



New Innovative Methods for Quality Capacity
Life Cycle Production Process Training of Inspectors

Pedagogical Guideline

This guideline equips educators and learners to **adapt to evolving teaching paradigms**. Designed for teachers, students, and institutions, these principles emphasize **innovative approaches** to address **real-world challenges**, **foster creativity**, and **enhance motivation**.

It can be used as a **reference guide** when **planning, designing, implementing** and **evaluating** any teaching **module**. It helps to align teaching with the 6 main and 2 specific **Educational Principles** for **welding and welding inspector training**.

1. Diverse learning approaches

- Applying various lesson types **tailored** to students' needs,
- Incorporating **simulations** and **gamified learning** to boost engagement and performance.



2. Integrating tests into instruction

- Developing reflective, **skill-oriented assessments**,
- Using **feedback loops** through quizzes, assignments, and iterative evaluations to **enhance learning outcomes**.



3. Connecting curriculum with real-life

- Aligning lessons with **practical applications** and **career goals**.
- Encouraging collaborative curriculum design and **cross-lesson integration**.



4. Strategic work methodologies

- Teaching **procedural** and **metacognitive strategies** to complete tasks effectively.
- Use of rubrics and guides to **promote critical thinking** and **organized responses**.



Coordinator:



Partners:

Easy Learning
Solutions AS



5. Development of generative thinking

- Moving beyond rote learning to **foster creative problem-solving** and **deep exploration** of topics.
- Encouraging **research, multi-perspective analysis**, and advanced documentation skills.



6. Cognitive collaboration in classrooms

- Promoting **teamwork** through **group discussions** and **collaborative problem-solving**.
- Using **small and diverse groups** to **share, challenge, and refine ideas**.



7. Use of Welding Simulators

- **Combine theoretical and practical training** with simulators for **hands-on learning**.
- Reduce costs while providing **self-paced, real-time feedback**.



8. Tailored training and assessment

- Define **target group profiles**, including **students, welders, inspectors, and designers**.
- Ensure **alignment with industry standards** through structured **evaluation and qualification processes**.



Strengths of the IQMET pedagogical guideline

- **Flexibility:** Adaptable to diverse teaching and institutional needs.
- **Technology Integration:** Enhanced learning with simulators and digital tools.
- **Future-Ready:** Preparing students for real-world challenges with innovative approaches.

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