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Facilitating Lifelong Learning in SMEs Towards SDG4

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ABSTRACT

Technological innovations transform jobs, challenge existing competencies and require new sets of skills, or upskilling of old ones, particularly digital skills. In this context, Lifelong learning (LLL) plays and important role in addressing the skills gaps and means also creating and sustaining a positive attitude to learning for both professional and personal development. In this presentation, the author describes the situation of SMEs and LLL not only from literature but also from experience within the work with SMEs in some European projects. Besides other valorization activities of project results, the learning program offered to SME employees will be improved with new modules for mastering of important lifelong skills like digital ones.

INTRODUCTION

Lifelong Learning is an important educational paradigm particularly discussed in the last decade also due to complex business environment, the increasing workforce skills gaps and the achieving of the Sustainable Development Goals (SDGs) https://sdgs.un.org/goals.

Technological innovations transform jobs, challenge existing competencies and require new sets of skills (Abernathy & Clark, 1985). Knowledge, market trends and new digital processes are being created and employers need employees with up-to-date product and market knowledge, skills, capabilities and mindset to succeed in their specific job role. Businesses are rapidly increasing the digitization of their processes, and digital skills are needed for all occupations across all industries (World Economic Forum, 2018; ECORYS; 2016). The extensive use of digital technologies across organizations means that all employees will need to upskill to stay abreast of the latest technological developments. According to the European Commission (2019), during 2017, 53 per cent of all enterprises that recruited or tried to recruit ICT specialists had difficulties in filling those vacancies due to digital skill gaps (ECORYS UK, 2016).

However, much of the academic research in this area has focused either on the development of digital skills to support specific activities, such as using public services or on how to address the "digital divide" being created by this technological change (Ferro 2009), rather than on the development of these world-class skills. The most skill gaps refer to main focus groups (https://www.esinstitute.com/importance-lifelong-learning/):

The first one is school or university graduates looking to make their first career steps. There is a disconnect between the skills they are taught and those that employers are seeking in new hires. The second group are the workers who are already in the workplace with some years of experience.

Given the rapid industry change, their skills gap is growing every year if they do not continue to learn new skills and technologies.

In this context, Lifelong learning (LLL) plays and important role in addressing the skills gap between what students have traditionally learned in formal education and needs of employers and the labor market. There is a new focus on the higher-level skills, ICT competencies and mindset needed for the modern working world.

Lifelong learning means also creating and sustaining a positive attitude to learning for both professional and personal development. Employers need to recognize and reward this to avoid losing out or lacking critical skills in their workforce. They should have responsibility for participation in learning.

It exists a shift in how companies design and invest in training, education and employee development. By optimizing the potential of LLL employers, business and society as a whole can benefit those employees who actively upskill (i.e. learning new skills or teaching workers new skills) and reskill (i.e. learning new skills to do a different job, or training people to do a different job) and so enhance their employment prospects (Whitely, 2019; Kapetanoiu, 2019).

Through LLL could bring an important contribution, it seems that lifelong learning remains an often-misunderstood concept in relation with the transformative vision promised within the SDG4, translated into concrete policy actions (https://www.norrag.org/lifelong-learning-in-sdg4-a-transformative-vision-or-just-another-passing-fad-by-maren-elfert/)

In this presentation the author, who is responsible for the Lifelong Learning Study Group at IAT, WH Gelsenkirchen describes the situation of SMEs and LLL not only from literature but also from experience within the work with SMEs within some European projects. SMEs would like to grow but face particular problems due to their limited resources and difficulties in finding qualified staff. By engaging with the SDGs and using LLL, they have many advantages to grow and develop sustainable innovations. Some methods to engage people within LLL are presented in this paper and used within the valorization phase of a learning program offered to European SMEs.

THE SUSTAINABLE DEVELOPMENT GOALS (SDG)

SDGs, also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030 (https://sdgs.un.org/goals).

The SDGs replace the Millennium Development Goals (MDGs), which established measurable, universally agreed objectives for tackling extreme poverty and hunger, preventing deadly diseases, and expanding primary education to all children, among other development priorities. The 17 SDGs are integrated, that means that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability. Sustainable Development Goal 4 (SDG 4) (https://sdg4education2030.org/the-goal) is the education goal aiming to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all."

SDG 4 is made up of 10 targets and we describe only two referring learning and skills:

Target 4.4 refers to substantially increasing of the number of youth and adults who have relevant skills, including technical and vocational skills for employment, decent jobs and entrepreneurship. Two main topics are included

- Access: Equitable access to VET needs to be expanded while quality is ensured. Learning
 opportunities should be increased and diversified, using a wide range of education and
 training modalities, so that all youth and adults, especially girls and women, can acquire
 relevant knowledge, skills and competencies for decent work and life.
- Skills acquisition: Beyond work-specific skills, emphasis must be placed on developing highlevel cognitive and non-cognitive/transferable skills, such as problem solving, critical thinking, creativity, teamwork, communication skills and conflict resolution, which can be used across a range of occupational fields.

Target 4.7 ensures that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and nonviolence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

SDGS AND SMES

Micro, small and medium-sized enterprises (SMEs) constitute the dominant form of business organization in all countries of the European Union: with some 23 million enterprises, more than 99% of enterprises in the European Union are SMEs (http://ec.europe.eu/enterprise/sme). SMEs greatly contribute to employment and wealth in Europe. The diversity of SMEs across Europe reflects industrial structures, economic traditions and other framework conditions, in particular economic and social transformation process in the Central and Eastern European Member States. SMEs face particular problems due to their small size and limited resources. Starting up a new business and getting the required capital is a challenge, as is finding the right kind of finance to expand an established business. Due to their limited resources and skills, they often do not use new developments in information and communication technologies, and have difficulties finding qualified staff as well as providing them with adequate training and education (Eurostat, 2019).

The dynamic European SMEs have a massive amount to gain by engaging proactively with the SDGs, especially in areas such as working conditions, climate action, responsible consumption and production, health & wellbeing, industry innovation, and equality https://globescan.com/wp-content/uploads/2017/05/CSREurope-SDG-Whitepaper2017-The-Value-For-Europe.pdf.

SDGs offer an opportunity for them to identify new growth opportunities, areas of competitive advantage, improved corporate values and talent acquisition and retention.

The highest impact areas of business opportunity for engaging and innovating around the SDGs refer to six powerful themes for generating value (https://globescan.com/wp-content/uploads/2017/05/CSREurope-SDG-Whitepaper2017-The-Value-For-Europe.pdf):

• Direct market opportunities created by addressing the SDGs

- Brand enhancement and competitive advantage
- New business models, enhanced by technology, and focused on sustainable outcomes
- Improved customer experience and engagement
- Internal operational efficiencies, process improvements and potential resource and cost savings
- Action on social responsibilities and obligations

For companies, this means that benefits from engaging with the SDGs include new sales, new customers and value propositions, and also cost savings, enhanced processes, improved environmental impact, better talent acquisition, and a more motivated and balanced workforce

DEVELOPMENTS OF EDUCATION IN DIGITAL ERA TO SUPPORT SDG4

The education sector is changing from classroom-based learning towards e learning with massive open online courses (MOOCs), remote and on-demand learning. Students do not need to be at one geographic location when accessing resources and lectures. MOOCs and free web resources have opened possibilities for personal and professional development. Qualifications – also for employees can be realized with private sector institutions from MOOC platforms to Social Media (egg LinkedIn) and accrediting courses that are highly regarded. Sure thus create real competition for public sector education(https://globescan.com/wp-content/uploads/2017/05/CSREurope-SDG-Whitepaper2017-The-Value-For-Europe.pdf).

Online education and mobile learning will address the issue of access, other technologies such as personalized education and cognitive learning will improve quality of learning. Technologies such as virtual reality (VR) will make learning more experience based in addition to being informative. VR content offers students inaccessible worlds and environments without having to leave the classroom—and the VR content library, especially in the education space, continues to expand.

Very important for education in the digital age will be technology that process large volumes of big data offering also personalized education. Artificial Intelligence (AI) technologies, can process amounts of data, use algorithms and statistical probability to make intelligent, fast decisions that react to environmental inputs. All these contribute to more personalized educational approaches; it will lead to better assessments of risk factors for dropping out of school, and it will improve financing and financial aid strategies for schools, companies as well as for students through better metrics tracking ((https://globescan.com/wp-content/uploads/2017/05/CSREurope-SDG-Whitepaper2017-The-Value-For-Europe.pdf).

LIFELONG LEARNING IN SDG4

Since lifelong learning is an important feature in SDG4, many activities in international organizations would like to promote lifelong learning. For example. UNESCO (http://uis.unesco.org/en/topic/sustainable-development-goal-4) in the process of preparing several policy handbooks and conducting capacity-building activities for member states. The ILO, on the occasion of its 2019 centenary, has launched a Global Commission on the Future of Work, which calls "a universal entitlement for lifelong learning" (https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_670542.pdf). The OECD (https://www.oecd-ilibrary.org/education/why-does-thesustainable-development-goal-on-education-sdg-4-matter-for-oecd-countries_cdc2482b-en) plays a role in monitoring and measuring SDG 4, and the European Union is re-engaging with lifelong learning and another key idea of SDG 4, global citizenship education (European Commission, 2017), to build a knowledge society of lifelong learners.

What is missing in the current policy attention to lifelong learning under SDG 4 is a debate about what lifelong learning means and about the many challenges that remain in the realization of lifelong learning in its full potential. It was characterized by the pioneers of the first generation as the "maximalist" vision of a learning society, which involved "a fundamental transformation of society" (Cropley, 1979; Regmi, 2015; Elfert, 2018)

Some observations in this context are done in https://www.norrag.org/lifelong-learning-in-sdg4-a-transformative-vision-or-just-another-passing-fad-by-maren-elfert/: First, the prioritization of formal education and the thinking about education in categories are difficult to overcome. Assessment and recognition of knowledge acquired outside the formal education system poses "a major challenge to the established hierarchy and traditional validation of different kinds of knowledge" (Schuetze & Casey, 2006).

Second, from a lifelong learning perspective, it will be important to tackle the traditional marginalization of adult, non-formal and informal education.

Third, the privatization of education and knowledge is a hindrance to lifelong learning, as "the trend towards the privatization of the public sector worldwide has implications for access and equity" (National Commissions for UNESCO: annual report, 2015).

Fourth, the focus on measurement, which is likely to reach new heights in the era of the SDGs (Grek, 2019), not support lifelong learning. The recently published Global Report on Adult Learning and Education (GRALE) points out that in particular the category of "liberal, popular and community education" might be very difficult to capture. There is a risk that the focus will be placed on forms of education for which statistics are available.

As a conclusion it is necessary to make a decision whether lifelong learning will be a transformative vision, as promised by the SDGs, launched under the title "Transforming Our World", or just another passing fad in the never-ending cycle of development agendas (https://www.norrag.org/lifelong-learning-in-sdg4-a-transformative-vision-or-just-another-passing-fad-by-maren-elfert/)

FACILITATING LIFELONG LEARNING IN SMES

SMEs in Europe need to improve their innovation capacity and the upgrading of qualification and skills as a crucial challenge. This challenge is faced not only by larger SMEs but also by micro companies. The lack of skilled labor is a problem for more than one third of all SMEs in the EU (http://ec.europe.eu/enterprise/sme).

Recent surveys have stressed significant gaps in participation rates for employee training by firm size. In general, the participation rates in large enterprises are much higher than in smaller companies. According to AES-2016, an average of 40 per cent of adults (25-64-year-olds) in the EU participated in lifelong learning last year.

At the same time, there are strong differences between European countries. The Nordic countries have the highest rates while Southern Europe and Central and Eastern European countries show the lowest participation rates.

The evidence shows variations in lifelong learning in not only different countries but also industries, implying that upskilling and reskilling depends on the institutional environment of each country (Huges et al, 2019). However, it is supposed that low participation in adult learning could also be the result of barriers, which discourage individuals to engage in training. The most frequently cited reasons for not participating in lifelong learning (averaged across the EU member states) were situational: problems with work schedules (39.9 per cent) and family responsibilities (32.5 per cent). Analysis also shows inequalities in adult learning between different demographic groups. Those with insufficient learning opportunities include the elderly, the low qualified and the unemployed (European Commission, 2017, 2019).

Future action should therefore aim to develop learning options suited to different individual needs in not only schools or classrooms. But statistics on training and further qualification rates only partly reflect the reality of training in SMEs. In particular, in the small enterprise sector, training is informal and skills development within on-the-job- training, both of which are not taken into account in official statistics Communication of the EU Commission (New Skills for New Jobs Anticipating and matching labor market and skills needs, Brussels, COM (2008)).

On-the-job training is the most used practice within SMEs. Some authors differentiated between "What employers do – provide training to employees and what employees learn (Kitching, 2007). Training is considered often as a task concerning a specific skill or behavior but learning is a multi-dimensional approach with persistent changes in behavior and increased skill levels (Susomrith, P., & Coetzer, A. (2015).

The issue of a skilled workforce, educational attainment and access to continuous, lifelong learning is crucial in this context also for SMEs (UEAPME, "European Innovation Policy: Take SMEs on board too", Brussels, 31.10.2006).

Encouraging continuous learning in the workplace has many benefits for the development of employees. Development does not always have to mean promotion. In most organizations, the availability of higher seniority positions is rare. By offering learning programs as part of employee's career path, they can be encouraged to remain loyal and productive. Lifelong learning can also support company Internal Mobility strategy and can help meet skill shortages, prepare the leaders of tomorrow and fuel a virtuous talent cycle.

However, employees also need to be responsible for their lifelong learning. They need to be aware of changing trends, particularly digitalization, and building their capabilities to align. This will give them a competitive edge over other professionals and help them to remain employable throughout their working life. Transformational changes are happening in every industry, also in SMEs. If someone received a degree five years ago, maybe even two. It can be difficult to see how relevant the knowledge gained from that degree, meets the demands of their current job.

A one-off qualification, whether earned at university or elsewhere, will no longer be enough to help an employee throughout their career. However, going back to university to acquire new or update existing skills is not a viable or sustainable approach for most workers either. LLL can help in this context; employers should offer formal training and development within the company. This should be combined with informal one, directly relate to the jobs, career paths, and the direction in which the company is headed. This can include job-related training and general business climate and culture development.

However, career-directed training is not the only opportunity that an employer can, or should, provide. Plenty of attractive learning opportunities that can help employees become better people that are not exclusively focused on the jobs are available. Some ways to help your employees learn as they go throughout life (https://www.thebalancecareers.com/how-employers-can-facilitate-lifelong-learning-4176856):

- Industry or career based conferences can provide a veritable Niagara Falls worth of new information in a short time period. The positive aspect of conferences is that numerous presentations and breakout sessions that may cover topics never learned are offered. An attendee can come back from a conference better able to attack current issues. They may also have attained an understanding of the issues that might happen in the future.
- Webinars are generally one-time courses that are targeted to a specific area of learning. A webinar is an online seminar that an employee can attend to obtain information about any subject. The employee can generally attend using a myriad of formats that might suit their learning needs. Webinars are often a great way to brush up on one specific skill or gain an introduction to an industry change. They are usually low cost or free and employees can take them using any computer.
- Unlike a webinar, which is usually a one-time seminar, an online course can mimic a college level course. MOOCs tend to take place over several weeks or months. These are often a great, low cost, way to help an employee gain new skills and understanding. If, for instance, an employee has excellent management potential, but has no knowledge of the financial sides of the business, an online course may allow learning those new skills without taking too much time away from work and home.
- Lunch and learns (or brown bag lunches as they are frequently called) are provided in a more casual learning environment. A current staff member can lead them, or an expert. Lunch and learn can be used to explain changes in your health insurance benefits or to talk about world trends that affect your business.

The best way to understand the needs of employees for lifelong learning is to ask them what they want to learn. Appoint a team to identify and lead brown bag learning opportunities.

Employees can be encouraged to more actively pursue their lifelong learning by teaching a webinar or leading a lunch and learn. Not only will other employees benefit, but also employee will learn and understand their topic area even better if they are called upon to teach it.

Many forward-thinking companies that value employee lifelong learning provide tuition reimbursement programs that allow employees to obtain a degree or certification. These are popular with employees and can help employees to gain knowledge and skills.

Sure, the focus at work is always on the business, but employees have a life outside of work. Promoting learning can help them live happier and more fulfilled lives. As part of benefits package, provide discounts for local museums or theaters and other learning opportunities. Support a monthly lunchtime book club. Expand lunch and learns for any topic of interest. Learning about new topics and challenges is always good for employees, even if they are not directly related to the business.

EXAMPLES

Within the European project Reinnovate, the partners developed the learning program, Smart Research as a 21st Century Skill for Business in order to help SMEs employees to use workplace research skills to gather information for business related decision-making (Hamburg, 2020).

The participants identified sources of business opportunities from differing perspectives, acquired the skills necessary to gather and analyze the relevant data to allow implementing a business opportunity or an innovative idea, evaluating the impact of it, reflecting on findings and learning from these by identifying future opportunities.

In the last months of the project, the partners organized dissemination and valorization activities. Results of discussions show that the learning program contribute to achieving some beneficial LLL skills like dealing with information and data and reflecting on learning processes and results which helps employers and employees to work, learn and live better but this is not sufficiently. Therefore, the project partners decided to "reinnovate" the existing learning program for SMEs with new modules for mastering also other lifelong skills https://wabisabilearning.com/blogs/critical-thinking/10-beneficial-lifelong-learning-skills).

An important group of lifelong skills is digital skills

- Digital skills (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/634178/Skills_and_lifelong_learning_meeting_digital_skills_demand_Bacon_final.pdf)
- Basic Digital Literacy Skills needed to carry out basic functions such as using digital
 applications to communicate and carry out basic internet searches. Cyber security sits under
 this category.
- Digital Skills for the General Workforce (Upskilling for the Digital Economy): these encompass the skills described in category 1, plus skills needed in a workplace and those that are generally linked to the use of applications developed by ICT specialists.
- Digital Skills for ICT Professions (Digitally innovative and creative individuals, organizations and businesses): these include the skills described in categories 1 and 2, plus skills needed to work across the diverse IT sector. They include digital skills linked to the development of new digital technologies, and new products and services.

Creativity

Creativity is the ability to think about a task or a problem in a new or different way, or the ability to use the imagination to generate new ideas. Creativity enables SMEs employees to solve complex problems or find interesting ways to approach tasks.

Problem Solving

Problem solving in business means implementing processes that reduce or remove obstacles if exists a gap between the desired and actual outcomes. Business problem solving can include following tasks:

- Identify and define the problem
- Prioritize the problem based on size, potential impact, and urgency
- Develop a variety of possible solutions
- Evaluate possible solutions and decide which is most effective
- Plan and implement the solution

Critical Thinking

It helps with rapidly changing economic and technology advancements, when businesses are exposed to risks of errors and lost opportunities. Strength in business critical thinking skills is required for the strong decision-making and problem solving skills that move a company forward.

Leadership

Good leaders need some soft skills to help them positively interact with employees or team members. Effective leaders have the ability to communicate well, motivate their team, handle and delegate responsibilities, listen to feedback, and have the flexibility to solve problems in an everchanging workplace.

Communication

Communication skills are needed to speak appropriately with people whilst maintaining good eye contact, demonstrate a varied vocabulary and tailor own language to audience, listen effectively, present ideas appropriately, write clearly and concisely, and work well in a group.

Collaboration

Collaboration skills enable to successfully work toward a common goal with others. Most work environments require collaboration, so these skills are essential. These skills include understanding a variety of perspectives, managing priorities from everyone in the group, and meeting expectations as a reliable member of a team.

Adaptability

Having adaptability skills means be open and willing to learn new things, take on new challenges and adjust suit transitions in the workplace.

Curiosity

Curiosity enhances a person's ability to learn and quickly overcome obstacles to gain new expertise. In time of enormous business change, those in IT leadership positions need to build teams that continuously improve their skills, and it can be done by encouraging curiosity

CONCLUSIONS

Rapidly changing developments in new technology and demographic ones have considerably changed the nature of skills requirements. It is expected that will be a significant change of workforce in the next years. LLL is a key component of inclusive grow ensuring that people achieve

the skills to navigate in the challenges of rapidly evolving labor market and required skills in the future. However, it is important to promote other conditions additionally to LLL provision that will assure an appropriate supply of skilled personnel particularly working in the ICT to satisfy demands i.e. funding of LLL education and improving the teaching of digital skills in schools. A number of existing initiatives is addressing the promotion of basic digital literacy skills but the issue of digital skills for employees (General Workforce) requires further support. Particularly needs are in reskilling workers who made redundant through digitalization or other changes in work, and upskilling existing workers to use technology-rich environments. This issue requires long-term investment and a change in the existing model of lifelong making it more dynamic and supporting SDG4.

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