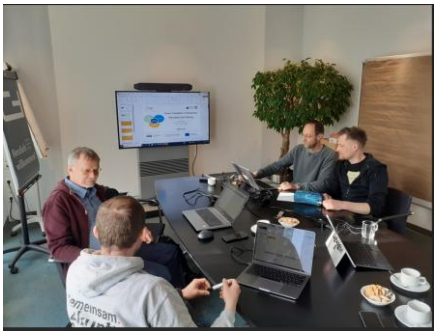
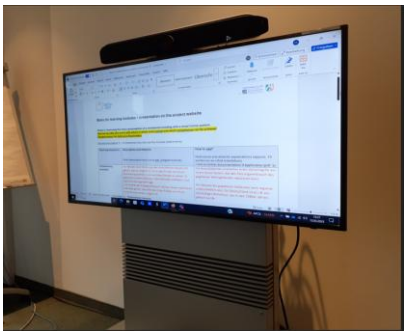
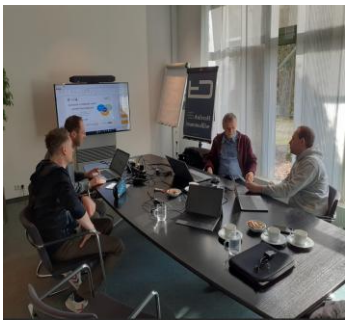
Evaluation of use WP 5

Consulting services for planning and preparing a test phase to trial interdisciplinary learning modules were primarily provided during an intermediate conference in Rösrath from March 12 to 14, 2025.

Participants (advisors) were teachers from the Adolf Kolping Vocational College who were to conduct individual learning modules or parts of learning modules with trainees from the fields of electrical engineering and supply engineering. A basic work plan was adopted as a rough outline. In addition to content-related aspects, a motivation survey and a standardized evaluation were also integrated into the planning as mandatory elements. Furthermore, the two learning modules to be tested were adapted so that they could be carried out in a “project phase-related” manner. The results were prepared in the form of consultation reports tailored to the customer's needs and presented during the project week.

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Consulting + preparation (organizational)

Testing of the learning modules was integrated into an EU project week at the Adolf Kolping Vocational College (March 19–21). The entire project week was held under the motto of “interdisciplinarity” in the dual system. All projects offered were designed so that they could be chosen by trainees from different vocational training programs. The trainees themselves chose the projects based on their interests. The two learning modules “Installation of a solar thermal system” and “Networked building technology through smart homes” were mainly chosen by “HVAC mechanics and electronics technicians for energy and building technology.” Prior to the project selection, project descriptions were published that specified the content of the respective projects. The project selection was carried out digitally:

https://akbkschule.sharepoint.com/:x:/s/Projektwoche2025/EcfsUg1mNHBIp6ro0VIblHMBuBYpRbrgP-d1y58kyNnoFw?e=a6Ahtv

Implementation of the test phase

The two learning modules, “Installation of a solar thermal system” and “Networked building technology,” were each conducted over two days (Wednesday and Thursday) with different learning groups. The following work plan was established:

8:00 h	Arrival (+confirm presence)
8:20 h	Motivation for choosing the project Key questions: 1. What interests you? / Why did you choose this project? 2. In which everyday work situations do you collaborate with other trades? (specific)

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	3. In which work situations do you think collaboration between electronics technicians (EGT) and HVAC mechanics (SHK) is necessary? https://forms.office.com/e/FL9YZ13M1X?origin=lprLink 
8:30 h	1. Presentation of the specific project/learning module (introductory scenario, work plan, presentation of results) 2. Interdisciplinary group assignment
8:45 h	Work phase - structure
13:00 h	Presentation of work results
optional	General information on the importance of interdisciplinarity in building systems engineering (context: GeTinVET - PPP)
13:30 h	Evaluation (Forms) - here is the link for Building Automation https://forms.office.com/e/500q2gSnbP?origin=lprLink 

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Installation einer Solarthermieanlage:

https://europawoche2025.akbk-horrem.de/installation-einer-solarthermieanlage-ein-projekt-zur-staerkung-der-zusammenarbeit-von-elektrotechnik-und-anlagenmechanik/

Vernetzte Gebäudetechnik:

https://europawoche2025.akbk-horrem.de/vernetzte-gebaeudeautomation-ein-projekt-zur-staerkung-der-zusammenarbeit-klassischer-berufsfelder-im-handwerk/

Both projects were presented on another day (Friday) as part of the European Project Week:

https://europawoche2025.akbk-horrem.de/eine-gelungenes-ende-der-projektwoche/

Evaluation of results and implementation proposals:

Both projects were evaluated by the participants:

https://forms.office.com/Pages/DesignPageV2.aspx?subpage=design&FormId=YGY8f0b6MkKiI0ye3MIn1-odJHHEYCFBgdxE1uXimUZUNzY0NFgzRlU0RzU3TVgzWjNOTzA4OTlNOC4u&Token=b45f0c047a134ae782b4a2fb73c1d302

https://forms.office.com/Pages/AnalysisPage.aspx?AnalyzerToken=kUL1yWKTGq7OZI4D1gYO2OxVn8JcJleH&id=YGY8f0b6MkKiI0ye3MIn1-odJHHEYCFBgdxE1uXimUZUQUJTOUxSRTdaOVFOWTlKRDYwMVhIVlNPMC4u

https://forms.office.com/Pages/AnalysisPage.aspx?AnalyzerToken=yZS70RiauPZJVi2H80HUJnA8zrWkr5mF&id=YGY8f0b6MkKiI0ye3MIn1-odJHHEYCFBgdxE1uXimUZUNzY0NFgzRlU0RzU3TVgzWjNOTzA4OTlNOC4u

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https://forms.office.com/Pages/AnalysisPage.aspx?AnalyzerToken=CEtcTPpWkAJSH8uYkCFM4YqSiZJMqvIU&id=YGY8f0b6MkKil0ye3MIn1-odJHHEYCFBgdxE1uXimUZUQ044VFVEMjdZS0Y0WTVCSTFORlU4VlFRTy4u

In future, implementation of the modules will be mandatory once per school year in the form of a project day for both the HVAC plant mechanic and building services electronics technician courses. Other areas of relevance to the curricula of both courses are:

- Anlagenmechaniker/in für Sanitär-, Heizungs- und Klimatechnik:

Overall matrix: Possible links between learning areas and work and business processes:

Field of action 2, Customer-oriented consulting and information, planning and learning area 12, Installation of resource-saving heat generation systems (3rd year) or learning area 14, Adapting supply systems and optimizing energy efficiency (4th year)

Learning area 9: Installation of drinking water and heating systems

- Elektroniker/in für Energie- und Gebäudetechnik

Overall matrix: Possible links between learning areas and work and business processes:

Field of activity 2, Customer-oriented consulting and information, and learning area 10, Installing, commissioning, and handing over automation systems (3rd year) or learning area 11, Maintaining, documenting, and optimizing automation systems (3rd year)

Electronics technician for energy and building technology – learning area 11

Electronics technician for industrial engineering – learning area 11

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