

2040, A RECORD-BREAKING YEAR FOR CONTINUING VOCATIONAL EDUCATION AND TRAINING

Fictional
Magazine

03

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06

Real-Time Skills Development for Everyone, Everywhere

13

The Evolving Role of Training Professionals

18

Broadened Horizons, Multiplied Investments

28

Design Fiction - Your Turn to Play!



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WELCOME TO 2040!

This magazine invites you to embark on a journey into the imagined future of continuing vocational education and training. Through articles that project you fifteen years ahead, you will delve into scenarios designed to inspire, provoke thought, and occasionally challenge your perspectives.



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Design Fiction

Our approach is based on 'design fiction': creating immersive and credible narratives that invite deep reflection on the future. Each article is designed to feel as if it were lifted directly from a magazine published in 2040, offering a window into potential scenarios.

However, let us be clear: these stories are neither forecasts nor blueprints for ideal futures. Their entirely fictional nature is deliberate, weaving together elements that may provoke concern alongside those that inspire hope...

Fictions that create friction

Far from predictions or manifestos, these stories serve as provocations—fictions that create friction—intended to spark debate and critical thinking about what lies ahead.

The backdrop of these scenarios assumes structural continuity: by 2040, the fundamental principles of our socio-economic system have evolved but without radical upheaval. In this framework, continuing vocational education and training remains a pivotal arena, balancing the dual imperatives of meeting productive demands and supporting personal and professional growth.

Technologies, professionals, systems

The magazine explores three major themes: technologies for skills development ("*Skills Tech*"), training and support professionals ("*Skills Pros*"), and training systems in terms of funding and the European dimension ("*Skills Org*").

The scenarios combine the amplification of current trends with fictional innovations. Digital technology plays a central role, as does the competence-based approach taken to its

extreme, with both its benefits and limitations. Meanwhile, ecological concerns also emerge as a major theme in the era of "eco-survival".

Do these scenarios feel too restrained? Or perhaps too radical? That's exactly the point: to challenge you to refine your own vision of what a desirable future might look like!

For ideas on how to use these scenarios as a tool for group discussions and thinking of the future, turn to pages 28–29.

We wish you stimulating reading and, we hope, fruitful debates!

The result of a European Erasmus+ partnership

This magazine was created as part of the Erasmus+ European project "Into-CVET 2040".

From October 2023 to November 2024, the partnership collaborated to develop the scenarios and articles featured here. The project brought together:

- Centre Inffo, Information Centre for Continuing Vocational Training, French project leader,
- INFPC, National Institute for the Development of Continuing Vocational Training, in Luxembourg,
- 3S, Austrian research consultancy,
- The Making Tomorrow collective, design fiction specialists.

For a behind-the-scenes look at the project and the partnership, see pages 30 to 33.



SKILLS MAG, a fictional magazine, is a co-publication of Centre Inffo, INFPC, Making Tomorrow and 3S.

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03

SKILLS MAG

On the cover



2040: The Year of All Records!
They Said
Figures of the Year
3 Questions for

06

SKILLS TECH

Real-Time Skills Development for Everyone, Everywhere



Happy Skills Targets the Hospitality Sector
Learning Exoskeletons and Embedded Skill Kits
The Underpinnings of HoloTraining's Success

13

SKILLS PROS

The Evolving Role of Training Professionals



Two Months to Become a HoloTrainer is Quite Short
A New Generation of Augmented Coaches and Advisors
AI for "Skills Matching": The Key to Seamless Career Paths
Sofia's Journey



18

SKILLS ORG

Broadened Horizons, Multiplied Investments



The Automotive Sector: Pioneer of Europeanized Training
Barry Gecker, Researcher in Economics of Education and Training
A Study by Cerefop
Lucy Sarasvati, a HoloTrainer Remembers

28

SKILLS FICTION

Design Fiction - Your Turn to Play!

Facilitation Methods for Using This Magazine
Making Off: Behind the Scenes of the Project
Presentation of the Partners



ON THE COVER

“2040: THE YEAR OF ALL RECORDS!”

The year, drawing to a close, marks a historic milestone in vocational training at the European level. The figures speak volumes: public and private skills insurance systems, collectively known as PSRA (Permanent Skills Reboot Assurance), amassed a record €280 billion across the 27 member states of the European Union in 2040.

Participation in training activities has also reached unparalleled heights. In 2039, more than four out of five adults engaged in at least one form of training—be it formal and certifying or non-formal, such as short courses and seminars—setting a new benchmark for adult learning.

In the domestic sphere, HoloFormation has seen remarkable growth, with 156 million users subscribing to its content platforms, underscoring the platform's widespread appeal.

In summary, 2040, has been a transformative year for institutionalized training, with skill acquisition and lifelong learning becoming firmly embedded in the everyday lives of Europeans.

The Boom of Learning Exoskeletons

The adoption of automated learning exoskeletons for workplace training has surged, revolutionizing how new recruits acquire job-specific skills. These exoskeletons aim to fast-track skill development to align with companies' profitability objectives. A testament to the growing popularity of this technology, German manufacturer Happy Skills reported selling 478,000 units in 2040 alone—a 15% increase compared to 2039.

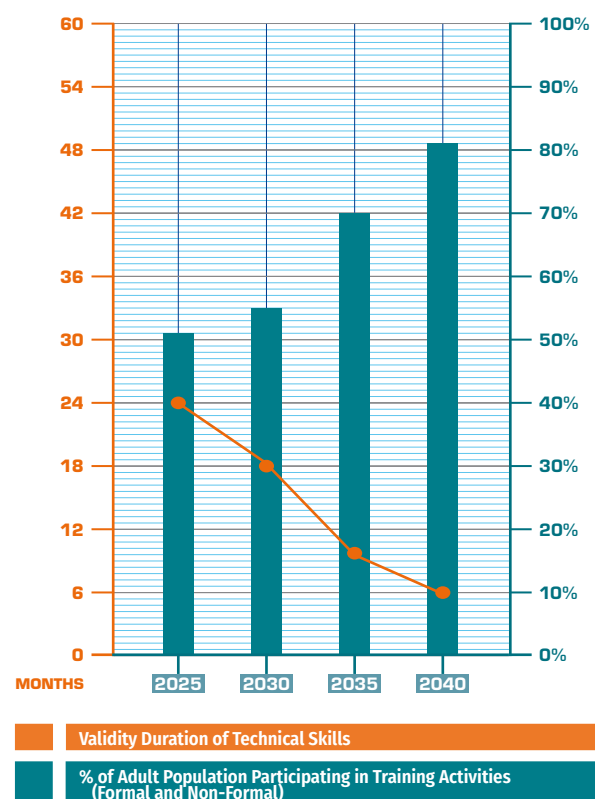
This enthusiasm is not confined to the workplace. The market for non-formal training, catering to individuals and households, is thriving with innovative modalities like Ludo-Skilling and Enter-Training. Fueled by the "HoloTraining effect", users can seamlessly acquire new competencies from the comfort of their homes, immersed in holographically simulated professional environments.

These platforms are further enhanced by automatic multilingual translation, ensuring content accessibility across languages and geographies. This technological inclusivity has made upskilling more accessible and engaging than ever before.

The Training Sector: 2% of European Workers

The expansion of professional training activities has sparked a significant rise in employment opportunities within the sector. By 2040, training professionals made up 2% of the European workforce, up from 0.9% in 2030. This means that one in fifty workers is now dedicated to fostering the skills of others—a striking indicator of the sector's growing importance! What drives this influx of professionals? While improved salaries and career advancement opportunities are primary motivators (cited by 39% of respondents), many are drawn by the sector's societal impact. Training professionals often find deep satisfaction in enabling individuals to unlock their full potential and contribute meaningfully to collective

Validity Duration of Technical Skills and Adult Training Participation Rate



progress. Additionally, technological advancements have catalyzed the emergence of new roles, such as technological pedagogical engineers, who bridge the gap between education and cutting-edge tech.

The World Celebrates Skills... and Demands More "Humanity"!

The year 2040 will also mark the inaugural of the World Day for Human Skills (WDHS), initiated by the European Union in May. Nearly 800 million people participated in forums worldwide to highlight the importance of human-centered skills such as empathy, intercultural communication, emotional intelligence, creativity, critical thinking, initiative, and flexibility. Launching the event, Rosa Castillo Perez, a Spanish Member of the European Parliament, declared *"These skills are essential for maintaining the delicate balance between humans and technology in modern workplaces."*

This call for human-centric values echoed across industries. In early 2040, a white-collar strike swept through Europe's banking sector. Workers protested the overreach of artificial intelligences (AI) dictating their tasks, rendering AI-generated outputs unusable for weeks. The disruption underscored a growing demand for ethical oversight of AI's role in decision-making.

In response, the European Union announced plans for new "ethical codices" to govern AI usage across industries, modelled after those in the healthcare sector. Starting January 1, 2041, specific skill-building activities in the medico-social field will require hybrid training methods. Skills involving patient interaction, for instance, must incorporate human-led training alongside automated exoskeletons. These programmes will emphasize oral expression, reflexivity, and critical thinking in group settings, preserving the human touch in learning.

Despite technological advances driving unprecedented growth in the training sector, 2040 has made it clear: skill development is, at its core, a human and social endeavour. The integration of technology in training must complement, not replace, the nuanced, interpersonal dimensions of learning. As society advances, ensuring this balance will remain crucial in fostering not just skilled professionals but well-rounded individuals. ◀◀Ⓧ

THEY SAID



Charline VAN RUYMBEKE,
 President of the European Union of Trade Unions
"European training insurance has been a game-changer for employees opening the door to lifelong learning. The next critical step is ensuring it reaches the most vulnerable populations."



Dr. Elena RODRIGUEZ,
 Director of the European Committee on Ethics in Learning Technologies
"Exoskeletons have transformed the way professional skills are learned, but it is essential to ensure that technology serves humanity. This is the core mission of ethical codes."



Magnus ANDERSSON,
 Swedish Minister of Skills Development
"The AI tax implemented in Nordic countries demonstrates a sustainable model for financing lifelong learning. This approach could serve as an inspiration for the rest of Europe."



Bertrand WEBER,
 General Director of the European Center of Excellence for Green Automotive (CGA)
"The Europeanization of training in green automotive is a shining example: it proves that resources can be pooled effectively while still respecting national differences."

FOCUS

FIGURES OF THE YEAR

€280 BILLION
 Total funds of all public and private Permanent Skills Reboot Assurance funds for the 27 EU countries in 2040

156 MILLION PEOPLE
 Number of Europeans subscribed to an HoloTraining platform

2% VOCATIONAL EDUCATION AND TRAINING SECTOR
 among the European active population

14% OF GDP IN THE EU ZONE
 Share of sectors that have Europeanized the organization of initial and continuing vocational training

INTERVIEW

3 QUESTIONS for Sofie RASMUSSEN



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To an European Commissioner

The Permanent Skills Reboot Assurance model guarantees all EU adults funding for two full months of training every five years, with full salary retention and coverage of training costs and living expenses.

Sofie Rasmussen is the European Commissioner for Employment. Ten years ago, she led the European working group tasked with developing new funding models for continuing vocational training, which laid the foundations for the Permanent Skills Reboot Assurance (PSRA).

The European Pact for the Revival of Continuing Vocational Training is under evaluation. Can you give us an overview of the evolution of this pact and the skills assurance model known as PSRA?

Since the introduction of the PSRA in the early 2030s, we have seen a fundamental shift in access to lifelong learning in Europe. The rapid rise of AI and the transition to a green economy have made it necessary to establish regular intensive training periods for many citizens to meet skill demands and ensure economic growth. Consequently, all insured individuals can participate free of charge every five years in tailored training programs, with full compensation and job retention.

How have funding mechanisms for these training programs evolved across different member states and sectors?

The funding models reflect the diversity of educational and economic systems in Europe. There are three basic models: voluntary private training insurance, private insurance with employer contributions, or mandatory levies as part of social insurance. The latter model exists in some Nordic countries, for example. Some countries also impose taxes on AI usage. This diversity of approaches ensures maximum flexibility and adaptability for all countries and sectors.

What are the evaluation results? What effects of the initiatives of the European Pact for the Revival of Continuing Vocational Training can be observed so far?

The socio-economic effects reported in the evaluation have been profound. We have observed a significant increase in job retention and career development opportunities, particularly in sectors most affected by rapid technological and environmental changes. The unemployment rate is below 6% in most EU countries. The effective retirement age has been raised by several years, particularly in countries where it was lower. However, there is also an increasing segmentation of the labour market, with high-value-added professions benefiting more from these initiatives than low-skilled jobs. This is an area we are actively addressing to ensure better access to upskilling and reskilling opportunities in the coming years.

REPORT

HAPPY SKILLS TARGETS THE HOSPITALITY SECTOR

From reception to kitchens, including housekeeping staff, new employees of the BedCorr hotel chain are now equipped with learning exoskeletons to acquire the skills needed for their roles.



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The German company Happy Skills, a European leader in learning exoskeleton systems, has recently expanded its reach into the hospitality sector. The company now provides its advanced exoskeletons to new employees across various roles within the BedCorr hotel chain.

These exoskeletons integrate artificial intelligence to guide employees through skill-building exercises on the job, all while ensuring service quality standards are maintained. Digital rewards, such as personalized avatar accessories for social media, recognize employees' progress, blending gamification with workplace performance. This approach is commonly referred to as "automated" and "gamified" skill development.

"This equipment has already demonstrated its effectiveness in our beta tests," says Anna Müller, HR Director of the BedCorr hotel chain. "For our housekeeping staff, the goal

was to maintain the standard of 3 minutes 20 seconds per bed while training them in new eco-friendly cleaning practices for the latest generation of self-cleaning synthetic titanium sheets. The exoskeleton demonstrated its ability to help all employees succeed, including those who initially struggled. It's a valuable asset in our employee training policy, and we've seen noticeable productivity improvements as a result."

Backlash Against Facial Mini-Exoskeletons

In contrast, the adoption of Happy Skills' mini facial exoskeleton—designed to help reception staff perfect their facial expressions—met with strong resistance. The device, intended to train employees in emotional intelligence by manipulating facial muscles, sparked an unprecedented strike at BedCorr before the summer season of 2040, leading to its withdrawal. "On paper, it seemed like a way to teach employees the correct facial expressions for customer interactions," says Jürgen Schneider, a union representative at BedCorr.

"But in reality, it felt like a form of torture, with pins moving the facial muscles. The reactions from both our staff and customers were shocking," he adds.

Reduction in Musculoskeletal Disorders

On a positive note, the integration of learning exoskeletons in BedCorr hotels has significantly reduced musculoskeletal disorders among employees leading to fewer sick leaves. However, the psychological effects of the technology have raised concerns.

"Employees have expressed dissatisfaction with the lack of human interaction that comes with learning from a trainer. They are left alone with their equipment, and simply following AI instructions, repeating the same movements to perfection, creates a sense of dehumanization. Worse, we've recorded the first cases of burnout since the introduction of learning exoskeletons at BedCorr," warns Klaus Weber, an occupational physician.

Return to Face-to-Face Training

A similar phenomenon has been observed among users of embedded skills kits like "Skills2Go" augmented reality glasses. These devices allow employees to perform tasks

without prior training by following on-screen instructions and audio commands from an AI. Such tools have been deployed for several years by BedCorr for kitchen assistants and waitstaff to address the company's difficulties in hiring qualified personnel. Here too, significant limitations have emerged, including a loss of meaning in tasks performed and, more critically, the undermining of teamwork dimensions, which these kits fail to address.

In response to these challenges, at the industry level, both hospitality unions and employers have begun negotiations to establish "ethical codes" to regulate the use of automated learning exoskeletons and embedded skills kits, following the example of similar initiatives in the care sector, set to take effect in January 1, 2041. Broadly speaking, these regulations aim to make complementary training sessions mandatory, incorporating human interactions and verbal exchanges with trainers or other learners to develop key skills, particularly those related to interpersonal communication. *"That would be a step in the right direction. After all, hospitality jobs are all about human connection, and we mustn't lose sight of that,"* emphasizes union representative Jürgen Schneider. ←④

REPORT

Learning Exoskeletons and Embedded Skill Kits Revolutionize Work and Training in Nursing Homes



In Caen (France), the city's only public nursing home was among the first French establishments in the sector to deploy automated training using learning exoskeletons.

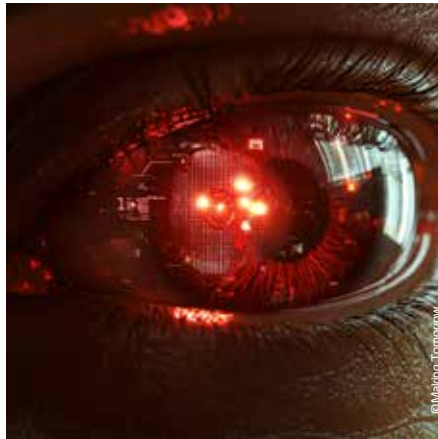
Shortly afterward, embedded skill kits were made available to employees to optimize their productivity. Five years later, in 2040, where do things stand?

"Careful, make sure the patient's feet don't hit the safety rail of the medical bed," warns a synthetic voice from the "SkillWings" exoskeleton worn by Denis Salmon. He is holding a life-size mannequin representing a patient. Just last week, Denis was working as an aerospace mechanic. After a layoff, the 40-year-old is training to become a caregiver at the "the happy wrinkles" nursing home. His movements are still hesitant, and his hands are visibly sweaty. *"When I was lost my job, I was looking for a stable employment. You know, with an aging population... healthcare would always have demand, so I'm not going to run out of work!"* he jokes, trying to rebuild his professional future.

Today's lesson is simple—at least in theory: learning how to safely transfer a patient from their room to the bathroom. An embedded artificial intelligence (AI) acts as the instructor. The exoskeleton vibrates to indicate whether Denis's arms and legs are following the correct trajectory and moving at the proper speed. This learning method, called automated skill development, is designed for newcomers to the profession, helping them acquire essential physical skills in record time ensuring they are ready to contribute productively from day one on the job.

In the next room, the department head, Carole, is managing the medication stock. As she picks up a bottle, she reads the instructions displayed by her augmented reality glasses "AssistVision". She places it on the designated shelf, following what appears to be a series of automated commands. *"That's exactly what I am doing!" she says with a laugh. "I do not have any medical training. I don't even know what these medications are for... My glasses tell me what to do!"* For training experts, this is an example of embedded skills kits: AI and contextual instructions adapt to the situation, enabling employees to perform tasks they've never been trained for. A micro-camera embedded in the glasses analyses the work environment in real-time, providing guidance as Carole works.

However, these systems come with a hefty price tag. The glasses cost around €1,500, with an additional €65 per month for access to the skills kit subscription. For low-paid workers, this expense can be prohibitive, especially when not all employers are required to cover the cost.



Fortunately, Carole's employer in the care sector does provide the equipment.

"Employees Are Infantilised!"

Learning exoskeletons and "AssistVision" glasses: miracle solutions to the skills shortage in healthcare? Since 2030, the number of qualified professionals in the sector has been steadily declining, hitting rock bottom in 2037 with a shortfall of 75,000 workers.

While exoskeletons and "AssistVision" glasses have been hailed as solutions to the healthcare sector's skills shortage, not everyone agrees. Karim Seghir, a union representative for the "Health Solidarity Collective" is outspoken about these technological solutions. *"Let's not mince words: employees are infantilised. Just wearing this equipment for a few hours doesn't make you a qualified professional. Recent studies by the European Committee for Workplace Well-being highlight a decline in worker morale. With "AssistVision" glasses, creativity and decision-making are lost as employees*

simply follow a task list dictated by AI. This is Taylorism 2.0—a form of assembly-line work that strips away human dignity."

However, Karim's criticism overlooks new developments introduced by the nursing home's management. *"We decided to reintroduce a human element into our training policy" - explains Stevan Dubois, director of the Normandy nursing home. "Now, exoskeleton training is supplemented by in-person practice sessions and reflective discussions with a trainer and other learners. This helps foster critical thinking and encourages collaboration. Without these sessions, we noticed a loss of purpose in work and even a decrease in teamwork among staff"*. This move aligns with new European regulations, which mandate the introduction of "ethical codes" in the care sector, effective January 1, 2041. The regulations ensure that care training retains its human dimension, even when AI and technology are involved.

Dubois emphasises the benefits of learning directly on the job: the ability to train directly on the job site. *"Let's not forget, over the past two decades, employees had to go to training centers, which often meant leaving their post with no available replacement. Now, that's no longer an issue. Exoskeletons and AssistVision glasses let them train right at the job site"*.

This argument doesn't convince Karim Seghir, who points out, *"We've lost many of the benefits that come with the right to training: a break from production pressures, the chance to meet others, and the opportunity to reflect on our work—the joys and the struggles alike."*

ETHICS

Learning Exoskeletons: The EU Enforces Human Interaction in Caregiver Training

The European Union has approved the establishment of "ethical codes" to regulate the use of automated learning exoskeletons in caregiving professions.

Starting January 1, 2041, every EU member state will require that the development of certain skills go beyond the exclusive use of automated learning exoskeletons. These programmes must now incorporate complementary training modules.

The EU directive outlines a broad range of professional skills for which training programs must incorporate "a human dimension," in addition to acquiring professional gestures through automated learning exoskeletons.

For instance, the acquisition of any skill required for interpersonal interactions with a patient must be supplemented by training modules focused on "mobilizing

oral expression, reflexivity, and the learner's thought process."

The directive provides also recommended training methods to achieve this balance including in-person training, human supervision, reflective sessions with a coach, discussion groups, or workshops for exchanging or analyzing practices.



ECOLOGY

Integrating the Unqualified

High-tech training and recruitment tools in healthcare have been particularly effective in integrating workers from disadvantaged backgrounds, such as young people categorized as “NEETs” (not in education, employment, or training). Today, they now account for over 30% of new recruits in the nursing homes.

Kevin Lopez, 32, is a perfect example. Struggling with depression since he was 19, he was unable to complete his education or earn a diploma. *“I’ve just found my first real job: care assistant. All I had to do was pass a psychological aptitude test and a medical exam. Now, I regularly download new skill kits with my AssistVision glasses to learn new tasks. Those from Eternal Care, the European leader in elderly care, are amazing!”*

A few days later, Denis Salmon successfully completed his introductory training at “the happy wrinkles”. He is now employed as a full-time caregiver. *“The practice sessions with my colleagues - and especially with the trainer - really lifted my spirits. Learning alone with an exoskeleton was tough for me,”* he admits.

“These practice exchange sessions are then analysed by AI to adjust the exoskeleton’s movements accordingly,” concludes Stevan Dubois. In other words, the machine learns from the experiences and insights of the learners to better support them in the future training. ◀◀🌐

In Construction: Exoskeletons and Embedded Skills Kits to Adapt to Climate Change



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Repeated heatwaves – reaching temperatures as high as 55°C on construction sites in Spain and Italy in 2039 – have had tangible effects on skill acquisition in the construction sector, particularly among installers of photo-quantum panels and roofers working in outdoor environments. In response, trade unions have successfully pushed for the mandatory adoption of models equipped with integrated cooling systems in work models across Europe, with no exceptions, in a sector where the use of learning exoskeletons has become a standard practice.

Furthermore, adjustments have also been made to embedded skills kits. The latest versions now include real-time monitoring of biological constants in and are integrated with micro-weather forecasting. This allows them to alert users to potential health risks ensuring they avoid performing tasks incompatible with extreme temperatures. ◀◀🌐

ANALYSIS

THE UNDERPINNINGS OF HOLOTRAINING'S SUCCESS



Born in 2033, continuous holographic training, known as "HoloTraining," has revolutionized the online training landscape. How has this technology developed? What are the implications for learners and especially for trainers?

Spectraviz. The journey of Spectraviz began with a 5 x 5 cm quantum chip, originally the core component of the "HoloStars" holographic projection devices. These high-tech gadgets were an instant success, becoming the top-selling Christmas gift in 2029, allowing influencers to appear as holograms in teenagers' rooms worldwide. But the potential of Spectraviz didn't stop there. By the end of 2033, the American company Netflix took notice and integrated the chip into its platform, NetSkills, launching 12,000 HoloFormation modules for a subscription fee of €15 per month. These modules are accessed via a HoloCompanion device powered by Spectraviz, enabling an entirely new method of learning.

Spectraviz has redefined the learning experience by allowing learners to train from the comfort of their homes. The SpectraViz chip projects realistic three-dimensional images into their living room, transformed into a training room. Learners can interact with virtual objects and other participants through 3D sensors, while haptic feedback adds a layer of tactile sensation, further enhancing the realism of the experience.

According to a recent study by the 4T Institute, 93% of participants in HoloTraining prefer this mode over traditional remote or face-to-face training. The primary reasons for this preference are the interactive nature of the learning and the high quality of the immersive experience. Only 7% of users hesitate to retry the experience due to HoloVertigo - a form of motion sickness caused by inconsistent handling of virtual objects. Ruben Chemouni, a neurobiology professor at the Neuroscience Institute of Paris (NIP), explains: "In some cases, the brain struggles to interpret the handling of non-consistent objects. This triggers a reaction similar to motion sickness, with the most severe cases involving vomiting and migraines". Moreover, 43% of respondents have reported feeling lonely while training alone at home, despite virtual group sessions. This is particularly true for older learners, with seniors (over 60 years old) being more reluctant to use a HoloCompanion and often preferring face-to-face sessions.

Adapted to micro-certifications acquisition

The advent of HoloTraining goes hand-in-hand with the widespread adoption of micro-certifications.

By paying an additional fee related to the final exam cost, a HoloTraining course can lead to the acquisition of a professional micro-certification. Impressively, three-quarters of those who have followed this route find employment within three months of completing their training. *"Companies prefer the clarity of profiles with composite skills certifications rather than relying on traditional diplomas,"* points out Solène Malrieu, an analyst at the HR consulting firm Talents & Value.

However, the rise of micro-certifications has also had unintended consequences on the job market. According to the 4T Institute, sector agreements that once defined wage levels based on formal qualifications have been undermined, leading to declining wages in industries that have widely adopted micro-certifications.

Despite these challenges, the validation of learning achievements through micro-certifications remains under the oversight of member states and social partners, ensuring that quality standards are maintained for both recording and certifying training programmes.

And the trainer became a HoloTrainer

"Given the development of holographic training, we had to adapt: either redefine our roles or risk obsolescence," simplifies Ryan O'Connor, spokesperson for the first European HoloTrainers union born in 2035.

In the last century, trainers had to be skilled in educational engineering, group facilitation (face-to-face & remote), and be continuously updated in their field to offer relevant content. *"Now, we mainly provide remote support to learners—through an avatar—in the context of formal (funded and certifying) training and organise the final exam in person. Additionally, relying on AI data that measures real-time motivation and mental well-being of the learner, we offer personalized psychological support,"* lists Ryan O'Connor.

Designing HoloTraining modules? It largely escapes HoloTrainers, who are often not involved in the creation of modules. These are in the hands of techno-pedagogical engineers, capable of mastering educational design and hologram creation.

"Indeed, we are more like support staff now. We teleport into learners' homes, guide them through their training, and help them validate their achievements. But if we are not involved in the process of creating HoloTraining modules, how are we different from customer service advisors? Not to mention the fatigue linked to the number of learners to support... If it weren't for our mobilization in 2035, the regulatory 5-minute break between two holographic teleportations wouldn't exist, and we would be on an assembly line," sighs Ryan O'Connor.

Questionable commercial practices

While HoloTraining platforms like NetSkills have made training more accessible, concerns about privacy and exploitation have

emerged. Sold commercially for €1,500, the HoloCompanion is inaccessible to the less affluent. Various financing systems have therefore emerged within member states, allowing it to be covered as part of formal training. The most common involves covering the cost of the HoloCompanion box and access to a platform by a skills insurance fund or the public employment service for the unemployed. Pedagogical surcharges related to learner support and access to a micro-qualifying exam can also be covered.

Problem: the offer of HoloTraining platforms flirts in some cases with the violation of users' privacy. On NetSkills, a learner can access free content by agreeing... to share all data on their domestic life recorded 24/7 by the device's sensors. Premium professional content, allowing the acquisition of a micro-certification, does not escape this logic.

"I don't have additional skills insurance, and the public employment service refused to fund my HoloFormation," recounts Natacha Kowalski, a job seeker. *"So, I agreed to be sponsored by a brand. The deal was as follows: since I wanted to train in the sports field, I had to commit to buying more than €50 per quarter of sports equipment from the VitaSport brand for two years. It was only after I activated this loyalty commitment that I gained access to the content on NetSkills. Okay, it helped me out, but I couldn't help feeling a bit humiliated by the deal."*

Does Natacha regret her choice? *"Being specialized in a specific task, through the game of micro-certifications, every time, I feel like a single-function tool, not really a gratifying feeling".* Despite these concerns, the micro-certification model continues to attract learners who see it as a faster, more flexible way to gain relevant skills. *"It has become simpler and quicker to enrich my career and broaden my skill set by accumulating micro-certifications,"* says Natacha, underscoring the growing demand for specialized, certifiable skills in today's job market. ◀◀Ⓧ

Position Statement of the European Union of HoloTrainers

In April 2035, we achieved our first victory: a mandatory 5-minute break between two holographic teleportations. What a milestone, just two months after the creation of our European Union of HoloTrainers! This proves that together, we are stronger than as individuals.

Five years later, we are raising our voices again calling for a reduction in the number of HoloTrainees assigned to each HoloTrainer. Colleagues employed by renowned training providers have reported having to supervise 450 trainees per month. That's too much. We are now demanding a European directive that limits the number to 100 people per HoloTrainer.

With a manageable number of learners, we can dedicate more time to each individual, ensuring truly personalized support and enhancing the quality of training across the board.

For the European Union of HoloTrainers,

Lukas Bauer, General Secretary!

PORTRAIT

Alex and the Art of Pastry Baking Through Holograms



In his studio in the suburbs of Berlin, Germany, Alex is busy in the kitchen—or rather, kneading the hologram of croissant dough before placing it into a virtual oven.

He is one of the 5,000 winners of the competition organized by the European Federation of Collective Catering in partnership with NetSkills. The prize? Financial assistance to cover his subscription to the platform, enabling him to prepare for the micro-certification as a for the micro-certification as a pastry assistant. With just five days to complete the programme at the "HoloBakeSkills Institute," Alex is putting his skills to the test.

Halfway through the programme, Alex reflects on his experience: "It's less restrictive than augmented reality glasses or the exoskeleton!" he admits. "But with 3D sensors installed all over my one-room apartment, it feels like I'm living in a training centre. Right now, it's hard to tell where my private life ends, and my professional training begins."

Despite these challenges, Alex acknowledges the benefits of the system, particularly the regular exchange sessions with the avatar of his trainer, Aline. "Her advice is always spot on. At the same time, my psychological state and my movements are continuously analysed by AI, which means it's pretty hard to mess up!" he jokes. "I just hope that all this data isn't shared with potential employers before I even get to an interview..."

With the exam just two days away, Alex feels confident but a bit apprehensive about the practical baking test: "With a hologram, I'm not always fully alert. But this time, the pain will be very real if I make a mistake!"

HoloTraining TOP 3 Platforms!

NetSkills: The new NetFlux channel offers free content focused on developing transversal skills such as mastering multi-tasking and maintaining concentration. This is complemented by a paid offering of 12,000 professionalizing modules that prepare for micro-certifications for €15/month (eligible for funding by public employment services).

iLearn by Pear: Access 20,000 HoloTraining modules, including 3,000 exclusive offerings, for €50/month (not eligible for funding by public employment services). A high price for an exclusive feature: no need to connect to the HoloCompanion box to interact with your trainer. The avatar is projected via the "iEye" ocular implant, and sound is transmitted through "MiEar," enabling guidance anywhere.

EU_4_All: This European platform offers 2,500 modules available in each of the EU's 15 languages for €30/month. A limited offering, but it ensures quality, eco-survival compatibility, and the micro-certification potential of each module (eligible for funding by public employment services).

REPORT

TWO MONTHS TO BECOME A HOLOTRAINER IS QUITE SHORT

Transitioning from the role of a "traditional" trainer to that of a HoloTrainer is not an overnight process. Across Europe, dedicated conversion centers are available to support professionals through this transformative journey. While skills may change, the ultimate goal remains constant: ensuring learner success.



At nine in the morning, the parking lot of the 3D Trainers conversion center, located in the suburbs of Belgium's capital, grows quiet as the flow of autonomous taxis slows to a halt. Among the arrivals, Léo Martin steps briskly out of his vehicle, barely glancing at the droid driver or remembering to rate the service.

"Two months to become a HoloTrainer is a tight schedule," he admits. "At first, I thought it was just about learning to move and interact with the learner through an avatar. Initially, I thought it was just about learning to move and interact with learners through an avatar. But the skillset required is much broader! Designing immersive scenes, interpreting trainees' emotions via their holographic imprint, verifying participant identities using biometric data—there's a lot to learn." Léo is especially enthusiastic about collaborating with techno-pedagogical engineers to create new training content. "Their expertise enhances the learning experience, making it far more immersive and tailored to trainees' needs," he explains. His favourite part of the programme? "The 'Merlin' module, which focuses on becoming a supportive and empathetic tutor." However, not every trainer successfully transitions to this futuristic role. According to statistics from the Brussels center, one in four trainers drops out during the first week of retraining. "The primary issue is the perceived loss of the human element," explains Leïla Berrada, director of 3D Trainers. "Many trainers educated in the early 2000s view professional training as inherently social and struggle with the idea of remote interaction. Face-to-face exchanges feel essential to them for maintaining engagement and avoiding dehumanization." Despite these challenges, the success rate across Europe is high, with 82% of trainers completing their transformation into HoloTrainers.

Updating Skills

Does becoming a HoloTrainer mean leaving behind traditional training skills? Not at all. Instead, trainers adapt their expertise to a pedagogical model that integrates holographic technology.

Aline, who is two weeks away from completing her retraining, demonstrates how these traditional skills remain relevant. At her internship with the HoloBakeSkills Institute, she supports trainees such as Alex, a Berlin-based jobseeker preparing for the micro-certification of "Pastry Assistant Specializing in Croissant Dough Preparation and Baking." Reflecting on her experience, Aline shares, "The skills I developed for face-to-face group facilitation are still applicable to micro-certification content. For instance, in a physical classroom, I focused on 'weak signals' like body language or subtle cues such as blushing. Initially, I worried these observational skills wouldn't transfer to working with holographic avatars—but I was wrong! Now, I pay attention to voice intonation, how a trainee navigates the HoloTraining scene, or AI feedback on their physical indicators like heart rate. Retaining this human touch has reassured me and strengthened my confidence during this transition."

Mastering Technology

A significant part of the training offered at the conversion center is dedicated to mastering holographic technology and navigating Virtualium 4.0, the virtual world where training takes place.

"The technology itself isn't difficult to master," explains Aminata Diallo, a trainer of trainers at 3D Trainers. "The HoloTrainer and trainee connect to Virtualium 4.0 through their respective HoloCompanions and meet in the same holographic training environment. This process, known as teleportation, is quite straightforward." However, mastering access protocols is only the beginning. "Knowing how to manage motivational AIs and incorporating psychology into training sessions are equally critical," Aminata adds. For trainers interested in content design, collaboration with techno-pedagogical engineers is essential. These specialists, many of whom come from the video game industry, work closely with trainers to create immersive HoloTraining scenes. "The key isn't to simply replicate in-person practices within a holographic framework," Aminata emphasises. "It's about rethinking pedagogical design entirely to align with the unique possibilities of holography." ◀◀

Spark Careers and Illuminate the Future for Aspiring Electricians!

Are you a training provider specializing in the construction sector and familiar with HoloTraining? Are you eager to train professionals for in-demand jobs facing critical labour shortages? If yes, the EFCS (European Federation of the Construction Sector) is looking for you!

If selected, your role will be to support the rollout of HoloTraining modules, designed to prepare learners for the micro-certification of "auxiliary electrician specializing in wire stripping." Your responsibilities will include facilitating group sessions through avatar-based interaction, psychological support to learners, and assisting them in preparing for the final micro-certification exam.

Contact: HoloTraining@fesc.eu



ANALYSIS

A New Generation of Augmented Coaches and Advisors

To support individuals in training or career guidance, augmented coaches and advisors leverage in-depth analysis of a multitude of personal and professional data.



By 2030, the outlook for the training industry seemed grim. Expert predictions painted a future dominated by algorithms, with humans destined to yield to the boundless computational power of artificial intelligence (AI). These systems were expected to outpace the human brain in instructional design, rendering traditional face-to-face training and advisory roles obsolete. Concepts like HoloTraining, embedded skill kits, and learning exoskeletons were forecasted to take centre stage.

But the prophecy did not come true. Today, trainers and technology work hand in hand, with the latter enriching the practice of the former. As Teodor Nowak, a healthcare trainer at Eternal Care, proudly states: “No AI can ever replace me.”

This is primarily because European lawmakers have taken care to implement safeguards, including the renowned ethical codes first introduced in the healthcare sector and now under development in other industries. Secondly, human qualities like empathy and the ability to address deeper questions of meaning and motivation remain irreplaceable. “No machine can show empathy,” asserts Teodor Nowak. From this collaboration between humans and technology, a new figure has emerged: the augmented coach, designed to better support learners in their skill development.

“Like a sports coach with their protégé!”

To clarify: the augmented coach is not a trainer. Their expertise lies in data learning, not instructional design. Their primary mission is to guide learners through their development journey, especially in certifying training programmes. “Practically speaking, I rely on data collected during learning activities,” explains Gérald Muller, an augmented coach. “For instance, I analyse data from the AI in a ‘SkillWings’ exoskeleton, which tracks professional gestures and behavioural patterns. Using this information,

I help individuals identify their unique professional style and motivational drivers. Then, we schedule sessions to address challenges and optimize their practice before the certification exam—just like a coach preparing an athlete for competition!” The same approach is also applicable in the context of Validation of Non-Formal and Informal Learning. “The principle remains the same: I help candidates prepare for their jury evaluation by analysing real-life data on their professional practices and behaviours,” Müller adds.

Profound Impact on Adult Career Guidance

Another emerging role is that of the augmented advisor, whose focus is on assisting job seekers or employees with career planning and transitions. AI-driven data analysis has transformed skills assessments, which are crucial for career reorientation. These tools analyse personal and professional trajectories, offering advisors a detailed profile before they even meet the client.

“There was a time when career interviews were inefficient,” says Ludvina Tayeb, an augmented advisor at an employment agency. “We’d spend half of a one-hour session on questionnaires and administrative tasks.” Now, with prior consent, data from career paths, skills, and interests is pre-analysed, allowing advisors to maximize the time spent on meaningful discussions.

“Today, I arrive at the session already knowing the key aspects of the person’s profile,” Ludvina explains. “We can dive straight into exploring a broader range of opportunities and focus entirely on their decision-making process. These roles represent a profound evolution in training and career guidance. By integrating human insight with AI-driven precision, augmented coaches and advisors are reshaping how individuals prepare for certifications, navigate career transitions, and unlock their potential.” Far from replacing human professionals, technology has empowered them and enhanced their ability to collaborate.

AI for "Skills Matching": The Key to Seamless Career Paths

In today's ever-changing world, individuals enjoy a broad array of opportunities for personal and professional growth, empowering them to enhance their quality of life. This progress is further supported by a growing emphasis on skill validation, available to everyone, anytime, anywhere, and at any stage of life.



We interviewed Kalev Mägi, Director of the Public Employment Service in Tallinn (Estonia), to discuss how the concept of skills validation, particularly the recognition of skills acquired informally and non-formally, has transformed their service offerings and enhanced the user experience.

Skills Mag: What are the main innovations of the tool you recently introduced, and how do your clients benefit from it?

Kalev Mägi: The digital portfolio replaces the traditional CV by consolidating all the skills an individual has acquired over their lifetime, alongside sections on previous employment and professional aspirations. Furthermore, users can choose how to fill out their portfolio in three different ways:

- In "basic" mode, where skills and career aspirations are manually entered.
- In "intermediate" mode, where their skills are validated through online tests.
- In "complete" mode, where users wear and install AI-enabled apps on their personal devices for a certain period,

which automatically detect and document their skills.

This tool revolutionizes the user experience by focusing on the individual, seamlessly linking personal characteristics in real-time to relevant job openings and training opportunities.

Skills Mag: If individuals are at the center, how do you balance this focus with the needs of employers?

Kalev Mägi: Our approach creates individual skills profiles that go beyond education and professional experience, offering a comprehensive view of a person's potential. This benefits employers by unveiling hidden talents that might otherwise go unnoticed.

Skills Mag: How do you ensure the authenticity of skills, particularly those that are uncertified?

Kalev Mägi: The "intermediate" and "complete" modes provide strong evidence of declared skills. In the "intermediate" mode, skills are validated

through online tests, while the "complete" mode relies on AI to detect and record competencies. For the "basic" mode, individuals must self-report their skills truthfully; otherwise, discrepancies will likely become apparent during job interviews or through performance. We emphasize this responsibility during the portfolio creation process.

Skills Mag: How does the matching process work?

Kalev Mägi: Achieving efficient and reliable matching has been a multi-year effort. A unified classification of skills is used across portfolios, job postings, and training programmes to streamline the process. Skills entered in the "intermediate" and "complete" modes align directly with this classification, while skills manually entered in the "basic" mode are translated by an advanced automated system. Career counsellors, trained in the classification system, step in to address discrepancies or provide guidance when necessary.

Skills Mag: Information about skills acquired, for example during leisure activities, can sometimes be seen as too personal... How do you address data protection concerns?

Kalev Mägi: Our clients disclose information just as they would in a traditional career counselling process. We also have a data quality monitoring system adapted to all three creation modes, which detects different types of errors. Regardless of the mode, portfolio owners, have to approve the final content to ensure that their information is accurately recorded and securely stored in our system.

Skills Mag: What are your next steps?

Kalev Mägi: We aim to encourage broader use of the "complete" mode, especially among disadvantaged or vulnerable groups, as it has the potential to bridge gaps in service accessibility. While this digital solution is transformative, it will not replace in-person counselling for those with limited digital skills. The "complete" mode also supports translation services for migrants and refugees unfamiliar with Estonian or English, and it can better serve individuals with disabilities who face challenges in accessing physical facilities. This multi-faceted approach reflects our commitment to inclusivity, innovation, and bridging the skills gap in a rapidly changing job market. ◀▶🌐



I speak several languages fluently, so finding a job has never been a challenge, and I've never experienced unemployment. Never? Well, that changed a few years ago when the company I worked for as a translator started using automated translations, reducing my hours to just 25 per week, which was barely enough to make ends meet. For the first time in my life, I made an appointment with the public employment service here in Tallinn.

On my way to the employment service, I expected the usual procedure: filling out forms detailing my educational and professional background, providing supporting documents, undergoing a perfunctory interview about my expectations, and, if my profile matched a job opening, being forwarded to an interview. Otherwise, I assumed I'd be nudged toward some generic digital training programme.

But I was surprised. The advisor I met introduced me to a system for creating a digital portfolio, where my qualifications, professional experience, and skills could be entered and tracked. At first, I was sceptical about entrusting an AI tool to monitor my daily life. But my advisor reassured me that my data would be securely managed and explained how the system could open up personalised opportunities I might never have considered. After some thought, I decided to opt for the "complete" mode, which promised to take into account not only my work history but also my hobbies and broader life experiences. A few weeks later, I returned to meet my advisor and review the results of the AI-driven matching process. To my astonishment, the system suggested that I pursue training in musical pedagogy to work with kindergarten children! This recommendation seemed utterly baffling at first.

Curious but sceptical, my advisor and I reviewed the data in my portfolio. During our first meeting, I hadn't mentioned that I played the piano and had some experience with children. But the AI, thanks to the "complete" mode, detected my piano skills, my regular attendance at concerts, and it noted my time as a camp counsellor in my youth. These details helped guide the AI toward suggesting musical pedagogy as a viable, fulfilling career path for me.

After some deliberation, I decided to enroll in the training programme suggested. The experience turned out to be transformative. Today, I work across several kindergartens, specializing in musical pedagogy. My language skills have proven invaluable, as many of the children I teach have Estonian as their second language. Most importantly, I've found deep satisfaction and joy in this new role—a career I might never have discovered on my own.

ANALYSIS

THE AUTOMOTIVE SECTOR: PIONEER OF EUROPEANIZED TRAINING

Harmonising the vocational training framework within the European Union? On paper, the idea is compelling, aligning perfectly with the "single market" established in 1993—a strong signal of cooperation among member states. In practice, the project has been slow to materialise. Only the green automotive and clean energy sectors have paved the way.

In 2026, the publication of a study by the research firm "4T Consulting" on the automotive sector within the European Union caused a major stir: the report highlighted the fragmentation of vocational training systems and the lack of collaborative efforts in educational engineering, which led to an estimated €785 million in additional public spending. The findings galvanized political decision-makers and national stakeholders - including ministries, regions, social partners- into action, etc.

Despite this urgency, it was not until 2034 that the European VET Center for Green Automotive (CGA) was officially established in Berlin. The center is the result of several years of negotiations among the 27 member states, driven by a focus on ecological efficiency, propelled by a collective commitment. Backed by substantial EU financial support, including €200 million in subsidies in 2040 alone, the CGA became a symbol of cooperation in one of Europe's most competitive industries.

"Negotiations were anything but easy. Even 'green' automobiles remain a highly competitive sector. We were in the midst of an anti-gravity vehicle revolution, and the 2035 ban on combustion engines was rapidly approaching. We were cornered," recalls Anna Keller, Vice-President of



the CGA. "To convince the states and major firms to join forces by pooling and harmonizing educational resources, we highlighted the level of excellence we could achieve against the American and Chinese giants. Ultimately, cooperation prevailed over competition, much like the European Union itself. Only proprietary content covered by industrial secrecy remains off-limits."

Competency Needs Analyzed at a European Level

Today, the skill frameworks for this industry have been standardised across the 27 member states, and the sector's entire vocational training system has been centralised in Germany at the CGA, following Finland's example with clean energy systems.

At the CGA's Berlin offices, the competency needs of the automotive



Excellence in Eco-Survivability: Selection Criteria for Leading Countries of the CGA

The question of leadership at the European Center of Excellence for Green Automotive ("European VET Center for Green Automotive" or CGA) arose very quickly after its founding. Instead of a rotating presidency among member states, Germany was unanimously designated as the head of the organization. This decision was based on objective criteria of excellence in eco-survivability: the level of adaptation of its automotive industry to green technologies and the measured impact on reducing greenhouse gas emissions over the past five years.



Europeanisation of training with the support of AI

sector are analysed on a European scale. By leveraging AI, the center has mapped out a core set of competencies for every job and qualification level, based on detailed analysis of the hundreds of national vocational certifications that previously existed. At a finer level, micro-certifications are also developed to meet additional needs. "Typically, this applies to certifications for operating a machine used at both Polish and Spanish production sites," illustrates the CGA's Vice-President, adding, "AI has been indispensable in making these resource-pooling efforts possible."

However, she is quick to clarify the scope of the CGA's authority: "This centralization of training pertains to educational engineering and certification. Regional correspondents then adapt and deploy training content locally through service providers. The CGA does not intervene or alter national training systems."

Enhanced Professional Mobility

The European-level recognition of the same diplomas and certifications for green automobiles has naturally been accompanied by facilitated professional mobility. For instance, a skilled French worker can now find an identical job in any member state. Unfortunately, this has not been sufficient to address the main challenge facing the industry: an aging workforce coupled with a lack of appeal among new entrants to the labour market. "Salaries and working conditions have indeed improved compared to the early 2000s," notes economist Lucía Morales. "But harmonized training programs alone haven't resolved the recruitment issue. However, we have observed that new hires are drawn to the sector thanks to its globally recognized model of climate performance based on zero-carbon transportation and its constant efforts to adapt. This is significant in terms of eco-survival, the pressing concern of our time."

What Happens If the EU Expands?

The success of the Europeanization of training within the green automotive sectors raises a critical question for the future: will this finely-tuned machine falter if new member states join the European Union?

"At present, there is no indication that this would endanger the CGA's existence. On the contrary, it would allow the integration of new educational resources and potentially the development of new certifications or micro-certifications tailored to technological innovations present in the new member countries," highlights Brian O'Connor, an independent observer of European industrial policy. "Of course, things might differ if the newcomers choose not to cooperate... It would therefore be necessary to determine whether their participation in the CGA would be optional or mandatory, and, if so, establish incentive

mechanisms for non-compliance."

The question of funding also arises. "The EU's subsidies allocated to the CGA are not infinitely expandable. Unfortunately, we currently have no solution to this problem. Should a tax be introduced on the purchase of new vehicles? Or should companies be required to contribute based on their annual profits? No option is off the table," anticipates Johann Gruber, the European Commissioner for Industry. While uncertainties remain, the CGA stands as a testament to Europe's ability to align ecological goals with industrial innovation and collaboration, setting a precedent for other sectors to follow. ◀◀

"HoloTrainers: For the Right to an HoloPause!"

One of the key advantages of HoloTraining is its ability to eliminate linguistic barriers between trainers and learners through instant translation powered by artificial intelligence (AI). A new Tower of Babel has risen at the heart of Virtualium 4.0.

Far from being just another gadget, this technology has led to two notable effects. The first, a direct consequence, is the decrease in the number of adult learners enrolling in foreign language courses. According to European regulations introduced in 2034, language courses must still be maintained in initial education. The second effect is the increased mixing of nationalities within the same training session.

For example, a German trainer can seamlessly teach a class composed of Spanish, Italian, French, or Polish learners. Each participant can freely express questions and concepts in their native language, even the most technical terms!

Resolutely inclusive, instant translation isn't limited to voice. It also supports subtitles, sign language through an avatar, and even Braille via a specially designed keyboard.

INFOGRAPHIC

Coordination between European and national levels in the operation of the CGA

1 From Countries to the CGA

1 STEP

★ SKILLS NEEDS

- ★ National certifications
- ★ Specificities related to the productive fabric
- ★ Emerging needs

2 At the CGA [Germany]

2 STEP

★ CERTIFICATION AND PEDAGOGICAL ENGINEERING CONDUCTED BY THE CGA

- ★ Analysis of skills needs and their evolution
- ★ Developing and updating **core euro-certifications** by profession and training levels
- ★ Developing and updating **complementary micro-certifications**
- ★ Designing **pedagogical engineering and educational materials** for teaching and training, utilising national resources processed and translated by AI
- ★ Delivering **HoloTraining modules** to foster innovation and ensure ecological excellence



AI in Service of Europeanized Automotive Training

DEVELOPMENT OF COMMON CERTIFICATIONS BY THE CGA

National sectoral certifications analyzed by AI: **1,872**
Euro-certifications developed by the CGA: **96**

European Qualifications Framework (EQF) levels	Euro-certifications developed by the CGA distributed across the EQF levels
3	14
4	21
5	19
6	20
7	14
8	8

Micro-certifications developed by the CGA: **240**

3 In Each Country

3 STEP

★ NATIONAL IMPLEMENTATION

- ★ Designing **specific training pathways** combining core euro-certifications and micro-certifications
- ★ Tailoring **pedagogical content** to align with national specificities
- ★ Disseminating **materials** to local training providers
- ★ Enabling **access to HoloTraining modules**, conducted by the CGA

DEVELOPMENT OF EDUCATIONAL RESOURCES BY THE CGA

National pedagogical resources, analysed by AI (in the 15 EU languages): **235,671**

The pedagogical design has yielded **6,500 educational resources** per language, including

training pathways / training module content / HoloTraining capsules / assessment resources / certification exams.

24 HOURS IN THE LIFE OF

Richard, Training Maestro at the European Center of Excellence for Green Automotive

Richard Dunil is the quintessential nightmare for journalists: reserved and modest. But as the questions unfold, he reveals glimpses of what his days are like as a pedagogical coordinator at the European Center of Excellence for Green Automotive (CGA).

"The majority of my work revolves around engaging with decision-makers and stakeholders at the CGA: ministries, regions, industry sectors, and other social partners," Richard explains, pausing briefly to sip his coffee. *"The objective is to adapt training pathways to their unique needs and practices while adhering to a key principle: everyone operates within a hyper-competitive ecosystem, and no one should feel left at a disadvantage."*

When is not attending high profile conferences in Virtualium 4.0, Richard ensures the proper implementation of the pedagogical methods used in the CGA's initial and continuing training programs. *"You need the right balance between 100% asynchronous and autonomous distance learning modules and those incorporating face-to-face interaction, whether virtual or in person. A good training programme is like a good meal: balanced!"*

Richard's responsibilities also extend to managing teams of artificial intelligence engineers. *"They are indispensable. Without them, we wouldn't have the capacity to configure and operate the expert systems that personalise training paths to meet national requirements or tailor them to the prior education and experience of each learner."*

INTERVIEW

BARRY GECKER, RESEARCHER IN ECONOMICS of Education and Training

"We Have Fully Entered the Culture of Lifelong Skill Renewal"

Barry Gecker, researcher in economics of education and training

What led to this intensified effort for lifelong learning? Was it a response to the skills crisis of the 2030s?

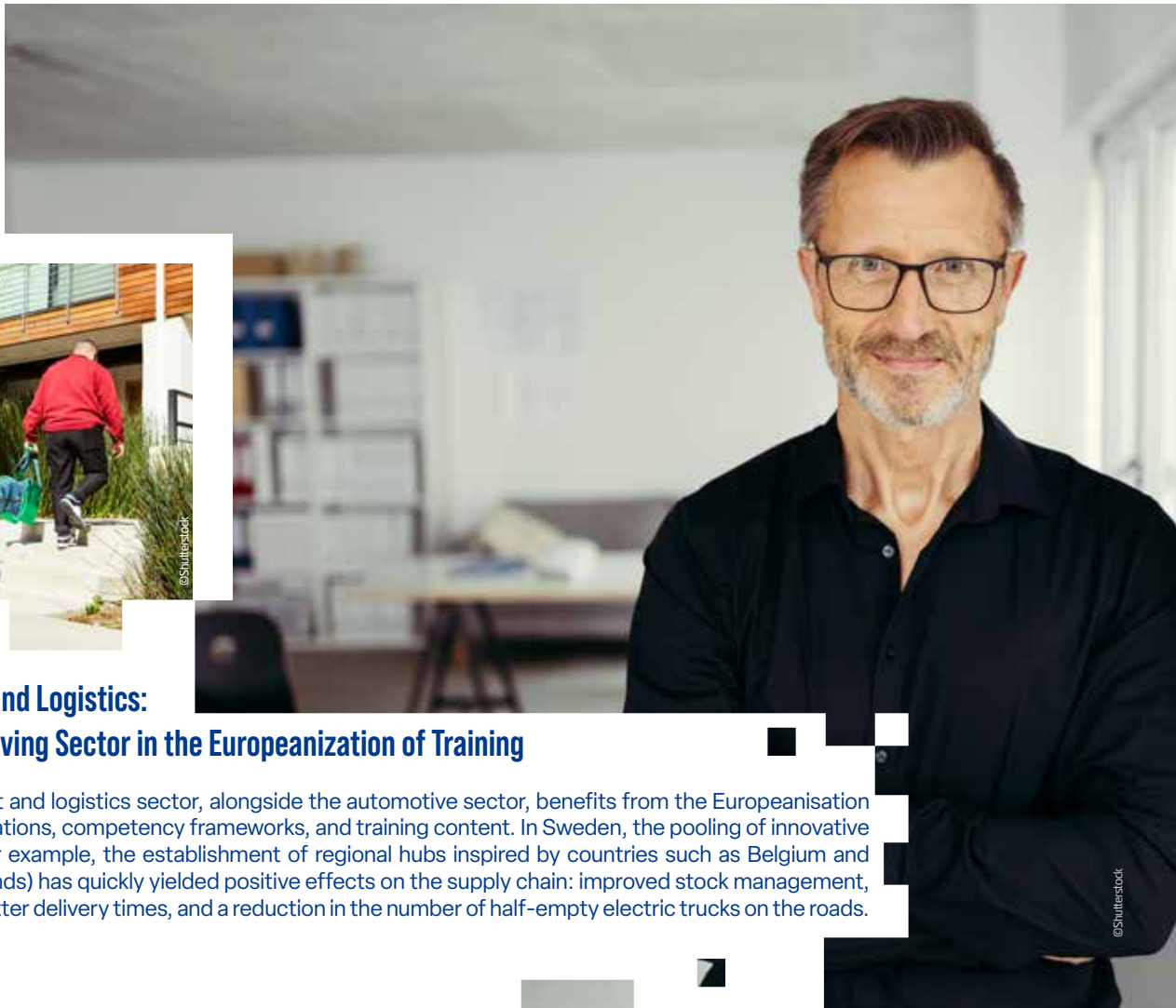
The skills crisis of the 2030s exposed the limitations of a work organisation model focused primarily on productivity and individual performance. Let me explain: before this period, training investments were often evaluated in terms of their immediate return on investment, such as increased competitiveness or measurable benefits for businesses. In the 2030s, however, we faced a bottleneck: technological advancements required a rapid upskilling of workers to effectively deploy new systems and tools.

Yet, existing training systems were simply not equipped to meet this demand at the required scale and speed! Suddenly, we found ourselves unable to respond quickly enough to challenges like ecological survival. The glaring mismatch between training capacity and market demands prompted substantial investment in adaptive lifelong learning systems capable of evolving alongside technological progress.

A second factor, also during that period, was the heightened need for hard skills. In the 2020s, we lived under the illusion that soft skills (transferable skills) were at the core of human capital and that the automation of industrial or cognitive processes would replace hard skills. This assumption proved false: the more sophisticated a system is, the greater the need for technical (and human) skills!

What are the common trends and key differences observed among European countries?

We can distinguish two prominent common trends that have emerged across European countries in the context of lifelong



Transport and Logistics: Another Driving Sector in the Europeanization of Training

The transport and logistics sector, alongside the automotive sector, benefits from the Europeanisation of its certifications, competency frameworks, and training content. In Sweden, the pooling of innovative practices (for example, the establishment of regional hubs inspired by countries such as Belgium and the Netherlands) has quickly yielded positive effects on the supply chain: improved stock management, leading to better delivery times, and a reduction in the number of half-empty electric trucks on the roads.

learning. The first is the continuum between formal and non-formal learning. This shift reflects a cultural transformation where skill-building is seen as a continuous and natural process taking place in multiple settings: at the workplace, at home. A portion of training expenses is now made by individuals in recreational contexts.

The development of EnterTraining and HoloTraining perfectly illustrates the seamless fusion of leisure and skill acquisition. This evolution marks the emergence of a culture of perpetual skill renewal, deeply embedded in both professional and personal spheres.

The second trend is the growing prevalence of micro-certifications. Today, individuals can gain proficiency in specific tasks or skills within a profession, often through step-by-step learning modules. This contrasts with traditional certification systems, which required mastery of an entire profession.

However, funding models for Permanent Skills Reboot Assurance (PSRA) differ significantly across Europe.

In most member states, the system is supported by employer-contributed insurance schemes. Some countries have adopted private, voluntary individual insurance models, while others, like those in Scandinavia, implement mandatory taxes through social insurance systems tied to AI usage.

Are technological developments reshaping social relationships?

The effects of advancements in lifelong learning systems have been significant for workplace productivity and society at large.

One often-overlooked driver of the 2030s skills crisis was the erosion of workplace collectives. This loss of collective identity and cooperation contributed to a broader crisis in employee motivation and the perceived meaning of work.

In the years that followed, the public debate focused on workplace collectives and strengthening cooperation, as many of the emerging training tools tended to isolate learners.

Awareness wasn't immediate, but over time social stakeholders began mobilizing to develop and maintain a human dimension at the core of training processes.

The aim was to restore a crucial balance: While individuals in private settings are free to learn independently, workplace training is increasingly designed to foster cooperation, shared experiences, and open dialogue. Trainees are encouraged to share insights, reflect on their professional journeys, and collaborate with peers. ◀●

The Scandinavian Exception

The Scandinavian model of Permanent Skills Reboot Assurance (PSRA) offers a distinct and innovative approach to financing workforce reskilling, setting it apart from mechanisms adopted in other European countries. Central to this model is a tax on artificial intelligence (AI) utilised within businesses, a funding strategy designed to link technological advancement directly to workforce development.

The principle is simple: companies that utilise AI in their operations are required to pay a tax proportional to their level of usage. To operate in Denmark, Norway, and Sweden, AI service providers must be registered with national authorities. This registration feeds into a centralised national database, enabling tax administration to accurately calculate contributions owed by companies. Key metrics used in this calculation include the volume of data processed, the complexity and sophistication of the AI models employed, and the total computing hours consumed by AI queries.

IN BRIEF

Axos: From Life Insurance to Skills Insurance



“Strengthen your skills risk coverage!”

Who hasn't encountered Axos's iconic slogan in workplace communications? Once a traditional life insurance company, Axos has reinvented itself as a trailblazer in the burgeoning market of private Permanent Skills Reboot Assurance (PSRA). Through relentless lobbying with HR departments and marketing campaigns, the company has

become synonymous with skills risk coverage, offering its services as either private insurance or mutual fund-backed schemes, depending on national regulations.

And it's paying off: Axos has reported a remarkable 13% increase in revenue compared to 2039, with 350,000 new contracts solidifying its dominance as Europe's premier provider of skills insurance.

Founded in 2021 by visionary Italian entrepreneur Luca Romano, Axos successfully leveraged the creation of the 2034 European standard “Skills Eco-Survival Proficiency Guarantee” (SESPG) and EU incentives for implementing PSRA systems. Recognizing the rapid pace of labour market disruptions and the critical need for continuous skill adaptation, Axos made a bold pivot, shifting from life insurance to the more future-proof domain of skills insurance.

Axos offerings go beyond insurance. The company has positioned itself as a comprehensive advisory service provider. At the core of its consulting portfolio are three flagship services: calculating the Skills Obsolescence Velocity Index (SOVI) for companies, providing advice and assistance in establishing funding systems with public authorities and social partners, and supporting businesses in implementing their “permanent skills reset” strategies, according to its promotional brochure. This multifaceted approach has turned Axos into more than just an insurance provider—it has become a key player in shaping the future of work.

SUMMARY

A Study by Cerefop Analyzes the Transformations in Adult Education Professions

The adult education sector has undergone significant changes during the 2030s, according to a recently published study commissioned by the European Center for Research on Vocational Education and Training (Cerefop). This study, titled "*The Future of a Profession: Adult Trainers Facing Multiple Changes*", highlights the rapid integration of artificial intelligence (AI), new tools, holographic imaging, and personalized learning systems into adult training, fundamentally reshaping trainers' roles and their approach to education.



The integration of AI into training has transformed learning processes, ushering in a new era of hyper-personalized education for adult learners. AI-driven systems now craft tailored learning pathways that adapt to individuals' unique learning styles, career aspirations, and skill development goals. One of the most striking technological advancements described in the Cerefop report is the widespread adoption of holographic imaging. By the mid-2030s, following Finland set a global precedent with its adoption of virtual classrooms enhanced by advanced holographic systems. This development has since spread to numerous countries, enabling learners to participate in immersive, highly realistic simulations regardless their physical location breaking down geographical barriers to quality education.

The study also delves into the transformative impact of a suite of technologies collectively termed "Skills Tech". These include automated

learning exoskeletons and embedded skill kits based on augmented reality tools which provide workers with real time guidance and support. While these technologies have occasionally supplanted trainers in specific contexts, such replacements

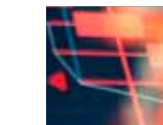
remain largely confined to narrowly defined skill areas. The most commonly observed effect has been a significant reduction in training durations, with processes now streamlined for efficiency thanks to instant, on-the-job assistance.

The widespread adoption of holographic imaging

At the same time, two other significant trends have emerged that are redefining the very concept of the training profession. First, there is a growing importance of continuous training in new technological skills, as they are critical for accessing learning environments. These skills now encompass more than just technical mastery of tools; they increasingly include the ability to use them thoughtfully, considering their limitations and potential "unintended side effects."

Moreover, the role of trainers has evolved to adopt a stance closer to that of facilitators and mentors, emphasising critical thinking, problem-solving, and emotional intelligence. With AI and automated learning systems handling instruction and training for specific content areas as well as formative assessments, trainers now spend more time fostering human-centered skills, guiding discussions, and helping learners tackle complex challenges encountered in society and the workplace. This shift has also given rise to entirely new approaches to trainer education.

Cerepop director Anna Novak supplemented the report's findings during a press conference, stating: *"The 2030s have shown us the potential of technology in adult education, but at its core, training remains a deeply human endeavour. Our trainers are more essential than ever, guiding learners through the complexities of the modern world. As we enter the 2040s, we must continue to support their development with appropriate resources and through their own access to ongoing, renewed training. Together, these developments are redefining not just how people learn but also the very nature of the training profession itself."* ◀🌐



A DECADE OF PROGRESS

2032

The launch of the **Permanent Skills Reboot Assurance (PSRA)** marks a significant milestone in lifelong learning at the EU level. This innovative solution guarantees, every five years, funding for all EU adults to receive two full months of reskilling or upskilling, while maintaining their salary and covering training and living expenses. It ensures that no one is left behind in an ever-evolving labour market.

2033

With holographic projection devices becoming a household staple, **NetSkills**, a specialized branch of Netflix, launches its **HoloTraining** offering. This platform allows users to engage in immersive training sessions from the comfort of their homes, revolutionizing access to lifelong learning.

2034

The first **European Vocational Training Centre for Green Automotive** opens its doors. A collaborative project co-financed by the EU, this centre ushers in a new era for vocational education and training. It provides a multinational learning environment with a regional focus and a unified program specifically designed to meet the needs of the European green automotive industry.

2035

Exoskeletons move from an experimental phase to large-scale deployment for training professionals in the healthcare sector. The University Hospital of Caen, France, becomes the first European institution to permanently integrate exoskeletons into its training programs for staff, enhancing both efficiency and safety.

2040

The European Association of Healthcare Professionals spearheads the initiative for a new framework of **ethical guidelines regulating the use of automated learning technologies** such as exoskeletons and embedded skills kits. These guidelines emphasise the importance of human oversight and the preservation of subjective and relational dimensions in caregiving professions. This approach ensures that the integration of learning automation enhances, rather than diminishes, essential human-centred skills.

Lucy Sarasvati, a HoloTrainer Remembers



© Shutterstock

Lucy Sarasvati is a HoloTrainer at the National Cognitive Integration School, a multidisciplinary training centre. From the advent of artificial intelligence to the widespread adoption of HoloTraining, she reflects on the impact of technologies on education. Behind what she perceives as a humanist renaissance lies the desire to better understand the meaning behind algorithms.

I took on my first role as a trainer before the development of HoloTraining, back in the 2010s. After the rise of remote learning and the growing prominence of Information and Communication Technologies (ICT) in education, the advent of artificial intelligence marked a major turning point. I still vividly remember the mix of enthusiasm and fear I felt the first time I explored the possibilities of ChatGPT. That was in late 2023, a moment that now feels like a distant epoch.

From that point, the pace of change became relentless. In just half a decade, no fewer than five major plans were launched at both the European and national levels to transform the education system and adapt it to technological innovations.

I've often wondered whether the volatility of public policies at the time reflected a society many described as being driven by the rapid succession of technological

changes. If governing means anticipating, no one seemed capable of maintaining a steady course over the long term. This lack of stability raised deeper questions: was it the speed of technological change itself that made foresight so elusive, or was it our institutions' inability to adapt quickly enough to an accelerating world?

From the skills crisis...

Who, after all, could claim to hold the compass when even those who introduced generative Artificial Intelligences admitted they didn't fully understand the intricacies of their creations? *"Look, spectator, wound up tight, such that the spring unwinds slowly over the span of a human life, one of the most perfect machines created by infernal gods for the mathematical annihilation of a mortal."* This opening line of the French author Jean Cocteau's play *The Infernal Machine*, published in 1934, was originally meant to evoke the inexorability of Greek tragedy. Isn't that exactly how many of us felt in the face of the rise of algorithms?

Fascination versus repulsion, terror at the sense of losing control despite the promise of a tool that, like all others, would be nothing without humans. A fine argument, except when faced with humans who still struggled to progress in humanity. For many, even when disguised as innovation, technological progress once again became a source of fear. The utopias of the 1980s, fed by science fiction, had given way to dystopias born of the all-too-real chaos of the new millennium. Even Alain Damasio, a

**We are
the custodians
of
meaning**

THE AGENDA

AGENDA 2041

JANUARY

16-18 INTERNATIONAL FORUM OF HOLOTRAINERS - Virtualium 4.0

- Annual congress conducted entirely through holographic technology
- Focus on implementing new ethical frameworks
- Showcase of the 2041 Holographic Pedagogical Innovation Awards

FEBRUARY

8-9 EUROPEAN SKILLS SUMMIT 2041 - Brussels

- Review of the first year of ethical frameworks in the healthcare sector
- Exploring perspectives for expansion to other sectors
- Presentation of the report "Skills Survivance 2050"

MARCH

21-23 EXOLEARN 2041 EXHIBITION - Berlin

- First European exhibition dedicated to learning exoskeletons
- Demonstrations of new models with integrated thermal regulation
- Roundtables on the integration of exoskeletons into human training

APRIL

5-6 SKILLS TECH AWARDS 2041 - Stockholm

- Presentation of the European Training Innovation Awards
- Categories: AI Training, Exoskeletons, HoloTraining
- Special "Ethics & Training" award introduced this year

MAY

15 SECOND WORLD HUMAN SKILLS DAY (WHSJD) - Initiated by the European Union

- 900 million participants expected
- Focus on human-technology balance in training
- Launch of the "Human First in Training" initiative

JUNE

29 NINTH EDITION OF THE EUROPEAN IN REAL LIFE TRAINING FAIR

- The largest gathering dedicated to face-to-face training
- Organised simultaneously in 8 European cities and within the Euro-Metaverse
- Inauguration of the "Humanist Augmented Training" space

SEPTEMBER

CALL FOR PAPERS FOR THE 50TH ANNUAL EGER CONFERENCE 2042

(European Conference on Educational Research)

- Theme: "Augmented Innovation: Rethinking Training in a Hybridised World".

OCTOBER

3-4 SKILLS INSURANCE FORUM - Luxembourg

- Meeting of PSRAs (Permanent Skills Reboot Assurances) stakeholders
- Presentation of new training insurance products
- Focus on funding systems through AI taxes

NOVEMBER

LAUNCH OF THE CVTS10 SURVEY BY EUROSTAT

Aimed at measuring companies' activities in vocational training in 2040

- Focus on the use of Skills Tech
- Analysis of the impact of ethical frameworks

DECEMBER

20-22 CGA CONGRESS (European Center of Excellence for Green Automotive) - Berlin

- Annual CGA meeting
- Review of common certifications
- Vote on new micro-certifications for 2042

14-15 NETSKILLS CREATOR FORUM - Virtualium 4.0

- First gathering of content creators for the NetSkills platform
- Holographic module design competition
- Presentation of new features for 2042

successful French science fiction author, stopped drawing on imagination, concluding after one of those "learning journeys" then in vogue, "the materiality of the world has become nostalgia."

...to transhumanist skills

All of this is true, but today I want to say that, in the realm of skills, the promise of an augmented humanity has not gone unfulfilled. The transition to HoloFormation didn't make my profession disappear but transformed it profoundly. The dropout rates from fully virtual training programs prove it: human mediation isn't obsolete. While we no longer hold the authority of the knowledgeable, we have become the custodians of meaning. In this regard, I find it unfortunate that anthropological research hasn't paid more attention to this topic. We still don't fully grasp the impact of developing transhumanist-era skills on transmission processes. There is no doubt that progress remains to be made.

The transdisciplinary dream

What about the learners? Here in 2040, I remain in awe of the agility shown by the trainees I support. Sociologist Edgar Morin's call for a new transdisciplinary humanism long struggled against the fragmentation of knowledge. With the help of multi-agent AI systems, the younger generation has managed to weave connections. None of them can claim sole ownership of their competence, but they now excel far beyond their predecessors in orchestrating humanity's legacy. That this regained wisdom rests on the science of algorithms may raise questions. But algorithms aren't of divine origin. Could they not be humanity's most perfect tool ever created for the cognitive augmentation of its members? In embracing this potential, we may find that technology's ultimate gift is not control, but connection. ◀◀



COLLECTIVE THINKING

DESIGN FICTION: Projecting to Explore

This magazine has surprised you— and that's great!

Now explore how to make the most of it.

- What is presented to you is a window to **design fiction**. This magazine embodies a design fiction approach, crafted to **stimulate your imagination** about the future of lifelong learning. By presenting you with varied trajectories and stories, it encourages you to **engage critically and reflectively**, refining **your vision** of what a **desirable future** might entail. These narratives are not static answers but invitations to project **your own alternatives** and shape your perspective.
- Since the future is uncertain and largely undetermined, the narratives invite you to explore **various possible scenarios**. Rather than offering a single vision of the future, each story addresses specific themes about the future of lifelong learning. This pluralistic approach highlights the diverse paths that could unfold.
- The possible futures presented are **not forecasts, predictions or roadmaps**.
- The authors **neither predict** what will happen **nor advocate** for specific pathways. Instead, the stories blend realism and creativity, avoiding overly utopian or dystopian extremes. They aim to provoke thought without limiting your imagination.
- Your perspective matters. Each narrative invites you to bring **your unique perspective**. What sparks your **excitement**? What raises concerns or signals **potential pitfalls**? These questions are central to how you interact with the magazine, transforming it into a tool for exploration and self-reflection.
- This magazine is designed to inspire **reactions, debates, and creativity**. It encourages you to delve into the scenarios presented, challenging and expanding upon them. Your agreements, disagreements, and new insights will form a foundation for developing **your own medium-term alternatives** for adult education in Europe.

Dive in and let the stories guide you — not as fixed answers, but as starting points to shape and refine your vision for the future of learning.



FACILITATION METHODS for using this magazine

You can use this design fiction material to achieve **3 possible objectives**:

- A** • **ENGAGE** an audience to spark reactions
- B** • **RAISE AWARENESS** and inspire deeper exploration within a group
- C** • **DRIVE** a real innovation process.

The **proposed methodology** involves **six key steps**:

- 1 ▶ Read one or more pre-selected **articles**.
- 2 ▶ Compare the world described in the articles and today's reality, identify the **differences**. Share your observations both orally and in written form.
- 3 ▶ Focus on the **implications of these differences** for lifelong learning. The more numerous and diverse they are, the more relevant and credible the insights will be.
- 4 ▶ Debate and define, collectively the **value** of the differences identified. Why are the futures presented in the articles desirable? Which aspects should be avoided?
- 5 ▶ While staying in the future, create realistic solutions to amplify the **desirable** aspects identified and reduce the risks or impacts of undesirable ones.
- 6 ▶ Finally, reflect on **what actions can be undertaken tomorrow** to make informed decisions and pave the way towards a positive direction.

YOUR TURN TO PLAY! DESIGN FICTION SKILLS

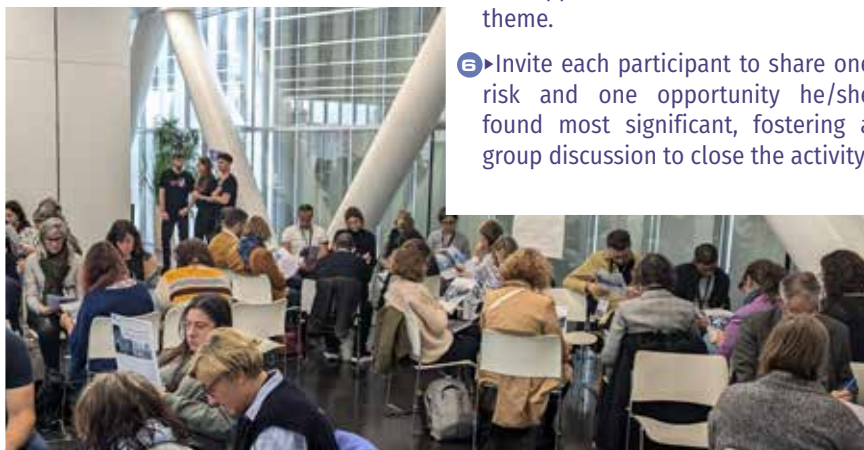
A• ENGAGE

To quickly capture attention and spark interest in lifelong professional training issues.

- **Number of participants:** 1 or 2 at a time
- **Material:** 1 article
- **Method:**
 - 1▶ Present the document as if it were a real news story.
 - 2▶ Discuss participants' opinion focusing on both the benefits and drawbacks of the situation described in the article.
 - 3▶ Reveal that the exercise is fictional and delve deeper into what resonated with your interlocutors.

Example questions:

- What actions could we take tomorrow to avoid this critical point in the scenario?*
- Do you know of any initiatives heading in the right direction?*
- What practical steps could we start implementing tomorrow to make progress over time?*



B• RAISE AWARENESS

To help participants grasp potential disruptions.

- **Number of participants:** Groups of 6 to 8 people
- **Material:** Several articles on the same theme. Print them in large format.
- **Method:**
 - 1▶ Divide participants into pairs or trios and assign each group a specific portion of the selected magazine content.
 - 2▶ Within the pairs or trios, identify changes described in each article compared to today.
 - 3▶ Collectively, note these changes on post-it notes, share, and synthesize them. Then, place these clusters of post-its in a circle around a central point representing your theme.
 - 4▶ Together, identify the consequences of these changes—both negative and positive—on new post-its. Synthesize and organize these insights using the same clustering approach.
 - 5▶ Conclude by summarizing the risks and opportunities identified for this theme.
 - 6▶ Invite each participant to share one risk and one opportunity he/she found most significant, fostering a group discussion to close the activity.

C• DRIVE

To explore future action plans addressing the identified major challenges.

- **Number of participants:** Groups of 6 to 8 people
- **Material:** Several articles on the same theme. Print them in large format.
- **Method:**
 - 1▶ Begin by following the steps of the awareness method up to and including step 5.
 - 2▶ Use a matrix to assess the impact of these futures on your organization. This matrix crosses two dimensions: actual impact (vertical axis) and your level of preparedness for such futures (horizontal axis). Prioritize futures with a high level of impact and low level of preparedness.
 - 3▶ Facilitate a creative session using inspiring "What if" scenarios. For each "What if;" imagine as many possible solutions as you can, from the easiest to the most complex.
 - 4▶ Choose a solution deemed most relevant. Present it as a new advertisement that could fit into the magazine. While creating this medium, you will likely raise new questions.
 - 5▶ Finally, establish an action plan: What should be prioritized to achieve this solution? Identify the first action to implement right after the workshop. A good action is one that can be concretely carried out by one of the workshop participants.

YOUR TURN

- The three suggested approaches are the most commonly used to enrich reflections on the future through a design fiction lens, as recommended by the Making Tomorrow collective, a partner of the Erasmus+ project that produced this magazine.
- Your curiosity and interests will guide you through the various sections and articles. Your critical thinking will be engaged on every page, prompting you to ask: Is this a future I want? If not, what role can I play in shaping a different and more preferable scenario?
- You now have the tools to creatively engage with future scenarios! Depending on your challenges and the objectives of your organization, this tool can of course also be adapted. Imagine variations of these articles and images. In short, create your own future culture!
- Finally, we encourage you to adapt and evolve the content of this magazine to reflect current events.

After all the future has a short shelf life...

BEHIND THE SCENES

BEHIND THE SCENES OF THE PROJECT (MAKING OFF)

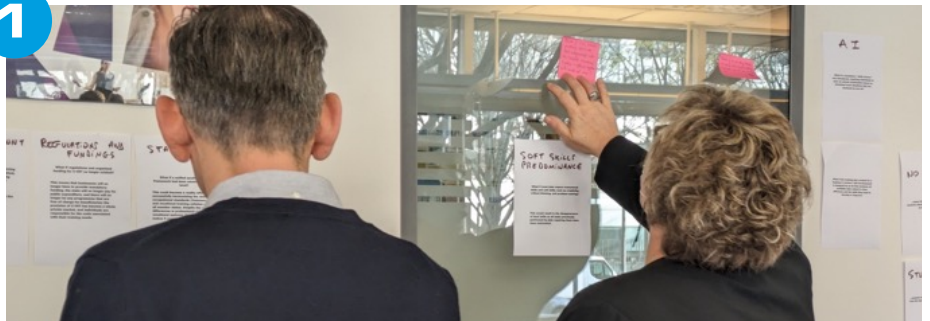
Design fiction is a creative process aimed at experiencing potential futures.

Developed from forward-looking scenarios, a "design fiction" offers a provocative yet credible vision.

Discover the behind-the-scenes creation of the magazine in your hands, produced as part of a European Erasmus+ partnership involving four organizations from France, Luxembourg, and Austria.

1 Identifying tomorrow's key challenges

In this first stage, the partners used several "academic" and institutional forward-looking studies on the future of lifelong professional training and work to extract the most relevant challenges to explore within the framework of a "fake news magazine" set in 2040.



2 Exploring the consequences

For each challenge, the partners explored possible consequences for lifelong training. At this stage, potential "provocations" and challenges were outlined: if these consequences were to materialize tomorrow, who would be most affected, and how? Several dozen avenues were explored in this way.



3 Prototyping

By making ideas tangible through material prototypes of imagined services or objects, they were pushed further. From the "What if" scenarios created in the previous step, participants in the design fiction workshop created models giving shape to these provocations and exploring their positive and negative consequences.

During the oral presentation of these prototypes, evocative narrative frameworks emerged. The six deemed most impactful were retained for further development.



4 Storyboarding

Initial versions of these narrative frameworks were enriched during exchanges between partners. Six complete scenarios were written to explore different adjacent issues while striving to remain credible. Each scenario included a description of a day in the life of a person related to the story, a context, and a timeline presenting events leading to the described situation. Synthetic images were created to convey this first-person perspective.



Enrichment

Two workshops with about thirty experts in lifelong professional training were held. These decision-makers, funders, providers, specialists in lifelong training, pedagogy, and innovation helped identify the key aspects of the scenarios and enrich them with new narrative ideas.

5



Magazine design and development

This final stage involved translating each scenario into a series of articles and varied content to express different facets. This process led to written content with a journalistic tone, illustrated by appropriate visuals. New contributors joined this stage to create the magazine, designed as a credible and immersive design fiction tool.

6



Academic Foresight Also Enriched by the Use of Scenarios

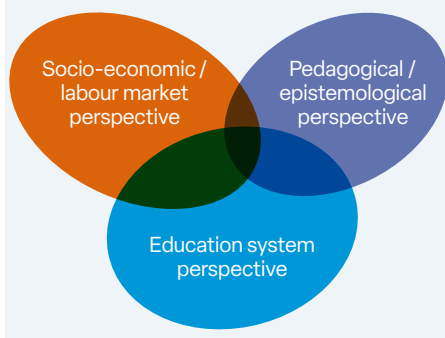
Classical academic foresight work on the future of vocational education and training (VET) in Europe also employ scenarios in terms of methodology.

These scenarios, defined as coherent visions of potential futures, are not predictive tools. Instead, they serve as a framework to explore a range of possible future states, much like their application within design fiction approaches such as the one that informed the creation of this magazine. In both contexts, scenarios are designed to stimulate reflection among stakeholders and decision-makers, helping them consider the potential consequences of various strategic choices.

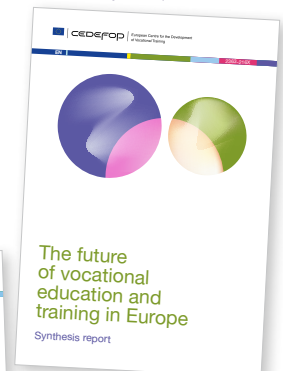
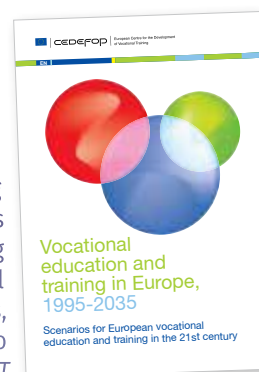
in Europe", took a more focused approach by applying these global scenarios to the specific national contexts of Norway and Slovenia. This application demonstrated how broad trends might intersect with local circumstances, offering tailored insights to guide national policymakers.

Through such studies, scenarios have proven to be a robust tool for enhancing the

Cedefop's three-perspective model of VET used for the development of scenarios for European VET in the 21st century



Among the key reference works on the medium-term evolution of VET in Europe, two studies conducted by Cedefop (European Centre for the Development of Vocational Training) utilised scenario approaches. The first, *"The Changing nature and role of VET in Europe"*, developed three global scenarios outlining possible trajectories for VET systems in European countries emphasizing shifts in governance, technological adoption, labour market demands, and societal expectations through to 2035. The second, *"The Future of VET*



understanding of VET's possible futures, fostering a proactive and informed approach to shaping education systems that remain responsive to future needs.

PARTNERSHIP

CENTRE INFFO

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on Lifelong Learning

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**The Centre Inffo offers professionals in the field of learning,**

training and career development expertise in the fields of law and pedagogical engineering, a tailor-made and specialised training offer and tailor-made information services. It carries out technical, advisory and support missions and facilitates debates between professionals.

As an association under the supervision of the Ministry in charge of vocational training, Centre Inffo is entrusted with a public service mission to capitalise on knowledge in the fields of learning, training and career development.

Supported by a team of 72 employees, Centre Inffo is committed to providing its public and private partners and clients with up-to-date expertise and proven methodologies to meet their challenges and support their projects.

The Erasmus+ project "*Into-CVET 2040 - An Invitation to an Immersive Journey into Continuing Vocational Education and Training in 2040*", initiated by Centre Inffo, is at the intersection of two of its missions: facilitating public debate for training professionals and promoting innovation in training.

INFPC

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of Continuing Professional Training

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**INFPC is a public institution under the supervision of the Ministry of National Education, Children, and Youth.**

Its mission is to promote lifelong learning within Luxembourg's economic and social fabric. The institute also oversees the evaluation of co-financing applications from companies legally established in Luxembourg seeking financial support for their training plans.

As part of its promotional activities, INFPC manages and runs lifelong-learning.lu, the national portal for lifelong learning. This platform connects training seekers—both businesses and individuals—with training organizations. It lists nearly 13,000 training programs offered by 320 member organizations and centralizes training-related information.

INFPC also conducts monitoring and development work in training through the Training Observatory. The studies and surveys carried out by the Observatory aim to assist public and private decision-makers in steering training and employment policies. These focus on corporate training practices, training offerings, and transitions from school to working life.

INFPC's involvement in the "*Into-CVET 2040 - An Invitation to an Immersive Journey into Continuing Vocational Education and Training in 2040*" project focuses on disseminating and utilizing results among training stakeholders.

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**Our goal is future-oriented education systems
that enable lifelong learning for everyone.**

MAKING TOMORROW COLLECTIVE

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**MAKING
TOMORROW**

Therefore, we support public authorities, higher education institutions and international organisations in making scientifically sound decisions — with our unique expertise at the interface of education and employment, our own research activities and our large international network. We collect, structure and analyse data in the areas of education and training, and are specialised in national and especially in European project work in the fields of initial and continuing vocational education, higher education, and adult education. Our employees cover a broad spectrum of experience, know-how and scientific methods, ranging from empirical social research and information science to linguistics and media design, meeting the diverse needs of our clients.

Our innovations focus on training and the world of work of tomorrow. Over recent years, 3s has gained deep experience in foresight work by using the three-perspective model and imaginative methods like storytelling, particularly in two Cedefop projects we coordinated: ‘*The Changing Nature and Role of VET*’ (2015–2019) and its follow-up, ‘*The Future of VET*’ (2020–2023). This experience made the ‘*Into CVET 2040*’ project especially relevant for us, as it allowed us to expand our knowledge of scenario-building approaches and step outside our usual scope by incorporating the design fiction approach, using new tools, and applying/testing scenarios with new stakeholders.

Making Tomorrow is a collective of makers (designers, illustrators, videographers, writers) **and futurists** (anthropologists, politicians, economists) who play with the future. We help public and private decision-makers design versions of their future that stand out from dominant visions to test their limits and decide which direction to take starting tomorrow.

The cornerstone of our approach is to bring future issues into the present by prototyping different versions of tomorrow and defining an original, plausible, and preferable vision of the future. Using objects and scenarios, we exaggerate and provoke possible futures to help stakeholders experience tomorrow’s world and understand its challenges.

We were enthusiastic about contributing our methodological expertise to this magazine. Similar to other projects for professional federations or intergovernmental organizations, we supported the team in producing a “magazine of the future.” This proven format allows for the best use of prospective data, provided in this case by other project partners. For the collective, this project is an excellent opportunity to share our expertise in lifelong learning and reach a new audience.



8th Edition of the IRL Training Fair^{*}

The European face-to-face reference!

*In Real Life

Saturday, June 28,
2040

Avatar 2103

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