

Kilimanjaro VET Workpackage 2

# Learning Material Package 2023 – 2026

Iiris Happo & Kimmo Kuortti

Oulu University of Applied Sciences

The material and pictures are licensed under a  
CC BY-NC-ND licence.



# Kilimanjaro VET WP2: Improved Skills of the Teachers

## Goals:

- Introduction to competence-based education and curriculum
  - difference between traditional and competence-based curriculum
  - recognition of existing and previously acquired relevant competence of a learner
  - the relevancy of competences in view of working life
- Introduction to competence-integrated learning and use of digital tools
  - continuous assessment and the use of digital tools

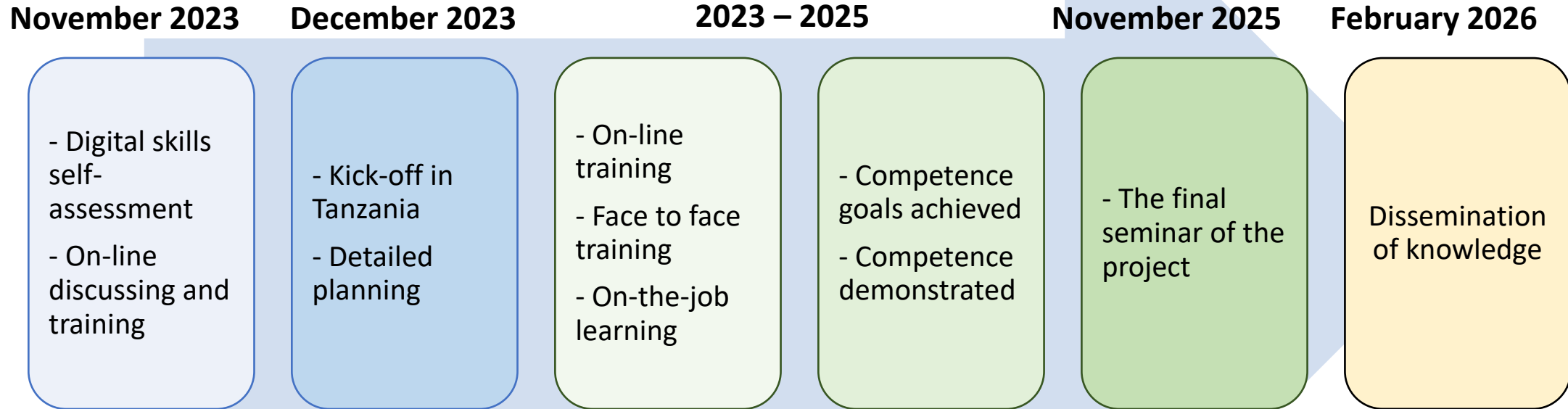
## Tasks:

- Competence-based education: principle and method
- Context-sensitive pedagogical approaches through teacher training
- Micro credentials for teacher training in VET
- Digital skills to VET teachers in Moshi
- Management and Governance

## Methods:

- On-line and face-to-face trainings
- On-the-job learning (as part of the participating teachers' daily work)

# Kilimanjaro-VET, Workpackage 2: The Process



# Kilimanjaro-VET, Workpackage 2

## Material Package

### Content:

- Competence-based curriculum
- Competence-based education
- Digital pedagogy
- Teaching practice
- Equity in education
- Reflective practice

What are you particularly good at?  
What would you like to be good at?  
How could you achieve this skill?



[This Photo](#) by Unknown Author is licensed under [CC BY-SA-NC](#)

# Competence-Based Curriculum

Competence-based curriculum specifies clear learning outcomes integrating knowledge, skills, and professional attitudes for practical competence.

- *Competence Goal*

- Defines **what** student is expected to master after studies.
- Defines what student is expected to know, understand or be able to do at the end of the course.
- Are usually expressed as knowledge, skills or attitudes.
- Contains a verb and the content to which the verb relates.

- *Assessment Criteria*

- Defines **how** student is expected to master the competence.
- Defines and concretize what kind of competence is adequate under each competence goal.
- The assesment is made on the basis of assesment criteria.

# Competence-Based Education

- Competence goals and assessment criteria are the same for everybody.
- The teacher's duty is to plan and implement teaching according to the competence goals.
- Although there are individual study paths, students do not study alone. Collaborative learning and competence demonstrating is encouraged.
- The students are given the opportunity to influence their own schedule, the way they study, to choose the methods to demonstrate their competence.

# Core Features of Competence-Based Education (CBE)

## Clearly defined competences

- Learning outcomes describe the knowledge, skills, and attitudes learners must demonstrate.

## Transparent criteria and expectations

- Requirements and assessment rubrics are clear and visible to learners.

## Authentic, performance-based assessment

- Assessments focus on real tasks, demonstrations, and application of skills.

## Flexible learning pathways

- Progression adapts to individual needs, previous experience, and pace.

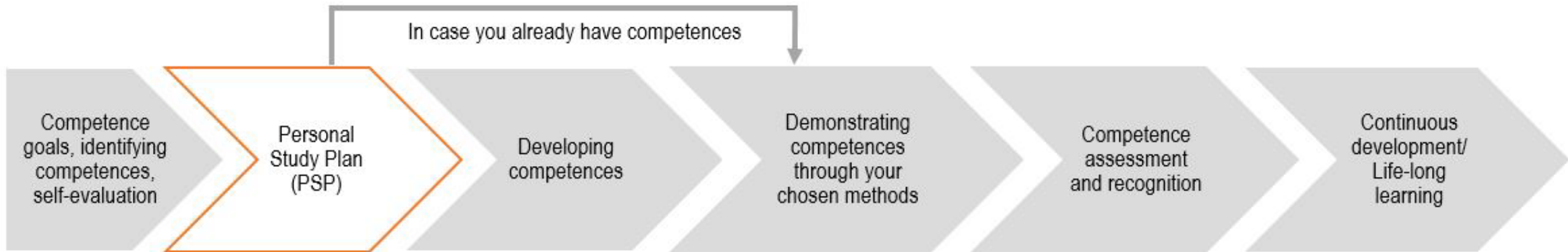
## Learner-centered support

- Personalized guidance, feedback, and learning resources throughout the process.

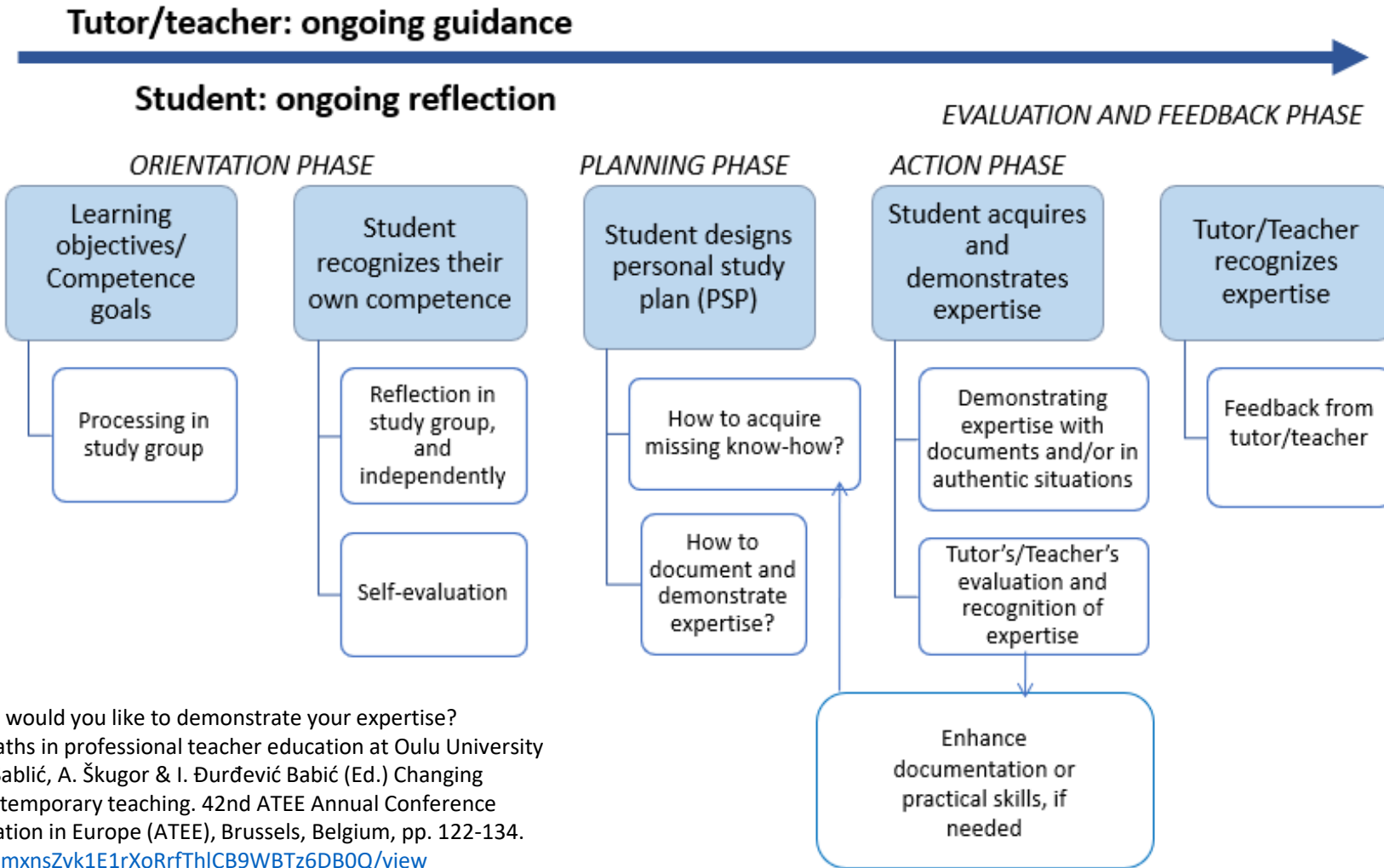
## Integration of theory and practice

- Competence development combines knowledge with practical application

# The Process of Competence-Based Education



# Implementation of Competence-Based Education



Happo, I. & Perunka, S. (2018). How would you like to demonstrate your expertise? Implementing personalized study paths in professional teacher education at Oulu University of Applied Sciences, Finland. In M. Sablić, A. Škugor & I. Đurđević Babić (Ed.) Changing perspectives and approaches in contemporary teaching. 42nd ATEE Annual Conference 2017. Association for Teacher Education in Europe (ATEE), Brussels, Belgium, pp. 122-134.

<https://drive.google.com/file/d/1WmxnsZyk1E1rXoRfThlCB9WBTz6DB0Q/view>

# Responsibilities in Competence-Based Education

## Responsibility of the student

- Self-assessment of competencies and development needs
- Learning and competence development actions
- Demonstration of competence, competence demonstrator
- Active actor "the owner of one's learning"

## Responsibility of the teacher

- Planning and implementing instruction according to the competence goals
- Individual guidance of students
- Activator and facilitator of competence development
- Assessor and acknowledger of competencies

# Digital Pedagogy in Teaching

- Digital pedagogy is the theory and practice of teaching and learning that purposefully integrates digital tools, environments, and methods to enhance pedagogical effectiveness and student engagement.
- Digitalization is not a necessity. However, it gives the student more opportunities to acquire and demonstrate their competences.

# Using Digital Tools to Enhance Teaching 1/2

## Collaborative Learning Tools

Platforms like **Flinga** and **Padlet** promote collaborative ideation and visual organization, enhancing group engagement and peer feedback.

<https://flinga.fi>

<https://padlet.com>

## Real-time Interaction Platforms

**Mentimeter**, **Kahoot**, and **Google Forms** facilitate real-time polls, quizzes, and gamified learning to boost student participation and motivation.

<https://www.mentimeter.com/>

<https://kahoot.com/>

<https://workspace.google.com/>

# Using Digital Tools to Enhance Teaching 2/2

## Communication and Resource Sharing

**Microsoft Teams** and **Google Drive** support communication, virtual learning, and organized sharing of learning materials among teachers and students. The **OQ-code** provides instant access to various types of information. It stores data, such as URLs, contact information, or text.

<https://teams.live.com/>

<https://workspace.google.com/>

<https://www.generateqr.net/en>

SCAN ME



## Comprehensive Reflection Platforms

**Howspace** offers tools for group reflection, discussions, and documentation, supporting deep engagement throughout projects.

<https://howspace.com/>

# Reflective Practice

(John Dewey, 1910.)

Reflection-before-  
action (thinking  
before doing)

Reflection-in-  
action (thinking  
while doing)

Reflection-on-  
action (after-the-  
event thinking)



Co-funded by  
the European Union

# Reflective Practice in Teaching

**Reflective practice in teaching** is the continuous, deliberate process of:

- examining one's teaching methods, decisions, and interactions,
- interpreting why certain outcomes occurred, and
- using those insights to guide improved practice.

## Key characteristics:

- **Self-awareness:** Teachers critically evaluate their beliefs, assumptions, and instructional choices.
- **Evidence-based:** Reflection relies on classroom observations, student feedback, assessment results, or teaching journals.
- **Improvement-oriented:** The goal is to refine teaching strategies and better support student learning.
- **Ongoing:** Reflection is not a one-time activity but an integral part of professional growth.

# Reflective Practice in Teaching: Diving in and Stepping out

## Diving in

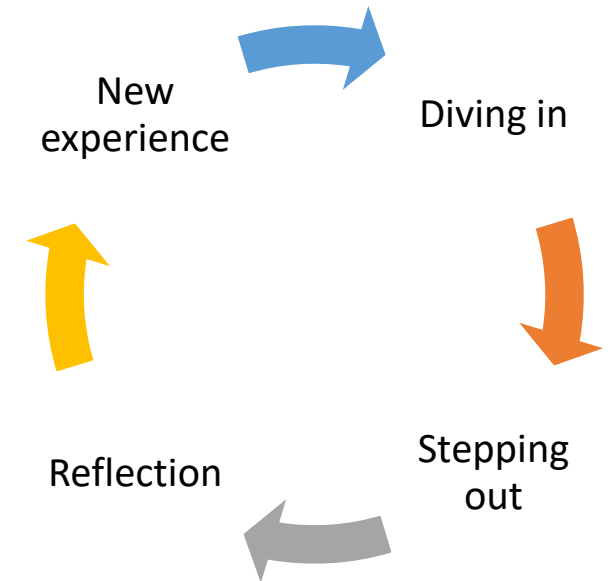
- Immersing in the experience
- Noticing feelings, reactions, and thoughts as they appeared
- Understanding the situation from the inside

## Stepping out

- Taking distance to view the experience analytically
- Identifying patterns, reasons, and alternative perspectives
- Connecting insights to theory and future actions

## Reflection:

A balanced reflection that is both experiential and critical—helping to understand what happened, why it mattered, and how it will shape future practice.

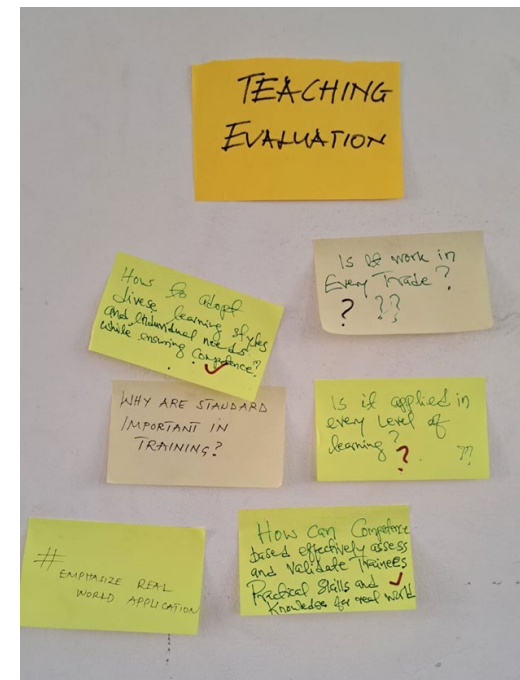


# Teaching Practise

Teaching practice is a planned and supervised period that forms part of developing as a teacher. Its purpose is to develop the teacher's pedagogical competence, teaching skills, professional identity, and ability to operate responsibly and independently in different learning environments.

The practice includes:

- lesson planning,
- delivering teaching sessions,
- assessing learning and providing feedback,
- guiding and supporting learners,
- reflecting on one's own actions and
- pedagogical discussions between the supervising teacher and the student teacher.

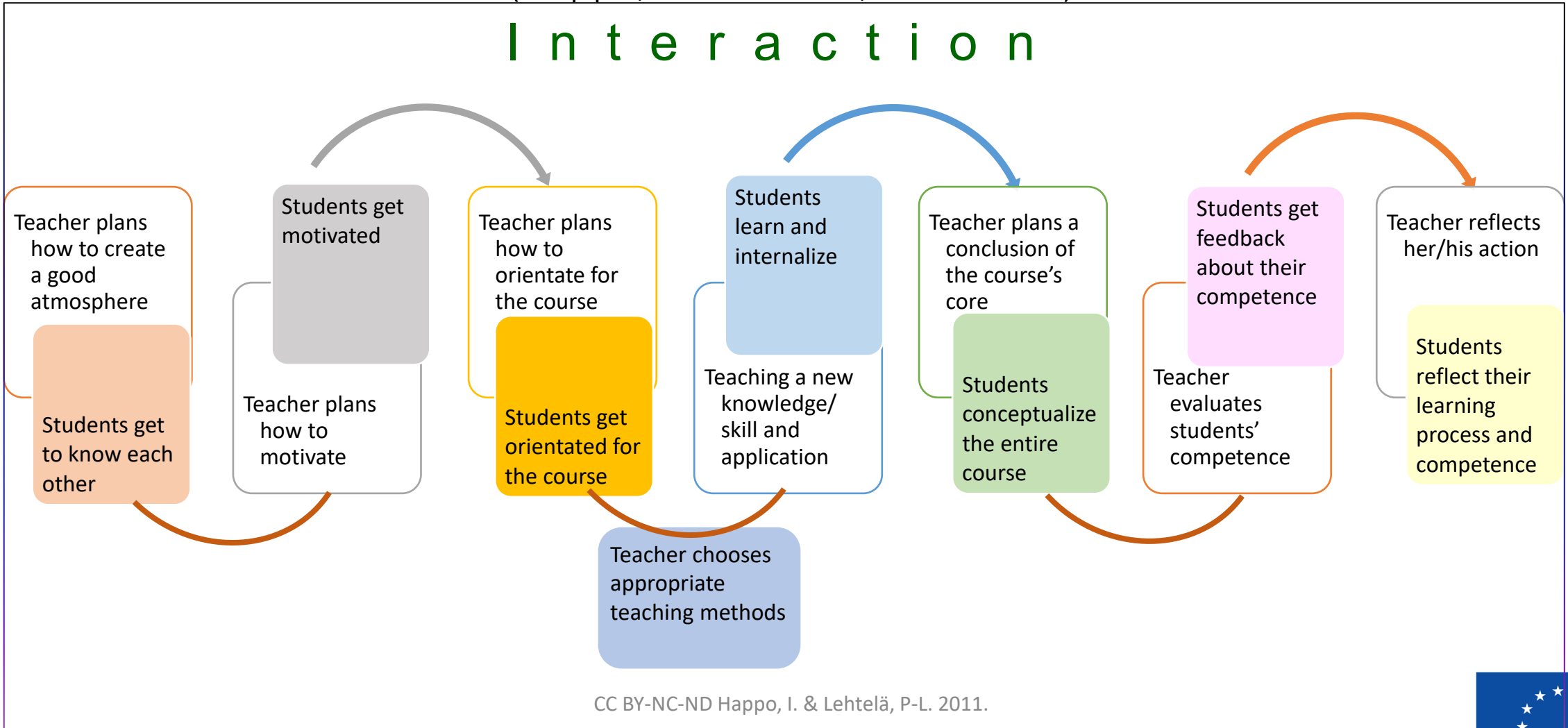


# Learning and Teaching Process – Planning Tool for Teachers

(Happo, I. & Lehtelä, P.-L. 2011.)

## I n t e r a c t i o n

Curriculum / Competence Goals



CC BY-NC-ND Happo, I. & Lehtelä, P.-L. 2011.

# Equity and Inclusion in Education

**Equity in education** means that all students have the same rights, opportunities, and access to learning regardless of their background, characteristics, or personal circumstances.

In practice, equity in education includes:

- **equal access** to learning environments, resources, and **support**,
- **fair treatment** of all students,
- **removal of barriers** that hinder participation or learning,
- **policies and practices** that prevent discrimination and
- **a safe and inclusive learning environment** where every student can succeed.



Co-funded by  
the European Union

# Equity and Inclusion in Education - Reflection after Teaching

After implementing the teaching, read the following questions and reflect on how you succeeded in promoting equity in your teaching:

- Were there students in your group who needed support in their learning? How did you address the needs of these students?
- How did you plan and implement your teaching to ensure that everyone had the opportunity to learn? How did you make your teaching materials accessible?
- What practices are effective in promoting equity? How would you develop the implementation of equity in your own activities and those of the education provider?
  - How do you recognize and respect different cultural backgrounds in your teaching, and ensure that all students feel welcomed and valued?
  - How can you identify and address discrimination and bullying in your school?
  - How can you promote openness and discussions about equity and inclusion in your school?
  - How can you promote gender equality in your teaching and school community?



Co-funded by  
the European Union

# References

- Day, C. (2017). Competence-based education and teacher professional development. In M. Mulder (toim.), *Competence-based vocational and professional education*. Springer Cham, pp. 165–182. <https://doi.org/10.1007/978-3-319-41713-4>
- Dewey, J. (1910). *How we Think*. Boston, MA: D.C. Heath & CO.
- Happo, I. & Lehtelä, P.-L. (2011). What Concerns Teacher Students in Teaching? In G. Mészáros & I. Falus (Ed.) *Responsibility, challenge and support in teachers' life-long professional development*. Association for Teacher Education in Europe (ATEE). Brussels, Belgium, pp. 420–428. [\(PDF\) Responsibility, Challenge and Support in Teachers' Life-Long Professional Development](#)
- Happo, I. & Perunka, S. (2018). How would you like to demonstrate your expertise? Implementing personalized study paths in professional teacher education at Oulu University of Applied Sciences, Finland. In M. Sablić, A. Škugor & I. Đurđević Babić (Ed.) *Changing perspectives and approaches in contemporary teaching*. 42<sup>nd</sup> ATEE Annual Conference 2017. Association for Teacher Education in Europe (ATEE), Brussels, Belgium, pp. 122-134. [Conference proceedings ATEE 2017 Annual Conference.pdf - Google Drive](#)
- Ilola, H., Lahtinen, J. & Saarinen, K. (Ed.) (2023). *Vocational Education and Training in Finland*. Tampere University of Applied Sciences. Series B. Reports 152.
- Inclusion in education. (n.d.) [Inclusion in education | UNESCO](#)
- Leijen, Ä., Allas, R., Toom, A., Husu, J., Mena Marcos, J.-J., Meijer, P., Knezic, D., Pedaste, M., & Krull, E. (2014). Guided reflection for supporting the development of student teachers' practical knowledge. *Procedia - Social and Behavioral Sciences*, 112, pp. 314–322. <https://doi.org/10.1016/j.sbspro.2014.01.1170>
- Mulder, M. & Winterton, J. (2017). Introduction. Teoksessa M. Mulder (toim.), *Competence-based Vocational and Professional Education: Bridging the Worlds of Work and Education*, s. 1–43. Springer. [2017-Mulder-and-Winterton-Competence-Book-Chapter-1.pdf](#)
- The New Era of Competence [Osaamisen aika]. (2019). Oulu ProLearn. <https://youtu.be/42E3v5ef4s4?si=2akKNazPIGIQlij>
- The Steps of Competence Based Learning [Osaamisen tunnistamisen askeleita]. (2015). Oulu ProLearn. [https://youtu.be/rN5TRXB-PTg?si=4\\_06lEdwIDYft\\_Ox](https://youtu.be/rN5TRXB-PTg?si=4_06lEdwIDYft_Ox)



Co-funded by  
the European Union

# Thank you!

