# Transformative Learning through International Internships

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<sup>Πρόγραμμα</sup> Ανθρώπινο Δυναμικό και Κοινωνική Συνοχή





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## **Internships and Higher Educational Institutions (HEIs)**

- Internships are **structured work experiences** that allow HEI students to apply their academic knowledge in real-world settings. The purpose of internships is **to bridge the gap between education and employment** by providing hands-on learning opportunities and exposure to the industry.
- Internships is one of the WIL (Work-integrated Learning) models as well as a form of experiential education, typically grounded on Kolb's Experiential Learning Theory (1984).
- The three partners (i.e., HEIs, workplaces and students) of an internship are viewed as independent, rather than interrelated, agents, where the students' learning is separated from the social process where that learning occurs.

# Framework & practical issues for the internship of DoEE/HMU students

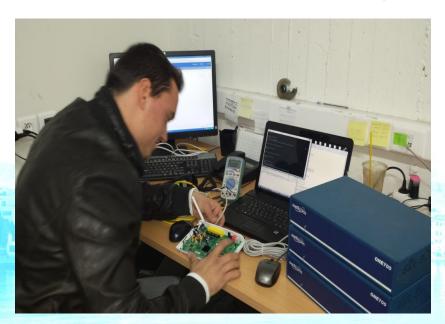
• Internships constitute an integral but optional part of the 5-years engineering curriculum at the DoEE/HMU. More specifically, the three months' internship duration is carried out through collaboration between the DoEE/HMU and Host Entities (i.e. a private company, a public organization, etc.), under the supervision of the academic and industry supervisors.

Academic Industry supervisor

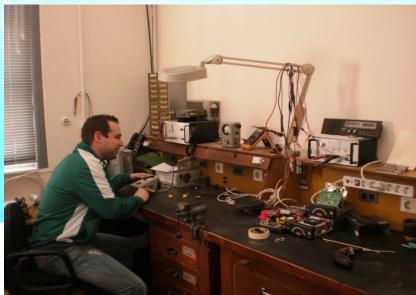
Student's WIL during the internship

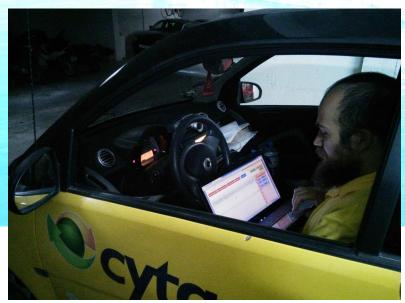
DoEE/HMU Host Entity

# Framework & practical issues for the internship of DoEE/HMU students









# Framework & practical issues for the internship of DoEE/HMU students in:

- Construction companies
- Manufacturing industries
- Maintenance and repair units
- Communication service providers
- Information technology companies
- Broadcasting companies
- Biomedical engineering units
- Research Units/Labs/Institutes/Centers
- Military branches
- Public sector and municipalities

- Acquisition of essential industry knowledge and specialization
- ✓ Gaining exposure to real-world industry practices
- ✓ Engaging in hands-on learning experiences
- ✓ Understanding industry-specific challenges and trends
- Developing a comprehensive knowledge base
- ✓ Exploring diverse job roles and career paths
- ✓ Identifying personal interests and strengths
- ✓ Testing career options before making long-term commitments
- ✓ Infusing versatility and adaptability in career trajectories

- Mastering specialized skills for future career advancement
- ✓ Earning practical experience in specialized areas
- ✓ Nurturing expertise through mentorship opportunities
- ✓ Enhancing critical skills required for specific industries
- Building a strong professional network during internships
- Establishing connections with industry professionals
- ✓ Leveraging mentorship to gain valuable insights
- ✓ Initiating professional relationships with colleagues
- ✓ Expanding the network for future opportunities
- ✓ Tapping into mentorship for guidance and advice

- ✓ Learning from mentors' experiences and expertise
- ✓ Cultivating invaluable long-term mentor relationships
- ✓ Leveraging network for future career prospects
- ✓ Accessing job opportunities through referrals
- Garnering recommendations for future employment
- Exploring collaborations and business partnerships
- Developing essential soft skills for career advancement
- ✓ Enhancing communication and interpersonal skills
- ✓ Engaging in effective team collaboration
- ✓ Refining verbal and written communication abilities

- ✓ Practicing active listening and constructive feedback
- Cultivating problem-solving and critical thinking capabilities
- ✓ Navigating work challenges with a proactive mindset
- ✓ Developing analytical skills to tackle complex problems
- Encouraging innovation and creativity in professional settings
- ✓ Fostering professionalism and work ethics
- ✓ Understanding workplace values and norms
- ✓ Demonstrating reliability and responsibility
- ✓ Building a positive reputation and personal brand

# Additional student benefits through international internships

- Evolution on both professional and personal fronts of a student in an international context
- Opportunity for students to socialize with a variety of people
- Learning of new language
- Ability to bring a global perspective to students' future work profiles
- Diverse understanding of students' interests
- Ability to work beyond the comfort zone of each student
- A chance for the students to explore different cultures and lifestyles

### **Searching for international internships**

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#### Companies

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FIND TALENTS



The European University ATHENA (Advanced Technology Higher Education Network Alliance) represents nine European mid-size Higher Educational Institutions: Polytechnic Institute of Porto (Portugal), Hellenic Mediterranean University (Greece), University of Siegen (Germany), University of Maribor (Slovenia), University Niccolò Cusano (Italy), University of Orléans (France), Vilnius Gediminas Technical University (Lithuania), University of Vigo (Spain) and Maria Curie-Skłodowska University (Poland).



#### Laura - Valencia, ESP

Ten questions for Laura from Lithuania who did her internship in Spain, Valencia as an SEO and online marketing intern.

MORE STUDENT EXPERIENCES \*



#### Milda - Helsinki, FIN

Ten guestions for Milda from Lithuania who did her internship in Finland as a research assistant in the National Institute for Health and Welfare.

MORE STUDENT EXPERIENCES »



#### Daniel Lopes - Porto, PT

An extraordinary trip where we faced a great deal of tough

# **Transformative Learning Theory**

- A core assumption of transformative learning theory is that, in general, a person's frames of reference exist in a state of homeostasis or equilibrium. People have assumptions about their own purpose in the world that serve as lenses for how they understand their experiences, and if they do not interact or engage with a force that challenges their frames of reference, then there is little reason for these to change. Thus, transformative learning is built upon challenging these assumptions.
- Transformative learning is an educational theory developed by Professor Jack Mezirow in the 1970s, which challenges personal beliefs and perspectives through reflection and communication. Mezirow believed that adults need to experience a "disorienting dilemma" a situation that challenges personal assumptions and views to undergo transformative learning.
- Nowadays, we understand transformative learning as a process of personal and cognitive growth. It involves critically reflecting on one's assumptions, beliefs, and values and then reconstructing them based on new experiences. As a result, one can experience a shift in one's worldview or perspective, resulting in a deeper understanding of oneself, others, and the world.

## Core criteria for transformative learning

#### Critical Reflection



- ✓ Although the term "critical reflection" has been used to broadly describe logic and problem-solving processes, it holds a more specific meaning in the transformative learning framework and literature. Critical reflection is framed as the ability to question, critique, and reframe presuppositions that influence an individual's thoughts and actions.
- ✓ In other words, it more specifically refers to how one responds to conflicts with their frame(s) of reference.

# Core criteria for transformative learning

Individual Experiences



- ✓ By actively engaging with and analyzing their experiences, individuals can challenge their beliefs, assumptions, and values, leading to transformative learning.
- ✓ The distorting dilemmas of transformative learning are inherently tied to one's own experience.

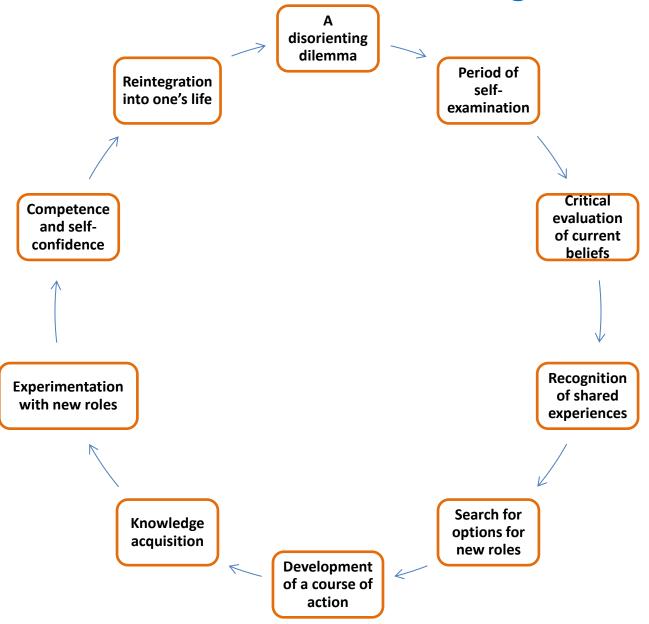
## Core criteria for transformative learning

#### Rational Discourse



✓ Discourse refers to both interpersonal relations **and** intrapersonal ones. The **interpersonal side** involves the experiences of interacting with differing or novel ideas through other people or the world as made by other people. The **intrapersonal** comes from internal debates that a person has when comparing experiences, deciding between priorities, and reflecting on the connection between their presumptions and outcomes.

# The 10 stages of Mezirow's framework for transformative learning



## Why Is Transformative Learning Important?

- ✓ Transformative learning is essential in education because it goes beyond simply transmitting knowledge and skills. It aims to shift individuals' perspectives, beliefs, and values, leading to personal and academic growth.
- ✓ It promotes diversity. Transformative learning encourages students to critically examine their assumptions and biases, allowing them to appreciate diverse perspectives, cultures, and backgrounds.
- ✓ It fosters students' inquisitiveness. Transformative learning nurtures curiosity, encouraging students to ask questions, explore different ideas, and seek knowledge beyond the surface level.
- ✓ It improves critical thinking and problem-solving skills. By challenging existing knowledge and beliefs, transformative learning encourages students to analyze information, evaluate its validity, and apply logical reasoning to solve complex problems effectively.
- ✓ It helps students adapt to changes. In today's fast-paced, dynamic world, adaptability is crucial. Transformative learning encourages the flexibility and open-mindedness necessary to embrace change.

### **Evidences on Transformative Learning**

- "Migration to transformational learning involves changes in teaching, curriculum, and assessment approaches. Teachers must pay attention to differences between students and facilitate learning that allows students to participate in the teaching-learning process actively. Curricula should emphasize 21st-century skills, such as interpersonal skills, critical thinking skills, and the ability for lifelong learning." (Ref. [4])
- "HEIS must offer open spaces for critical work and possibilities for students to critically investigate their frames of reference and induce them to believe their role in society is essential. Accordingly, academic teachers need knowledge about the importance of transformative learning in HE teaching practices." (Ref. [5])

## **Transformative Learning vs Experiential Learning**

Aspect	Experiential Learning	Transformative Learning
Basis	Experience	Critical reflection
Key Thinker	David Kolb	Jack Mezirow
Goal	Skill and knowledge development	Perspective transformation
Process		Dilemma → Reflection → Change
Depth	Often practical or behavioral	Deeply personal and cognitive

# Transformative Learning vs Experiential Learning in the context of internships

	Aspect	Experiential Learning	Transformative Learning
	What happens	Learners gain skills by doing	Learners critically question assumptions
9	Triggered by	Assigned tasks and reflection	Unexpected, disorienting challenges
	Main goal	Apply academic knowledge	Rethink identity or beliefs
	Example output	Resume-building experience	Life-changing perspective shift
	Support needed	Supervision and feedback	Space for critical reflection, mentoring, discussion

### **Conclusions and further directions**

- Student internships are not just temporary experiences but crucial pathways especially to students' career growth.
- Although experiential learning is the core purpose of most internships, transformative learning often occurs as it is triggered by critical incidents or exposure of students to new perspectives (especially in international internships).
- Adoption of transformative learning theory has implications for how academic and industry supervisors as well as other involved entities consider supporting students before, during and after the student's internship period.

### **Conclusions and further directions**

- More robust methods of assessing students' internship may be introduced (along with the traditional competencies' assessment) by considering the potential transformation due to a disorienting dilemma:
- ✓ Have your values, goals, or sense of identity changed?
- ✓ If so, how might this affect your personal or professional choices going forward?
- ✓ Has your understanding of what it means to be an engineer, for example, changed?
- ✓ How might this experience influence the kind of projects or companies you want to work for—or how you want to work with others?
- A proposal aiming to examine –among others- the incorporation of a transformative learning-based approach for international internships may be prepared for submission and subsequent project funding by partners of the ATHENA European University Alliance and beyond (Faculties and researchers in Pedagogy, Sociology, Engineering Schools, etc.).

#### References

- [1] J. Mezirow, "Perspective transformation", Adult Education, 28(2), pp. 100–110, 1978.
- [2] G. Liodakis, K. Loulakakis, I.O. Vardiambassis, and I.A. Kaliakatsos, "Quality in higher education and benefits from the internships" (Chapter 3) in "Project work and internships: Impacts on Labour Market and Society" 2014 Book (ISBN: 987-83-63987-03-9), International Center for Entrepreneurship (ICE) pp.45-61.
- [3] N. McRae, "Exploring conditions for transformative learning in work-integrated education", Asia-Pacific Journal of Cooperative Education, Special Issue, 2015, 16(2), pp. 137-144.
- [4] M. Herman, "Transformative learning: Empowering individuals to challenge their assumptions and create positive change", Chapter 5 in "Revolutionizing Education By Embracing The Modern Learning Era", 2023.
- [5] L. Bergman and F. Hessel, "From "confusion" and "fear" to "broadened horizons". Students' transformative experiences in two higher educational contexts: Argentina and Sweden", Journal of Transformative Education, Vol. 22(2) pp. 137–156, 2024.
- [6] www.learnflu.com
- [7] www.studycorgi.com