Development and Use of flexible and digital tools for increasing digital skills of vocational students and employees in retail trade.

"digiskill-retail"

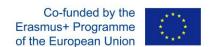## Competence matrix on skills gaps for trade

Partner:

DIGISKILL-RETAIL
INTERVIEW RESULTS MATRIX
DigcompEdu

Comparative case studies were conducted among training staff employed in the two main occupations of sales assistant and retail salesperson or their equivalents in the partner countries under three different framework conditions: in companies among trainers, in VET provider among teachers/trainers and in vocational schools among vocational school teachers in the various partner countries.

The aim was to create a comparative competence matrix across all partner countries, in which the different weighting of the qualification deficits at the different learning locations can be specified as well as the possibly different degree of development of the existing competences of the educational staff at the different learning locations. The aim was also to discover competence deficits that had not been recognised in advance and to take them into account in the project.

The competence matrix also provides a basis for the development of digital, practice-relevant micro-learning units along operational business processes in retail.

The results of the analysis of apprentices regarding the need for support in the competence areas of information and data competence, communication and cooperation, security as well as analysis and reflection were compared with the resulting competence requirements for educational staff and the qualification deficits in the area of teaching/learning were determined and learner orientation specified. These five competence areas are defined in the European digital competence framework DigiComp 2.0 for apprentices. First of all, it was analysed which of these skills, knowledge and abilities and competences to be taught can be found in the training regulations and the framework curriculum of the occupations of retail salesperson and sales assistant. The results of the analysis formed the basis for the interview guide. The interview guide was used uniformly by all partners for the interviews to ensure comparability. Based on the results from the interviews, an extended competence matrix on skill deficits for retail was created.

Examples from the training regulations and the framework curriculum of the occupations of retail salesperson and sales assistant on the identified needs for support in the competence areas mentioned:

INFORMATION AND DATA LITERACY

Products and services of the training company (AO - training regulations, §4 paragraph 2 number 1

Introduction: In order to advise customers according to their needs, prospective salespeople and retail clerks need in-depth knowledge of goods. This is one of the key qualifications in retail. Knowledge of goods includes knowledge of:
- the production
- the product characteristics
- the advantages and benefits
- the application and use
- the care, storage and, if necessary, disposal of goods
- alternative offers and of course the price of the goods.

COMMUNICATION

Presentation of goods and advertising measures (AO - training regulations, §4 paragraph 2 number 2)

Introduction: Advertising is part of a company's communication policy. Customers need to know what services the trading company can offer them. Advertising is the communication with the customer to inform, maintain one's own image, create purchase incentives and build trust.

COLLABORATION

Information and communication (AO - training regulations, §4 paragraph 4 number 3
- Introduction: In order to exchange ideas with colleagues or customers, digital media are increasingly being used today in addition to personal conversations.

INFORMATION

Consulting of customers (AO – training regulations, §5 paragraph 3 sentence 1 number 2)
Introduction: In retail, customers today expect individual, needs-based advice and solutions to their problems as well as a clearly tailored benefit-related presentation. In order to advise customers according to their needs, sellers and retail merchant (KiE) must be able to recognize and analyse the latest trends in retail.

DIGITAL CONTENT CREATION

Online trading (AO – training regulations, § 5 paragraph 4 sentence 1 no. 6)
- Introduction: More and more retail companies set up their own online shop in order to be present for their customers on various channels.

DIGISKILL-RETAIL INTERVIEW RESULTS MATRIX **DigcompEdu**			
3 Teaching and Learning	**CURRENT STATUS**	**FINDINGS**	**COMMENTS**
3.1 Teaching Plan and use digital devices and resources in the teaching process to increase the effectiveness of teaching interventions. Appropriate management and orchestration of digital teaching activities. Experiment with and develop new formats and pedagogical methods for teaching.			
Target level education staff (B1 -Integrator) **Target level - Trainee (Intermediate 3):** Meaningful integration of available digital technologies into the teaching process. I organise and manage the integration of digital devices (e.g., classroom technologies, students' devices) into the teaching and learning process. I manage the integration of digital content, e.g. videos, interactive activities, into the teaching and learning process.			
◆◆ Use of technology in the classroom to support teaching, e.g., electronic whiteboards, mobile devices.	Smartboard, beamer, tablets, computers, Chromebook, graphic tablets, VR	Operation and handling of digital technologies is well developed ◆ All trainees have access to EQUIPMENT: computers, tablets, WIFI, Chromebooks, PCs, beamers, smart boards, etc. ◆ They vary between different types: private vs. public; VET schools vs. companies.	

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◆◆ Structure lessons in such a way that different (teacher- and learner-led) digital activities together reinforce the learning objective.	*School and VET provider:* ◆ work tasks with internet research - searching in Google ◆ posting learning materials PDF and web links on the topic of commodity knowledge ◆ work assignments such as lectures via PowerPoint and beamer ◆ frontal teaching with textbook, lecture, group work ◆ work tasks with filtered information by Teacher ◆ flipped classroom ◆ blended learning ◆ learning by doing ◆ co-creation in an Excel file	*School and VET provider:* No special instruction in Internet research / Google search ◆ Provision of pre-filtered digital information and learning materials by teacher ◆ use of textbooks is very present	
◆◆ Set up learning units, activities and interactions in a digital environment.	*School:* ◆ video telephony in teams ◆ recording with digital camera and evaluation ◆ provision of information and texts mostly as PDF on the learning platform ◆ Google classroom is widely used at schools where structure follows folders and topics according to the lesson plans. *Business*: ◆ Interactive and multimedia learning materials in learning platform or learning App	*School and VET provider:* ◆ use of textbooks and provision of digitalised learning materials as PDFs ◆ multimedia learning materials are rarely used or missing ◆ It is still dominant to use textbooks, and legislations especially for specific product and commodity information. *Business*: ◆ most retail companies provide corporate learning platforms with digital learning units	
◆◆ Structuring and managing content, collaboration and interaction in a digital environment.	◆ LMS Ilias ◆ OneNote course notebook ◆ Corporate learning platforms ◆ Shkolo ◆ Google classroom ◆ Moodle ◆ Corporate e-learning ◆ platform Skillaby ◆ Corporate app ◆ textbooks ◆ templates and handouts ◆ Discord, and all	*School/VET provider*: ◆ frontal teaching with textbook ◆ lecture, group work, work tasks with internet search - searching and filtering information without guidance	

	communication tools for online calls and meetings ◆ Miroboard ◆ Word clouds ◆ Mindmaps.	◆ work tasks with filtered information by Teacher ◆ flipped classroom ◆ blended learning ◆ learning by doing	
◆◆ Considering how teacher-led digital interventions - whether face-to-face or in a digital environment - best support the learning objective.	◆ promotion of digital work assignments in the field of internet research (product descriptions) ◆ presentation of product information through videos (Youtube)	*School:* ◆ give work assignments such as internet research or showing YouTube videos ◆ less frequent work orders with more complex digital ones *VET provider:* similar to school *Business:* ◆ online webinars and Seminars ◆ much face-to-face on the market area	
◆◆ Reflect on the effectiveness and appropriateness of chosen digital pedagogical strategies and flexibly adapt methods and strategies.	n.a.	n.a.	

◆◆ Experiment with and develop new formats and pedagogical methods for teaching (e.g., flipped classroom)."	*School:* The following methods/formats were mentioned: **digital:** simulation and analysis via video telephony ◆ recording the talks **analogue:** simulation of customer conversations ◆ role plays ◆ simulation of phone conversations ◆ work tasks from the textbook *VET provider:* technical like schools *Business:* ◆ is given by the head office, no experimentation by the trainer	*School:* only a few teachers experiment with new format ◆ most respondents teachers use best practices and traditional methods, due to time constraints or lack of digital skills ◆ the teachers focus on exercises about customer consulting - face to face *VET provider (DE):* technical like schools ◆ regression to Corona, more analogue work again, e.g., printout of materials *VET provider (BG, EE, GR)* advanced like business *Business and VET provider:* are more advanced: tests, research papers ◆ simulations of customer situations are in focus	
3.2 Guidance			
Use digital technologies and services to enhance interaction with learners, both individually and collectively, within and outside the learning session. Use digital technologies to provide timely and targeted guidance and support. Experiment with and develop new forms and formats for offering guidance and support. **Target level education staff (B1 -Integrator)** Using digital technologies to enhance interaction with learners. Using a shared digital communication channel to respond to their questions and answers.			
◆◆ Use digital communication tools to respond to learners' questions and doubts, e.g., homework.	*School:* OneNote ◆ Google Classroom ◆ Moodle ◆ Shkol ◆ internal platforms ◆ Skillaby	*School and VET provider:* The tendency is to talk face to face. (In class or on the job).	◆ Potential of existing digital infrastructure for communication

	VET provider: ◆ LMS Ilias ◆ School E-Mail *Business:* Slack ◆Viber◆ Skype ◆ internal channels		among each other is rarely used.
◆◆ Set up learning activities in digital environments, and anticipate and respond to learners' needs.	*School:* course notebook in OneNote *VET provider:* exam preparation in LMS ilias *Business:* using corporate learning platform for set up digital learnings (DE, EE) ◆ available product information of the manufacturer	*School and VET provider:* ◆ The tendency is towards (frontal) teaching. ◆ Digital environments are mostly used to manage and access teaching materials on the specific topics. Not microlearning, mostly learning materials in digital form such as PDFs.	
◆◆ Interact with learners in collaborative digital environments.	*School and VET provider:* ◆ Assignments for students via Google classroom ◆ Shkolo ◆ Slack (EE, BG) *Business:* using corporate learning platform for Online Seminars (DE).	*School and VET provider:* ◆ Only online teaching	
◆◆ Digitally monitor learner behavior in class and provide assistance as needed.		*School, VET provider and Business:* ◆ is not supported	
◆◆ Using digital technologies to monitor students' progress remotely and intervene, when necessary, while enabling self-regulation.	*School:* course notebook in OneNote and Google classroom, Shkolo - where completion status is checked by teacher. *Business:* corporate learning platform - the trainer can view the report books and the status of the e-learning (DE) ◆ Assessment is done mostly online by questionnaires and tests and exams. Individual sessions for testing are provided in companies for progress and performance review (EE)		
◆◆ Experimenting with and developing new forms and formats for offering	n.a.	n.a.	

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guidance and support, using digital technologies."			
3.3 Collaborative learning			
Use digital technologies to promote and enhance learner collaboration. To enable learners to use digital technologies as part of collaborative tasks to enhance communication, collaboration and collaborative knowledge creation.			
Target level education staff (B1 -Integrator) Incorporating digital technologies into the design of collaborative activities. I design and implement collaborative activities in which learners use digital technologies for knowledge acquisition, e.g. sourcing and sharing information. I require learners to document their collaborative work using digital technologies, e.g. digital presentations, videos			
◆◆ Conduct collaborative learning activities using digital devices, resources or digital information strategies.	*School and VET provider:* ◆ Simulation and evaluation of counselling interviews via Video telephony in teams ◆ recording with digital camera ◆ group work - internet research on product descriptions ◆ presentations with PowerPoint and beamer ◆ exercises with MS Office *Business:* Mandatory seminars for safety instruction	*School and VET provider:* ◆ Point of sale and sales talks are the main topics of the lessons *Business:* Mandatory seminars (DE)	
◆◆ Conducting collaborative learning activities in a digital environment, e.g., using blogs, wikis, learning management systems.	n.a.	n.a.	
◆◆ Use digital technologies for collaborative knowledge sharing between learners.	n.a.	n.a.	
◆◆ Monitoring and guiding learners in their collaborative knowledge creation in digital environments.	n.a.	n.a.	

◆◆ Requiring learners to present their collaborative efforts digitally and supporting them in doing so.	*School and VET provider:* Presentations with PowerPoint and beamer. *Business:* Use of video conference and webinar platforms and tools: Webex, Cisco, Google meet, Teams,		
3.4 Self-directed learning			
Use of digital technologies to support self-directed learning processes, i.e., to enable learners to plan, monitor and reflect on their own learning, to demonstrate their progress, to share insights and to find creative solutions.			
Target level education staff (B1 -Integrator) **Use digital technologies in the design of self-directed learning activities.** I encourage learners to use digital technologies to gather evidence and document progress e.g., to create audio or video recordings, photos or texts. I use digital technologies for learners' self-assessment.			
◆◆ Use digital technologies (e.g., blogs, diaries, planning tools) to enable learners to plan their own learning.	*Business:* corporate learning platform - checklists, Report booklet (DE)	*School and VET provider:* rather no	
◆◆ Use digital technologies to enable learners to gather evidence and record progress, e.g., audio or video recordings, photographs.	*Business:* different LMSs including customized ones	*School and VET provider:* pure collection of materials	
◆◆ Use of digital technologies (e.g., ePortfolios, learner blogs) to introduce learners to the possibility of their work.	n.a.	n.a.	
◆◆ Use digital technologies to enable learners to reflect on and self-assess their learning process.	n.a.	n.a.	

5. empowering learners			
5.1 Accessibility and inclusion Ensure accessibility of learning resources and activities for all learners, including those with special needs. Take into account learners' (digital) expectations, abilities, uses and misconceptions, as well as contextual, physical or cognitive limitations when using digital technologies.			
Target level education staff (B1 -Integrator) I understand how access to digital technology creates differences and how students' social and economic conditions affect the way technology is used. I ensure that all students have access to the digital technologies I use.			
◆◆ Provide equitable access to appropriate digital technologies and resources, e.g., ensure that all learners have access to the digital technologies used.	*School, VET provider and Business:* provision of School/company-owned laptops, tablets, whiteboards, beamers or computers at the respective learning location (DE, GR, EE, BG)	◆ Equal access to appropriate digital technologies and resources available in all learning locations.	
◆◆ Selecting and using digital pedagogical strategies that are responsive to learners' digital contexts, e.g., contextual constraints on technology use (e.g., availability), skills, expectations, attitudes, misconceptions and misuse.	*School and VET provider:* Schools follow mainly traditional approaches and face-to-face lessons; ◆ Tests ◆ research papers ◆ simulations of customer situations *Business:* conduct a lot of training digitally and provide everyone with the necessary technical and personal resources (Seminars). The topics are legislation ◆ instructions ◆ regulations that are necessary for the specific jobs and products and type of retail.	*School and VET provider:* Have a media concept for the use of digital media in the classroom. Nevertheless, teachers use digital media predominantly for researching content (DE).	
◆◆ Use of digital technologies and strategies, e.g., assistive technologies designed for learners who need special support (e.g. learners with physical or	*School:* specific equipment and learning tools for students with disabilities. *VET provider:* Digital basic package - 1-week training in the use of digital tools and communication training (DE)	*Business:* The flexibility of the various learning modules in the LMS offers trainees the opportunity to determine their own learning tempo.	

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mental disabilities; learners with learning disorders).			
◆◆ Consider and respond to potential accessibility issues when selecting, modifying or creating digital resources, and consider and respond to alternative or compensatory tools or approaches for learners with special needs.	*School:* personalised access to LMS, emails. *VET provider:* Practical knowledge is made more visible to disadvantaged young people, through adaptation or selection of appropriate learning materials. *Business:* personalised free access	*School, VET provider, Business:* providing hardware and thus creating access for all is very well established	
◆◆ Apply design principles to improve the accessibility of resources and digital environments used in the classroom.	n.a.	n.a.	
◆◆ Continuously monitor and reflect on the suitability of implemented accessibility measures to improve accessibility and adapt strategies accordingly."	n.a.	n.a.	
5.2 Differentiation and personalisation			
Use of digital technologies to address learners' different learning needs by enabling learners to progress at different levels and at different paces and to pursue individual learning paths and goals.			
Target level education staff (B1 -Integrator)			

Using digital technologies to differentiate and personalise. I select and use customised learning activities, e.g., quizzes or games, that allow learners to progress at different paces, choose different levels of difficulty and / or repeat tasks that have not been adequately completed before.			
◆◆ Use digital technologies to respond to the specific needs of individual learners (e.g., dyslexia, ADHD, above average performance). needs of individual learners (e.g. dyslexia, ADHD, above average performance).	n.a.	n.a.	
◆◆ Consideration of different learning paths, levels and speeds in the design, selection and implementation of digital learning activities.	*School and VET provider:* Availability of exam preparation at different levels. *Business:* self-directed digital education. The flexibility of the various learning modules in the LMS offers trainees the opportunity to determine their own learning tempo.	*School and VET provider:* Limited availability of trade/topic-relevant e-learnings to provide to trainees. *Business:* The offer depends on the size and range of the company.	
◆◆ Establish individual learning plans and digital technologies to support them.	*School:* just for additional qualification using LMS, support high-performing trainees; profiling students depending on their field of studies and strengths especially for those with achievements *VET providers:* offer individual learning paths based on their career path and needs (EE). *Business:* in most of the cases the customization is at department and store level for teams (EE)		

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5.3 Active engagement of learners			
Use digital technologies to promote learners' active and creative engagement with a topic. Using digital technologies within pedagogical strategies that promote learners' transversal skills, deep thinking and creative expression. Opening up learning to new, real-world contexts that involve learners themselves in hands-on activities, scientific investigations or complex problem solving, or otherwise encourage learners' active engagement with complex issues.			
Target level education staff (B1 -Integrator) **Promote active use of digital technologies by learners.** I place learners' active use of digital technologies at the centre of the teaching process. I choose the most appropriate tool to promote learners' active engagement in a particular learning context or for a particular learning objective.			
◆◆ Use digital technologies to visualise and explain new concepts in a motivating way, e.g. through animations or videos.	*School and BET providers:* use of PowerPoint presentations ◆ Smartboard ◆ YouTube ◆ Trainees shoot videos with the smartphone		
◆◆ Use digital learning environments or activities that are motivating and engaging, games, quizzes.	◆ Quizzes (if suitable sources are found by teacher) ◆ Kahoot! ◆ Padlet ◆ Miro ◆ word clouds ◆ Internal learning system Tahvel ◆ Zoom ◆ Moodle ◆ Big Blue Button ◆ Google Drive ◆ Facebook messenger ◆ Whatsapp ◆ Viber Padlet◆ Mentimeter ◆ Digital touchscreen boards.	*School, VET provider, Business:* Use of digitally motivating activities is rare.	
◆◆ Make learners' active use of digital technologies central to the teaching process.	*School and VET providers and Business:* in-house learning management systems	*School, VET provider and Business:* digital technologies are added in a supportive way to the classical teaching process.	
◆◆ Use digital technologies to enable learners to actively engage with the subject matter, e.g. using different senses, manipulating virtual objects, varying the task to explore its structure, etc.	n.a.	n.a.	

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◆◆ Selecting appropriate digital technologies to promote active learning in a particular learning context or for a particular learning objective.	*School and VET provider:* Google search for information, presentations in PowerPoint and use of beamer; Magenta, Nixor, virtual warehouses, etc.	*School and VET provider:* Limited use of digital technologies that promote active learning, either because there are no suitable or not enough digital learning materials available for the topic or because the teacher prefers traditional teaching methods.	
◆◆ Reflecting on the extent to which the different digital technologies used are appropriate for active learning of learners and adapting strategies and decisions accordingly.	n.a.	n.a.	