prepared for experience</p> <p>Host organization: needs to be sourced, vetted and prepared for the student</p> <p>Institution: identifies meaningful experiences and prepare students and employers</p>
	During	<p>Student: needs to engage in an ethical, responsible manner</p> <p>Host organization: needs to provide a supportive environment for the student experience</p> <p>Institution: needs to monitor quality of experience</p>
	After	<p>Student: completes required employer and institutional requirements for experience</p> <p>Host organization: meets obligations made to the student and institution</p> <p>Institution: follows up with student and host organization to ensure retention of quality experience on an ongoing basis</p>

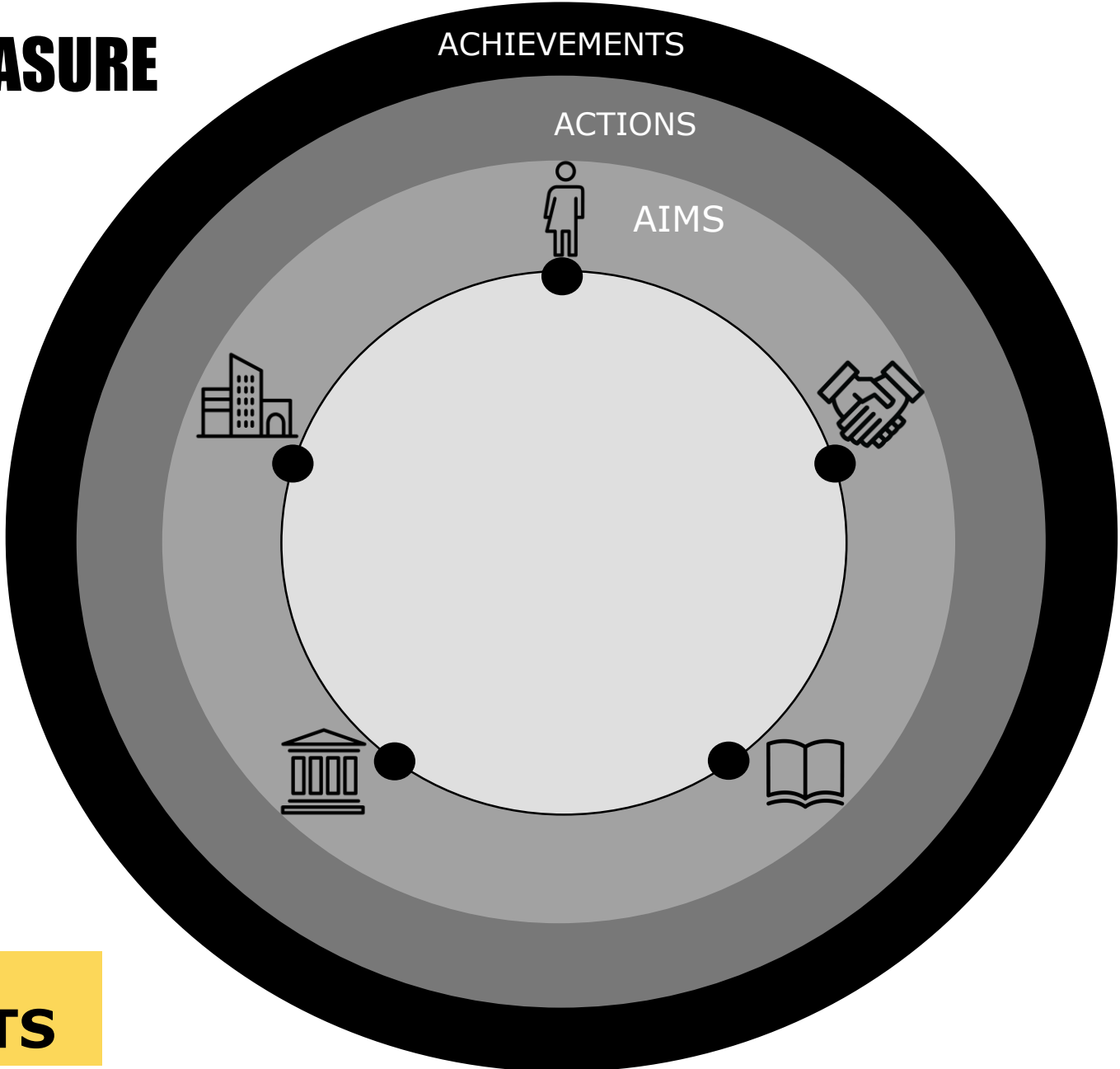
**AAA★
ACTIONS**

ACTION	TIMING	
ASSESSMENT	Before	Student and employer/host organization understand assessments to be conducted
	During	Learning goals established and learning and performance assessment conducted including by employer/host organization
	After	Required assessments completed, including those required by employer/host organization. The assessments recorded by Institution

ACTION	TIMING	
REFLECTION	Before	Student reflects on what meaning they want to gain from the experience and then student identifies learning outcomes as appropriate for employer/host organization context
	During	Student reflects about experience while engaged Student identifies the development of learning outcomes, including those related to employability and career development
	After	Student reflects on the impact of the experience and their next steps including related to employability and career development

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ACTIONS**

HOW DO YOU MEASURE ACHIEVEMENTS?



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ACHIEVEMENTS

ACHIEVEMENT	EXAMPLE
PEDAGOGY	<ul style="list-style-type: none">• Curriculum: before, during and after• Number of courses• Type of courses• Development of technical and soft skills, including those related to employer/host organization needs• Curricular mapping: how do the experiences map into the overall curriculum?• Employer/industry input into curriculum may occur

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ACHIEVEMENTS

ACHIEVEMENT**EXAMPLE****EXPERIENCE**

- Number of students engaged
- Number of host organizations
- Number of experiences
- Successful completion
- Application, interview, employment rates
- Employability outcomes
- Recruitment and retention in labour market

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ACHIEVEMENTS

ACHIEVEMENT	EXAMPLE
ASSESSMENT	<ul style="list-style-type: none">• Identification of learning objectives• Articulation of learning outcomes, including those related to employability• Student learning measurements and reports, including connections to career• Achievements related to impact on employers/host organizations

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ACHIEVEMENTS

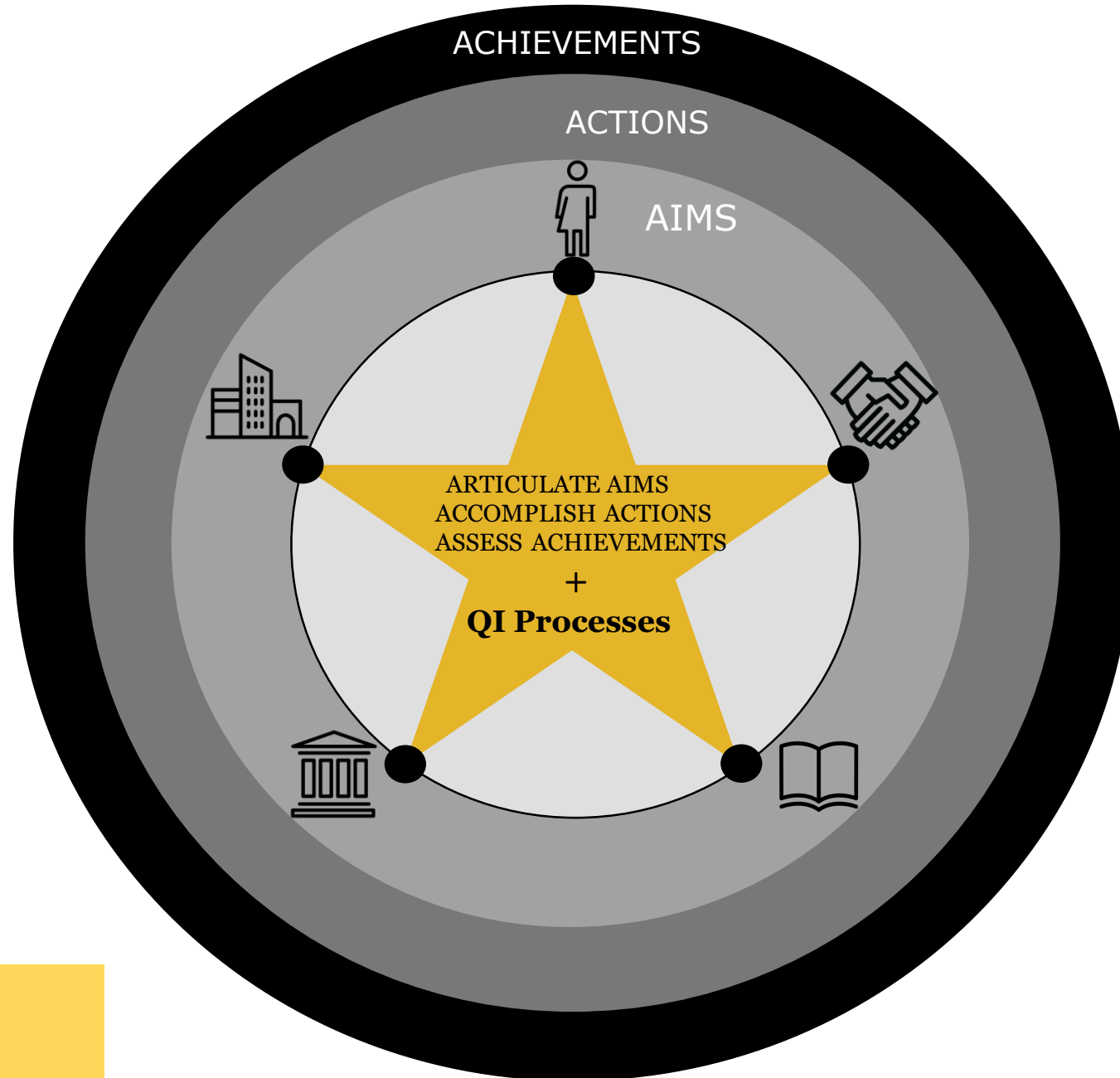
ACHIEVEMENT	EXAMPLE
REFLECTION	<ul style="list-style-type: none">• Student reflection outcomes, including related to employability and career development• Impact measurements, including related to employer/host organization talent recruitment and retention needs• Development of habits of mind for lifelong learning

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ACHIEVEMENTS

QUALITY WIL FRAMEWORK: AAA★

What continuous
improvement
processes are in place?



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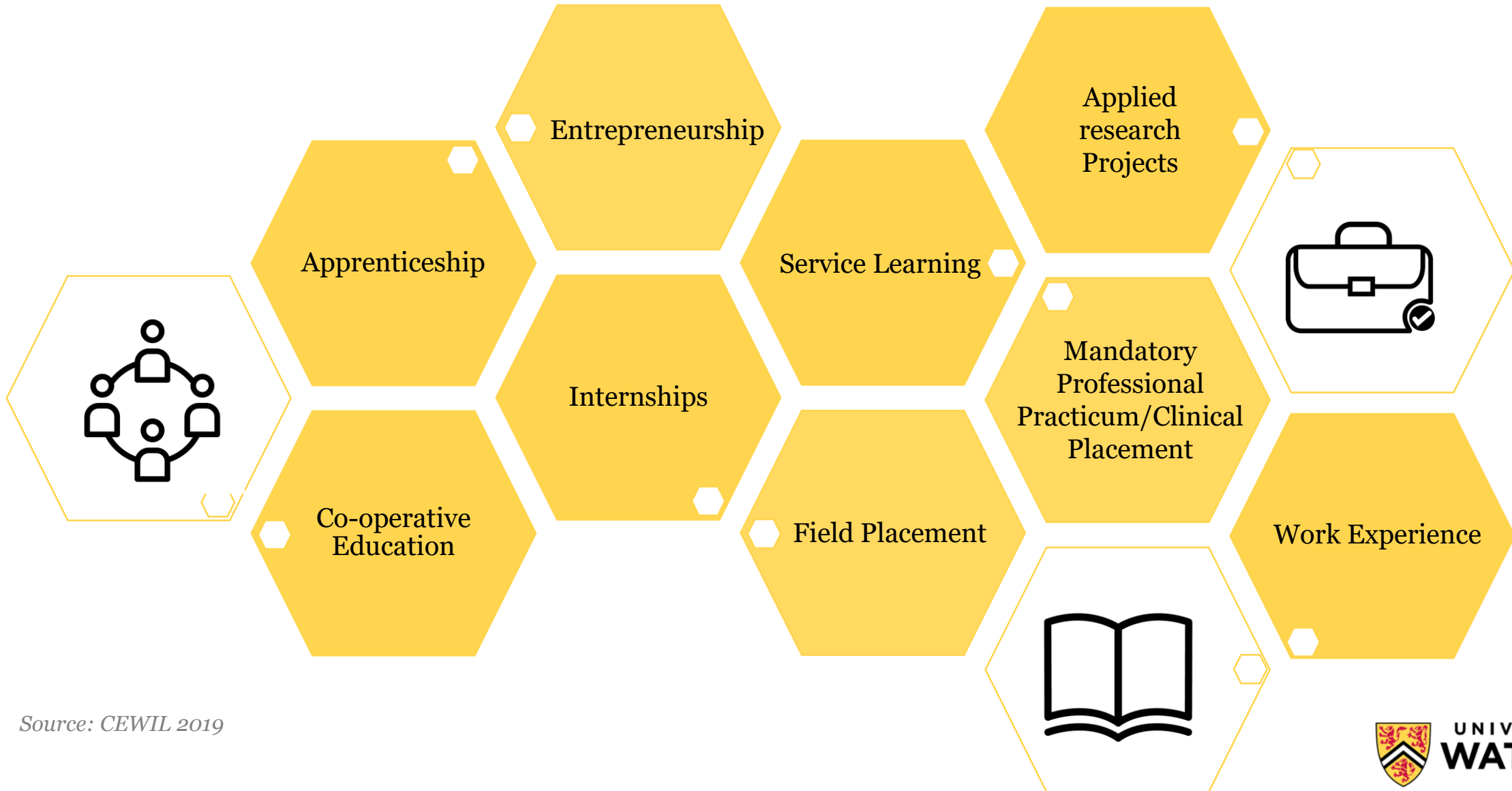
QUALITY IMPROVEMENT

- Student improvement (student achievement record)
- Program improvement (curricular renewal)
- Stakeholder engagement, including employer/host organization
- Use of data and data analytics, including as related to employer recruitment and retention
- Impact analysis for each stakeholder including for employer/host organization

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**HOW DO YOU MEASURE THE
INTENSITY OF A WIL PROGRAM?**

THE NINE TYPES OF WIL



Source: CEWIL 2019

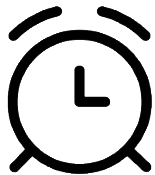
NOT ALL WIL PROGRAMS ARE CREATED EQUAL

Each type of WIL requires different time in the workplace. Length of time in the experience is related to intensity of experience.

Time x Quality = Intensity of experience

Time	Hours of time on task relationship to learning, development, outcomes and impact
Quality practices	P.E.A.R. enacted by the three partners (students, educators, employers) before, during and after each experience
Intensity	The amount of time and the application of quality practices (P.E.A.R.)

Time



Quality



Intensity



**HOW DO YOU MEASURE THE
IMPACT OF A WIL PROGRAM?**

VARYING LEARNING OUTCOMES OF DIFFERENT TYPES OF WIL

- **Vocation specific skills**
 - Apprenticeship
- **Employability related capabilities**
 - Co-operative Education
 - Internships
 - Work Experience
- **Entrepreneurial mindset**
 - Entrepreneurship
- **Service to community mindset**
 - Service learning
- **Research skills**
 - Applied research projects
- **Profession specific skills**
 - Mandatory Professional Practicum/Clinical Placement
- **Discipline specific technical skills**
 - Field placement

**University of Waterloo's
FUTURE
READY
TALENT
FRAMEWORK**



FUTURE READY TALENT

Expand & transfer expertise



+ Develop self



+ Build relationships



+ Design & deliver solutions



= **Future Ready Talent**



UNIVERSITY OF WATERLOO'S FUTURE READY TALENT FRAMEWORK

Expand + Transfer Expertise	Develop Self	Build Relationships	Design + Deliver Solutions
information & data literacy	self-assessment	communication	critical thinking
technological agility	self-management	collaboration	innovation mindset
context-specific knowledge & skills	life-long learning & career development	intercultural effectiveness	implementation

Learning Outcomes



(
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ACHIEVEMENTS
)



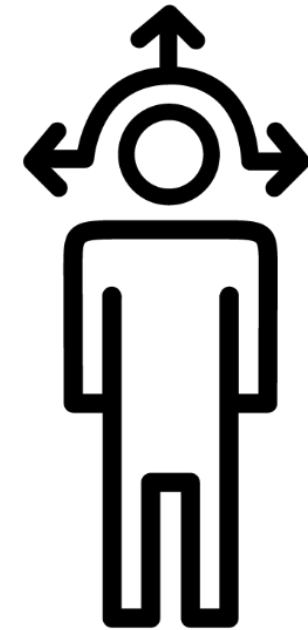
Intensity



(
⌚ × ★
(Time x Quality)
)



Learning Impact

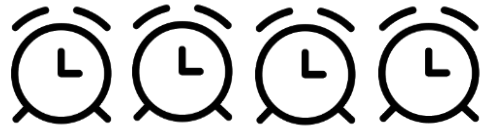


DIFFERENCES IN WIL

Work-integrated learning can be categorized as nine types, all built upon quality practices (P.E.A.R.) but differences in:



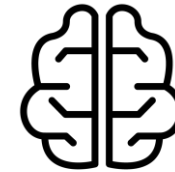
How the quality practices are enacted



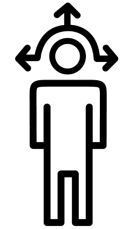
Cumulative time spent in the experience



Learning Outcomes



Reflection

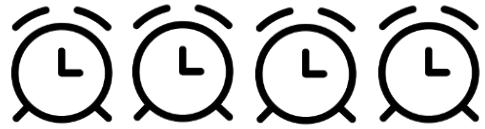


Learning Impact

WIL PROGRAMS CAN FUTURE PROOF THE GLOBAL ECONOMY IF WE:



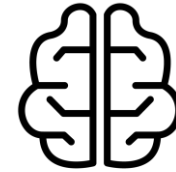
Invest in quality practices



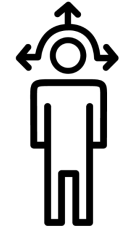
Allow students enough time in these experiences to strengthen intensity, build resilience and ROI



Focus learning outcomes on preparing students for the future of work



Position reflection as developing habits of mind for lifelong learning



Appreciate and integrate the impact from their learning into our institutions and workplaces

& continuously adapt to the needs of all stakeholders

**WE NEED QUALITY, INTENSE WIL
PROGRAMS THAT MAKE AN IMPACT.**



Thank you!

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