Welcome

Our first issue of the year, in English, will be published at the end of March, as initially planned. We are now past last year's IT platform change and the renewal of editorial processes, and it is precisely thanks to the foreign-language issue that it is evident that, in the interest of the international recognition of ***Opus et Educatio***, we are also trying to provide a framework for Hungarian authors to publish their work in foreign languages. As part of the modernization of the formal framework, we are expanding the column system and presenting the ***Online First*** column for the second time. In our new column, *Tibor Bors Borbély-Pecze* deals with the complex problem of building a career path, providing an outlook on the processes taking place in the world and which are characteristic of the continents in different ways. The highlight of his study is the validation of community aspects during career building, the definition of individual career goals, and the impact of community culture on the process.

The first article in the ***Studies*** column directly relates to global and regional analyses. The study by *Klára Antesberger, Emese Schiller*, and *Helga Dorner* analyzes the implementation of the European Union's Action Plan since 2016 from the perspective of integration and social inclusion. Analyzing the process of integration of migrants, the authors conclude that the success of the process of social integration can be significantly influenced by knowledge of the host country's language. The following study, by *Fatma Hamdi, Ahlem Khefacha, Míra Makai, and Beatrix Séllei,* partly related to the previous topic, also considers the possibility of success in higher education. Based on empirical research, the research examines the emotional intelligence of first-year students studying economics and social sciences, engineering, and natural sciences in 2020-2021, analyzing the correlations between student dropout and success in different faculties.

The dropout analysis is related to the study by *Katalin Torkos* and *Anikó Kálmán*, which deals with dropout in higher education, focusing on the processes in disadvantaged regions. The first part of the article explores the methodological background of the statistics of the decrease in the number of higher education students and dropouts, then presents the main educational policy concepts related to the number of higher education students and dropouts, analyzing these processes from the perspective of disadvantaged, mentored students. As a special highlight of this issue, the first article in our Awareness column is a study related to a doctoral dissertation, which analyzes the philosophical background of the increasingly central topic of talent management. *Emese Berzsenyi*, in connection with *Max Weber's* epochal work "*The Protestant Ethic and the Spirit of Capitalism"* undertook a historical study of the topic of talent research and talent management in Hungary from the end of the 19th century to the middle of the 20th century. A doctoral student and his supervisors published *Khalid Mohammed Idris* and *Anikó Kálmán's article* on professional learning. This new approach deals with thematic analyses conducted on self-reflective and interactive data sets, demonstrating the importance of practice development in higher education. The exciting study by *Gábor Bomba* and *Tamás Csányi* uses quantitative methods to examine students' physical activity from an international perspective, using the PACES scale. The authors conclude that positive physical and mental health related to physical activity significantly impacts the development of young people's motivational systems.

In our **Projects** section, *Cz. János Horváth* article is about the international development underway for years under the coordination of the *Institute of Continuing Engineering Education of BME*, the work related to applying open badges in higher education. The DISCO SMS Erasmus project provides the background for the application of micro certificates, which is currently in the introduction phase in higher education worldwide. The European cooperation aims to develop education and training by recognizing and making soft skills visible – *Urmonienė Daiva, Oleskeviciene Indre, Rimanté Čepauskien* and *Arenas M. Begoña*, as well as *Dénes Zarka* – by developing the methodology presented by the international team of authors, in which the use of digital open badges is a key factor.

In our first issue this year, it is clear that 2025 will be particularly rich in terms of professional conferences and events. Our editorial team is receiving more and more articles reporting on upcoming significant international conferences and recently held meetings dealing with exciting topics. One such article is ***Looking Ahead***, also a new column compiled by *István Simonics*, which places the internationally outstanding world conference on interactive-collaborative learning (ICL2025), which will take place at the *Budapest University of Technology and Economics* in early October 2025, in a broader context. We can refer to the professional-scientific system of connections linked to the technological and methodological modernization of education and training for more than half a century. The following article in the ***Conference*** column reports on an already implemented event. The efficiency of the activities of those involved in human resource management, which shows the connection between higher education and the economy in a new and increasingly perceptible way, was analyzed by the conference that took place recently, in February 2025, at the *Eötvös Loránd University* in Budapest. The demanding summary written *by Nóra Hegyi-Halmos, Zsuzsa Kovács, Szilvia Lakner, Orsolya Pongrácz-Juhász, Tünde Tóth-Téglás* demonstrates that HR consultants play a critical role in improving the competitiveness of business organizations in the process of digital transformation.

Finally, by its traditions, our ***Review*** column appears in this issue with writing, drawing attention to another relevant work. *Lilla Pető* provides thought-provoking information about the book "*The Nordic Secret*" which is presumably also influential on the public thinking of our decade. This intention is characteristic of the entire collection of writings by nearly a quarter of a hundred authors "coming" from many countries in the first issue of ***Opus et Educatio*** in 2025. I trust our selection will be colorful and interesting, and I wish you a good read!

Budapest, March 2025

András Benedek
Editor-in-Chief of ***Opus et Educatio***

Tibor Bors BORBÉLY-PECZE

Career and career guidance beyond the Euro-Atlantic culture

Collectivist counselling theories and practices[1]

Introductory

The main tool for advice is conversation. All counselling is based on interpersonal communication, even if the counsellor and client communicate through images or movement instead of speech. Like any communication situation, communication during counselling is culturally loaded. The understanding between transmitter and receiver dependent on culture. In essence, the career development theories and practices applied in Hungary are all based on individualistic interpretive frameworks. They are built on activating the counsellor, and inspiring action. We have a few theories and practices that target the community. Hungary today represents a highly individualized culture. From an economic and social historical point of view, the emergence and ossification of strong individualisation can be traced very far back. Tibor Valuch wrote in his book describing contemporary Hungarian society; "*In the decades following the regime change, a significant part of Hungarian society moved even further from the intention of collective action and participation in it.... Individual and low-risk political and advocacy actions using all possible means of informal advocacy are generally accepted as opposed to collective action*." (Valuch, 2015, p. 171)

The creation of a less individualistic framework for the theory and practice of career counselling in Hungary could not be facilitated by the strong Euro-Atlanticist influence on the adaptation of certain methods from the 1990s onwards. In essence only North American, Western European, and Israeli counselling theories and methods were adapted. These approaches have further strengthened the approach of career building, which is now based on individual opportunities and responsibility. While community development has received and continues to receive serious attention in related areas of counselling, such as social work (Kozma, 2018), community resilience has been and is being developed. After all, just as a career is a solitary activity, it is connected by a thousand threads to the community, to its culture, without which our career itself is essentially an incomprehensible, truncated story.

As programmes for the training of career guidance counsellors develop in certain regions and countries (in the case of Hungary this was done in the early 1990s, but Hungarian career guidance models have been available for about a hundred years), university teachers, researchers, and practitioners have also started to develop theories that guide and support local practice. Research on the effectiveness of certain counselling models, and investigations into the effectiveness of different practices are beginning to provide evidence to support model practices and theories. This institutional knowledge is an important indicator of whether a country has developed its own theoretical and practical framework and further training system supporting career development. Typically, this level of commitment in the field goes hand in hand with the fact that the population also begins to understand and use the knowledge related to track construction. There is also a widespread belief that everyone should deal with individual careers, career development, and career care. (Yoon & Hutchison & Maze & Pritchard, & Reiss, 2018, pp. 4-5). Although we live in a globalised world, the Internet reaches everywhere, and the career orientation development and emphasis of each region and country is very different.

In this article, we mainly review career counselling theories and practices that do not belong to the above-mentioned culture, emphasizing a collective approach, reflecting on which we can expand our own theoretical and practical thinking frameworks in Hungary. Geographically, the article focuses on

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Asia, Africa, and Central and South America. Europe, North America and, in this approach, Russia is deliberately omitted, because it represents a more Euro-Atlantic culture. Due to the size and cultural differences between Africa and Asia, as well as the very different levels of development of labour markets and education systems, we cannot strive for completeness even in these large regions. The purpose of this article is an overview rather than an accurate inventory. From a European perspective alone, let's say looking in from Budapest, the developed South Korean or Japanese system and the fragmented labour market in the Philippines or Indonesia are both Asian. The 56 sovereign African countries can similarly not be lumped together. Neither the linguistic and cultural orientation of the former colonial past, nor the linguistic and cultural diversity of individual states allow for the use of the term "African" counselling model of service. One of the youngest career guidance journals, The *African Journal of Career Development (AJCD), undertakes to present this African diversity*[2]*, and we may be critical of the extent to which the journal published in English by the* South African Career Development Association (SACDA)[3] can reflect this diversity. In any case, it is telling that the track/career theories A to Z website contains only Anglo-Saxon theories[4] (Truyens, 2019).

While the review lacks the classic tool of anthropology, observation based on fieldwork, I would argue that the fifteen years I have spent on the boards of directors of global career advisory organisations[5] have equipped me to embark on such a (partially subjective) venture.

"Cultural anthropology can be described in dictionary brevity as the total of knowledge in cultural theory, comparative cultural studies, "general" ethnography, or universal "human science." (Gergely A., 2006, p. 4) Instead of my fieldwork, I built my message on the secondary analysis of articles available in English, with the help of which the Hungarian-speaking reader can gain a level of insight into the repository of counselling theories and practices belonging to other cultures. In our globalised world it is becoming increasingly important to get to know the interpretive frameworks of other cultures related to career and career counselling, especially with the transformation of the Bretton Woods and Anglo-Saxon world, the large number of foreign (often Asian, South American, and African) guest students already appearing in Hungary (mainly within the framework of the Stipendium Hungaricum[6] programme) and the temporary reduction of employment of third-country workers in 2025. I feel that an equally strong reason for preparing this compilation is the fact that nowadays we regularly meet speakers from Asia, Africa and South America, whose message is often understood through the interpretative framework of well-established North American and European cultural circles during 15-30-minute conference presentations. With this, we often get straw man statements, Euro-Atlantic style sample presentations, professional adaptation of North American and European career questionnaires, and examination of statistical relationships, but we do not learn more about the meaning of career in each society and environment. While I know that a single literature review will not fill this gap, perhaps it can highlight the need for a change of perspective. After all, not everyone likes to eat at McDonald's.

[2] https://ajcd.africa/index.php/ajcd
[3] https://www.sacda.org.za/
[4] https://marcr.net/marcr-for-career-professionals/career-theory/career-theories-and-theorists/#A
[5] ICCDPP: International Centre for Career Development and Public Policy (continuously since 2011) https://www.iccdpp.org/ IAEVG: The International Association for Educational and Vocational Guidance (2015-2019) https://iaevg.com/ Cedefop Careers Net https://www.cedefop.europa.eu/en/networks/careersnet (since 2017) and NICEC: National Institute for Career Education and Counselling (since 2015)
[6] https://stipendiumhungaricum.hu/ Stipendium Hungaricum, the Hungarian Government's most prestigious higher education scholarship programme, offers a wide range of courses for high-achieving international students with an excellent academic track record. The programme, founded by the Hungarian Government in 2013, is supervised by the Ministry of Foreign Affairs and Trade and managed by the Tempus Public Foundation.

Career development and culture

In many ways, the idea of career development is a concept of the modern age. The selection, modification, adjustment (correction) or even complete change of trajectories was based on a wide variety of aspects, none of which belonged to the activities of professionals engaged in career development. The history of work suggests that in earlier times, individuals chose a job, a place of work, rather than a career or career. This is all the truer for geographical and cultural regions outside the Euro-Atlantic, Judeo-Christian culture.

At the same time, the present interpretation of Judeo-Christian culture also raises questions. In the USA, for example, there has been a growing awareness of the presence of Muslims, Hindus, Buddhists, Sikhs and other religious communities in American society. The perception of the United States as a "Judeo-Christian" country used to be perceived as exclusive as the term "Christian" seemed after World War II. The Western religious tradition itself had to be described as including Muslims; in some ecumenical religious circles, the term "Judeo-Christian" began to be replaced by the term "Abrahamic" – a term that expresses the common ancestor of Judaism, Christianity and Islam in the Patriarch of the Hebrew Bible, Abraham (Silk, 1989). In connection with the quote here, perhaps it is worth thinking about how far the framework of a given culture can be expanded. How long do salad bowl (peaceful coexistence of cultures) and melting pot (integration or annexation of cultures?) approaches make sense? The "melting pot" is a metaphor for the views of assimilation advocates on integration, which means that a person merges into a new identity while losing their original selves. It is often used to express submission, drawing a line between "successful" and "unsuccessful" integration. In contrast, the "salad bowl" is a metaphor for social integration as a process of establishing and nurturing social relationships that leads to co-existence with trust, reciprocity and a sense of belonging.

Sweden is one of the countries receiving the highest number of immigrants in the European Union in terms of population. In his article, Qamar (2024) explores the paradox of Swedish multiculturalism through the example of two Muslim girls. Swedish multiculturalism (as described in politics) created the image of a welfare society based on class and gender equality. However, the gap between formal and substantive rights has not been bridged, highlighting the paradoxes of Swedish multiculturalism.

When all religions and continents are absorbed, like a line of restaurants on a better metropolitan street, is it still the same culture? And to what extent are assimilated cultures deformed and changed by their behaviour in their new environment? Everyone knows the offer of the Chinese buffet adapted to Hungarian consumers. Just as the twentieth-century stories of Turkish doner kebab and Greek gyros exemplify the transformation of original food and consumption culture in the new environment. Spending time in company has gone from slow food to street junk food alone.

Economy and career

"It would seem that poorer countries have limited ability to offer their citizens career opportunities – is that necessarily the case? In middle- and low-income countries, the priority is obviously to provide jobs for all, to provide adequate living standards, nutrition, housing, schooling, and health care, among other needs. Unfortunately, in many countries, these minimum standards are not met because of several economic and socio-political factors that hinder the development of adequate formal employment opportunities." (Pillay, 2020).

The theories and most of the practical literature on career counselling also focus on the individual. The individual's career choice and then career maturity are studied. Practicing career counsellors try to understand individual career blockages and guide them toward change. Most counselling models are therefore formulated in individualistic cultures.

In individualistic societies, the interests of the individual prevail over group interests, thus personal achievement is encouraged. These cultures are often referred to as "self-culture." The reverse is true of collectivist cultures, where individuals consider the interests of the group to be superior to their own. The most important aspect is the well-being of the group, harmonious relationships, and emotions within the group. These cultures are often referred to as "we-cultures" (Hoftede, 1994, cited in Holló 2011). In this article, we look at how different the thinking of collective, community-based cultures is about careers and career guidance services supporting career development and construction. Do all these non-Euro-Atlanticist approaches give rise to different interpretative frameworks that is from ours? If so, they could enrich our own perspective.

Central and South America

The international career development community has learned more and more about career guidance in Central and South America in recent years. For example, following the COVID pandemic, the OECD (2021) surveyed adult career counselling in four countries (Argentina, Brazil, Chile, and Mexico).[7] The National Career Development Association (NCDA), the major consulting association[8] of the USA, is also showing a keen interest in solutions for the continent, classically considered "near abroad".

Latin American labour markets are characterised by a high degree of informality, which may limit formal learning opportunities or access to career guidance. Chile, Argentina, Brazil, and Mexico have one of the lowest rates of informal employment in Latin America (OECD, 2021). In Chile, Argentina, and Mexico, for at least 80% of adults pick "really matter," but at least "to some extent" when questioned on how much they rely on advice from family and friends when making work-related decisions. While adult guidance, correctional, and career guidance have not received significant political attention in Latin American countries, young people's career guidance is being followed by greater interest. Youth training programmes are widespread in the region and mostly target young people with fewer opportunities. These programmes often include a specific guidance component. At the same time, a large group approach is typical here, and less individual counselling.

In Latin America, according to the OECD survey (OECD 2021), the most common reasons for using career guidance services are progress in the current job (40%), help needed to choose study/training opportunities (29%), and changing jobs (23%). Adults in the four Latin American countries surveyed are significantly less likely to report "looking for a job" (21%). This fact has a significant correlation with the informality of labour markets. Formal job searching in the European sense is not widespread. In this context, the OECD questionnaire showed that 36% of adult counselees wanted advice on exactly how to formally apply for a job.

Recent details on the practice of consulting in Latin America can be found in surveys conducted by the Inter-American Development Bank (IAB, 2025). Their studies, published in 2025, are flash reports on career guidance experiences in five countries (Panama, Peru, Chile, El Salvador, and Mexico). The focus was on the policy issue of youth employment, which is 'automatically' linked to the lack of access to youth guidance in the region.

Latin American theories of career guidance rely heavily on theories of the Northern Hemisphere, although such approaches take shape in the context of the Global South (Fonseca da Silva &; Paiva &; Ribeiro, 2016).

Brazil

Brazil is also struggling to get rid of its colonial past. The career/career counselling for middle- and upper-class people in Brazil is inspired by classical global Nordic (read: Western) theories. However, they are near irrelevant for a large part of the population.

There are two relevant proposals for the development of independent Brazilian career guidance theory and practice, which produce theory and practice in different ways in the field of career development/guidance.

[7] Survey of Career Guidance for Adults (SCGA) https://www.oecd.org/en/publications/career-guidance-for-adults-in-a-changing-world-of-work_9a94bfad-en.html

[8] https://www.youtube.com/watch?v=PH7kty9Dr_g

First, Silvio Bock proposed a socio-historical approach to career development, based on historical and dialectical materialism and inspired by the ideas of Paulo Freire (1975). This is to draw attention to the socio-historical context, as well as to the place that people occupy in the power relations (Riberio, 2020). Secondly, in Brazil, the intercultural career development approach proposed by Marcelo Ribeiro combines the epistemology of social constructivism, inspired mainly by the design paradigm inspired by life trajectories and oeuvres and the theory of work psychology (Blustein, 2013), combining contextualized theories from the Global North with theories from the South.

The Brazilian career development/orientation practice is based on the theory of narrative counselling. It tries to find the possibility for the counsellor to recognize social discourses in their own narrative, while helping the counsellor to develop their own career/career narrative.

Colombia

In Colombia, career/career counselling as a profession does not exist. These functions belong to the general responsibilities of school counsellors (Brual, 2018). Counselling training was first developed in the country in the 1950s, inspired mainly by preventing drop-out rather than pursuing the goals of career guidance. The concept of transition between educational levels related to career choice is undeveloped in the country. Therefore, the tasks associated with this process are also not structured.

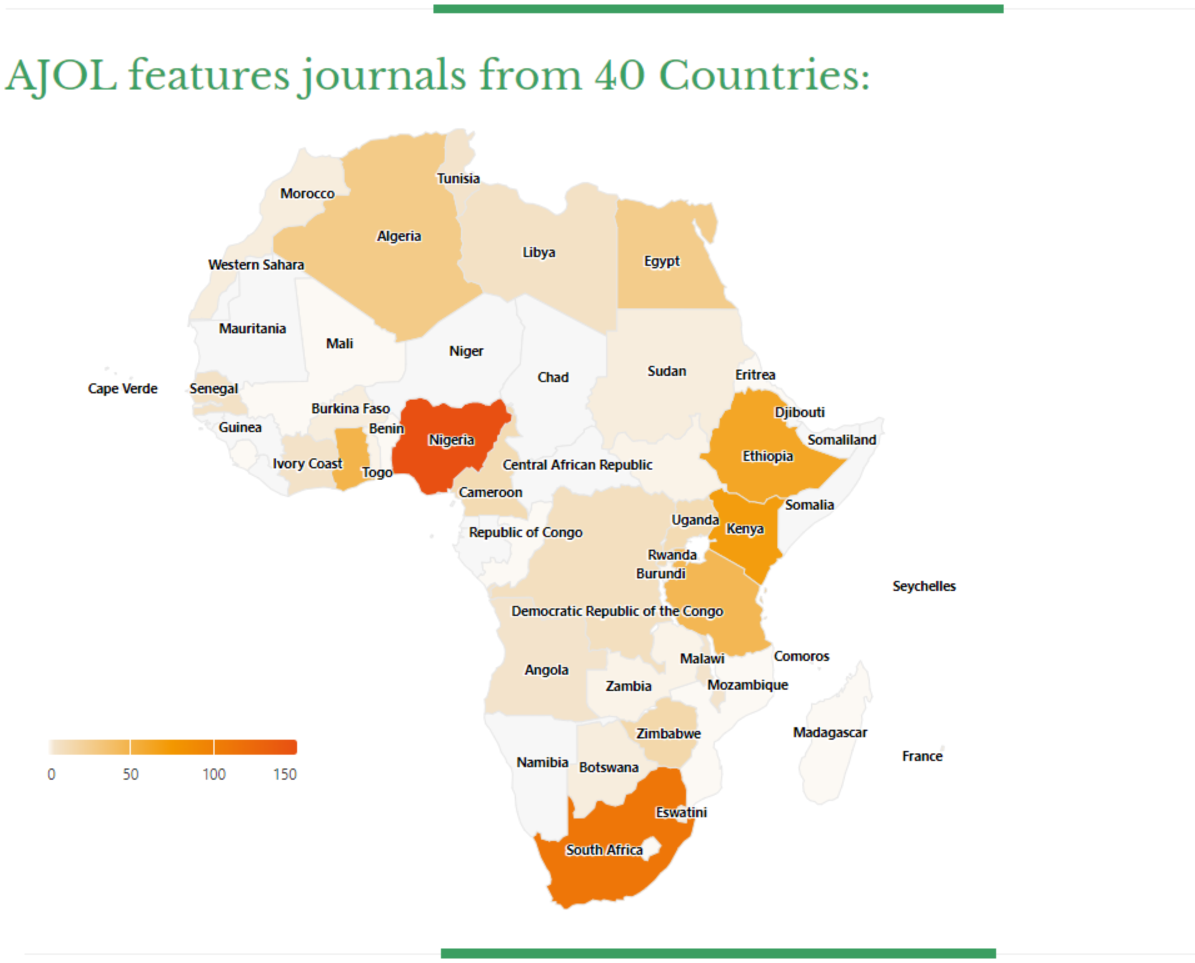
Africa

In African countries, career/career counselling traditionally consists of psychometric tools that tailor an individual's values, personality, and abilities to a particular trajectory, based on personal goals, and interests (Maree, 2024, Scholtz, 2023). The lack of career/career guidance is particularly evident in disadvantaged groups, for whom person and environment focused guidance programmes are lacking. The use of non-adapted devices designed for European and North American populations is highly criticized. Several African studies have been conducted that have supported the unreliability of Western devices and the lack of adaptation (Scholtz, 2023) For example, Holland's hexagon model does not work reliably in an African (Morgan &; De Bruin, 2015). Due to Africa's size and cultural diversity, even the concept of the "African model" is difficult to interpret and leads to error. Some researchers have made considerable efforts in recent years to develop career guidance tools that can be used in the African context (Maree Career Matrix[9] and South African Career Interest Inventory). The Maree Career Matrix (MCM) reflects an affinity for 19 job categories by asking about interests and skill levels in 152 different occupations. The results are then aggregated and plotted on the Maree Career Matrix. The matrix consists of four quadrants, namely 'Get started', 'At the bottom of the pile', 'Use it, don't lose it' or 'Improve yourself'.

Guidance and counselling organisations from the African continent are brought together by several networks. Prominent among these is the African Career Development and Guidance Association (AFCADAGA),[10] based in Ghana. They publish a separate guidance journal in Nigeria, the Nigerian Journal of Guidance and Counselling (TNJGC),[11] founded in 2011. While much of Africa is still a blind spot in career guidance research. African Journals Online (AJOL) provides a good overview of this situation with a summary map of the number of articles received and published from each country (not career advice specifically).

[9] https://jvrafricagroup.co.za/catalogue/maree-career-matrix
[10] https://afcadaga.com/about/
[11] https://www.ajol.info/index.php/njgc

Map: AJOL Number of peer-reviewed OA studies published in Africa (2024)



(*source: https://www.ajol.info/index.php/ajol*)

*AJOL, an indexing platform for quality African scientific journals, is a non-profit organization that has worked (since 1998) to increase global and continental online access, visibility, quality and use of published, peer-reviewed research in Africa.

South Africa

Counselling has always been a controversial issue in South Africa, created specifically by Afrikaner academics to perpetuate racist ideology and white economic power by empowering poor whites and providing access to good careers. Through social engineering, the black majority is excluded from social mobility (Maree, 2010). Career counselling in South Africa is still largely practiced by relatively well-situated counselees, making orientation the privilege of a few.

In terms of career guidance publications, the "leading power" of the African continent is the Republic of South Africa. Building on the Boer-British tradition, the country maintains strong international academic relations even after the apartheid regime. The editorial office of the African consulting journal operates here, and thanks to the work of Avron Herr, the country is also the entry point for African career guidance developments and research. Avron Herr is a founding member of the East African Association for Career Development (EACDA), a career consultant for 27 years, and managing director of the PACE Career Centre, Africa's longest-running career advice company.[12] The other major academic figure involved in career guidance in the country is Professor Maree.

[12] https://eacda.org/member/0

He is the founding president of the South African Association for Career Development (SACDA). At the same time, building on the South African might also be also deceptive. The country's researchers often participate in cross-continental research, collaborating with Australian, American, British and Canadian researchers. So, the careless reader can easily become a cultural victim of the Anglo-Saxon globalist approach. The role of psychologists in career guidance is still strong in the country. Several EU-South African projects have already aimed to introduce a modern career guidance approach aimed at developing new pedagogical-andragogical interpretive frameworks and competence profiles.[13] (I had the pleasure of attending one or two of these conferences online.)

The legacy of apartheid still haunts us today; in essence, children of colour did not have access to guidance in the school system for career choices and high school preparation (Pilley, 2020). At the same time, the expertise represented by whites, essential to the functioning of the country, has only partially been replaced. The labour market is characterised by informality, lack of decent work, and deteriorated public security. Career guidance and guidance services are nothing new in South Africa. These services have existed in the country for decades and are well-known among a certain stratum of the population. Unfortunately, the services were only available to a select few, coinciding with racist apartheid policies that specifically benefited the country's white minority.

Uganda

It would be appropriate to write a detailed account of Africa in several volumes if the development of career guidance systems in several countries were not a continuous blind spot for us. At the same time, considering the above, the professional situation of the Republic of South Africa, however burdened, cannot be extrapolated to the continent’s entirety. So, let's look at another, somewhat more typical African state.

Uganda is an agricultural country in East Africa with a population of 40 million, where 80% of the population works in agriculture and lives in rural areas. In 2008, the Ministry of Education of Uganda established the ministry's career guidance and counselling department. The department is responsible for providing strategic and professional guidance, counselling, and strategies on all issues that may be aimed at counselling, including HIV/AIDS mitigation, psychosocial problems, and support services (Yoon & Hutchison & Maze & Pritchard & Reiss, 2018, p. 186). It is already clear from the assignment that career guidance in Uganda cannot appear on its own but in conjunction with maintaining a healthy life. The primary question is whether young people live to healthy adulthood without becoming a victim of illness and domestic or tribal abuse. Talking about career guidance in the Euro-Atlantic sense is therefore pointless in this context.

In Uganda, career services usually start in high school (if at all), and some higher education institutions offer one-to-one services. Students are usually only familiar with certain jobs, so young people are not fully aware of their occupational opportunities. Family responsibilities affect the ability to attend school, and many do not get far in education, instead staying at home to work on the family estate. As a country, Uganda still does not have easy access to information due to lack of infrastructure (e.g. internet access). Most rural areas do not have access to the internet, computers and electricity, so online materials are not easily accessible. The Ministry of Education requires schools to carry out career guidance tasks, but it cannot control this. Consultants are trained in one-week trainings. The country is still a long way from establishing a functioning career guidance system and the associated research and development background, while Euro-Atlantic models and tools do not provide answers to its daily problems (uneducated rural population, farm work, lack of infrastructure, work organisation within families).

Nigeria

Completely different characteristics are inherent in the Federal Republic of Nigeria. With a population of more than 220 million, it is the most populous country on the continent and the sixth most populous

13 https://www.dhet.gov.za/Information%20Systems%20Coordination/Framework%20for%20cooperation%20in%20the%20provision%20of%20career%20development%20services%20in%20South%20Africa.pdf

country on Earth. In the multi-ethnic state with more than 250 ethnic groups, English is used as an intermediary language. The concept of career counselling was first introduced in the 1980s. Within higher education, vocational guidance tends to have a national history dating back to the early post-colonial times of the 1960s.

Official vocational training counselling for graduates of St. Theresa's College in Oke Ado, Ibadan, was launched in the country. In 1961, in the now independent country, the organisation "Ibadan Career Counsellors" was inaugurated as its headquarters. This is how the association known as the Nigerian Association of Career Counsellors came into being. Then the National Career Council and the "Career" magazine, were launched in 1961 (Raji, 2019). The next steps led to the formation of the Association of Nigeria (CAN) [14]at the University of Ibadan in 1976. Olumakinde was the first president of the association. Since 1981, the use of a counsellor has been mandatory in all schools in Nigeria.

While Nigeria's decades of professional consulting experience are impressive in comparison with Uganda, tribal culture still plays an important role in practice. *"Many Nigerians still prefer Babalowos* {meaning "father of secrets"}, *pastor, imam or consults elders in their community when they face problems related to their own professional, marital or spiritual life.*" (Raji, 2019 p. 51).

Arab states

Although it is not an independent continent, the Arab world deserves an independent entry. Its specific religion and culture spans continents, part of which is a little bit of Africa, and another part Asia, strongly divided from within by religious differences. One need only recall the unfortunate history of Syria over the past decade. The Arab states form a greatly divided environment based on their labour market and career prospects. There is also "Gulf" wealth, where citizens (e.g. Qatar, Kuwait, Saudi Arabia) are "getting work" because they are comfortable with high state transfers and culinary work provided by guest workers. Several Arab states are in a state of total or near-total collapse, such as Libya, Lebanon, Iraq, and Syria, where the basics of track construction, peace, and individual security are not available. Some Arab states (e.g. Egypt) have a huge population of young people, so they face problems more similar of some Asian countries like Pakistan and India. In the process of creating new posts, there is a constant competition with population growth. Maintaining social peace is often difficult. Despite the division, interpretive gardens and descriptions of "Arab career counselling" have already been created. The independent Arab Career Development Association[15] (ACDA) was launched in 2023 with a clear mission to[16] enable career development professionals and educators in the Arab and MENA regions, to study career development, learn from each other and develop together.

Hooley described the Saudi Arabian career guidance model based on his observations in the mid-2010s. He found Saudi Arabia to have a very limited tradition of career guidance. Although counselling and orientation had existed in schools in the Kingdom, it was more pastoral and dealt only very limited with the secular concept of career guidance. (Hooley, 2017, p. 290) Some of the biggest challenges facing Saudi career guidance practices include the under-representation of Saudis in the private sector, low interest in vocational training, a shortage of a highly skilled national workforce and the rudimentary design of the unemployment benefits/activation system. The lack of Saudi or other Arab consulting theory and practice has resulted in a few Anglo-Saxon developments lacking a local context in recent years.

We learned a lot about the career guidance processes of the MENA region through the mediation and development work of Professor Sultana from Malta. In 2008, he described ten countries as such*; Different colonial and postcolonial experiences left different traditions and models in each Arab state. This affects many aspects of state administration and institutions, including education. In the field of career guidance, for example, while Egypt and Jordan were more influenced by Anglo-Saxon*

[14] https://cassonnigeria.org/about/perspectives/
[15] https://acda.me/
[16] The Middle East and North Africa (MENA), also known as West Asia and North Africa (WANA) or Southwest Asia and North Africa (SWANA)

approaches, Morocco, Algeria, Tunisia, and, to a lesser extent, Lebanon were more influenced by French and French-Canadian models. (Sultana & Watts, 2008).

Hooley's comment refers to Saudi Arabia, but it reflects the region's calls to develop career guidance theories and practices. *The Islamization of knowledge refers to the attempt to harmonize Western knowledge with Islamic ontology and epistemology. At present, it is clear that career guidance in Saudi Arabia relies heavily on Western epistemology, although there is considerable reflection within the country about how career guidance should appear in the Saudi context* (Hooley, 2017, p. 294).

This adaptation experiment already has noticeable traces in the international literature. In Jordan, once part of the British sphere of influence, local authors started the work. With the local environment made visible, we again see the increased career orientation role of the extended family, some kind of genus; *In Jordan, it is well known that families and community play a big role in their children's lives in any decision they make, and career choices can be one of them. Both community and family are especially important in the socialization of children. This is because every child in Jordan belongs not simply to his immediate family, but to the whole community. Therefore, the community has a very big role to play.* (Alkaraki, 2017).

Asia

We have quite detailed knowledge about certain groups of Asian countries, such as Japan, South Korea, and Singapore from authors who often publish in English, while in the case of large countries such as China or India, information is often either fragmented, or delivered through the mediation (interpretation?) of English and North American colleagues. In the case of other states, such as the Philippines or several tiny micro-states in Oceania, we only have flashes of memories from global conferences and information from narratives (Fiji, Samoa).

To help us understand the career orientation trends of this vast and highly heterogeneous region, we are helped by APCDA Asia-Oceania Career Development Association[17] and their journal, edited by Brian Hutchison[18] (a.k.a. the Global Career Guy), which has earned undeniable merit over the past decades. APCDA connects career development professionals working in or interested in Asia-Pacific and provides a global forum for sharing effective career development ideas, research and techniques in the Asia-Pacific region. The organization's 2025 conference will be held in China.[19]

Regarding the Asian Career Guidance Symposium in 2023, the two organisers wrote; *"Asia! The very name evokes in us an image of expanse and diversity. Asia is the largest, most diverse and most populous continent in the world. This symposium aimed to provide an overview of the development of counselling and guidance in Asia, as well as the specific challenges and opportunities of the region and those shared with other regions. The Asian symposium covers a wide range of presentations from China, Hong Kong, Macau, Taiwan, Singapore, India and Pakistan.*" (Bakshi & Yuen, 2022).

Japan

In articles about Japan, the term “ikigai” (生 き甲 斐, “reason for existence”) is quick to pop up. In the context of career development, the term pinpoints the intersection of four topics that set meaningful career/career goals for the individual. Essentially, you're trying to create your personal "place of happiness" by considering what overlaps with four different elements: (1) what you love to do; (2) what you are good at; (3) for which you may be paid; and (4) what the world needs. Some explanations perceive a link between a long, healthy life and career choices based on ikigai.

According to the Japanese, everyone has an ikigaija – the reason for life. Residents of the Japanese village, home to some of the world's oldest people, say finding this is the key to a happier and longer life. If we have a strong sense of ikigai — where what we love, what we're good at, what we can get paid for, and what the world needs — means that every day becomes meaningful. That is why we get up in the morning. This is also why many Japanese never really retire (in fact, there is no word in

[17] https://asiapacificcda.org/
[18] https://www.globalcareerguy.com/
[19] https://asiapacificcda.org/2025-conference/

Japanese that means retirement in the same sense as in English). They stay active and engage in what they enjoy because they have found the true purpose of life – to be always busy is happiness. (García & Miralles, 2017).

The downside of Japanese work culture and career perception is mental and physical overload. Japan is known for its excessive work culture and commitment to work, which makes the world view the country as "workaholic." "White collar heroes", or "paid people" as they are known locally, are credited with boosting Japan's economy at the expense of their own lives (Widarahhesty, 2020). In this contradiction, a) work that forms our sense of ikigai and b) work that overloads us emerge as an interesting dichotomy as a paradox of useful activity serving the community (and not Euro-Atlantic self-expression).

In Japan, the term career was classically used to describe male careers (Dillon, 1983). The concept of "vocational counselling" ("shokugyo shido") was historically introduced in Japan in 1915. Shokugyo means vocation in Japanese and shido means guidance. After the Meiji Restoration, this was the era of labour migration due to the Industrial Revolution. Soju Irisawa translated the term vocational counselling into Japanese and introduced the concept of vocational counselling in her book 'Current Education' (1915) (Mimura, 2016). In 1927, the government introduced vocational counselling into school education.

In 1950, the Korean War broke out, and during the war, increasing production resulted in the boom and vigorous development of the Japanese economy. Human resources, especially skilled engineers and people with technological skills, were in great demand and were therefore highly valued. Thus, in 1957, the term career guidance appeared for the first time instead of vocational training. At the same time, the concept of career and career counselling referred to an academic career. In 1971, the Japanese Ministry of Education codified the concept of career guidance. This legislation stated that 'career guidance' was the process by which teachers guide and assist individual pupils. They systematically and continuously support students to develop their own competencies and attitudes to choose or plan their future careers, progress to higher levels of employment or education, and adapt to their future roles in adult life.

Student follow-up is also an important activity for teachers. The main function of this activity is to assess whether graduates have dropped out of further education or adapted to a new school, level of training, or profession. If there is a career matching problem, teachers are responsible for supporting former students.

China

In 1916, Zhou Yichun, then President of the Tsinghua School (University) (predecessor of Tsinghua University), organized career development lectures and surveyed student preferences in choosing majors and overseas universities (Xie, 2009). This date is often referred to as the institutionalized birth of Chinese career guidance. Career guidance in secondary schools is still in its infancy and does not have well-defined professional staff. Despite the lack of a uniform professional protocol and set of requirements, there is a national standard for the provision of career guidance services in higher education. One of them is the national standard for professions: Expectations of guidance professionals, which was given in 1999 and revised in 2005 by the Ministry of Labour and Social Security.

Chinese culture has a collectivist orientation, which also plays an important role in the emerging career guidance theory and practice under Western influence. Chinese culture, values and beliefs influence the career choices of Chinese students and the career aspirations of employees. In China, the family structure is very clear and strict, and people respect authority. To this day, Confucian values, "filial piety," which favour humility and good behaviour of individuals, are also strong, which partly explains the negative attitude towards career counselling (Shao, 2021).

"Keeping your face" (how you look and behave in front of others) has significant cultural value and influences career choices, career development and work culture in China. It refers to social rank, fame and dignity. Maintaining a good image is key for both individuals and organisations. Chinese experts try to avoid embarrassing themselves or cause embarrassment for others. The emphasis on protecting the "face" affects the dynamics of communication, since criticism or confrontation can be approached indirectly to preserve harmony and avoid public shame.

In Chinese work culture, building and nurturing relationships, known as guanxi, is highly valued. Guanxi refers to the network of personal contacts and relationships that facilitate business interactions and collaboration. Trust, mutual understanding and building relationships with colleagues, customers and business partners are essential for successful co-operation in China. Investing time and effort in building a strong guanxi can lead to better business opportunities and a deeper understanding of the local business environment. Chinese work culture is often associated with a high-pressure environment characterised by long working hours and intense commitment to work. The concept of "996" refers to the unofficial expectation of working six days a week from 9 a.m. to 9 p.m. This strenuous work schedule can result in increased stress levels, fatigue, and limited time for personal activities. Chinese professionals often face the challenge of balancing their professional obligations with their personal well-being.

While reviewing the available literature (quite possibly due to the lack of access to non-English articles) I could not find domestic career development theories based on modern labour market challenges and careers and the international characteristics of career guidance. There are many traces of the adoption of Euro-Atlantic models. The globally noted works of Pop, Savickas, Holland, etc. often appear in English-language literature written by Chinese authors. The resurgence of Confucianism is also clear; "*Confucianism has been shaping China for more than two millennia: the words of the Master offer guidance to both ordinary people and power.*" (Almady) whose teachings are indispensable in the organisation of work and career guidance based on collectives. For an outside observer, it seems to be a professional challenge create work-life balance (similarly to Japan and South-Korea), to adapt consulting models supporting the adherence of decent work agenda in China, or to develop their own Chinese modalities.

India

By 2020, India had become the world's youngest country by its age structure. The average age is just under 29 years old, accounting for around 28% of the world's workforce. Like other countries on the African continent, guiding a growing population of youth into the world of work in India will be a challenge for a long time to come. With this, India views career guidance from a fundamentally different point of view than the aging Japan, South Korea or the neighbouring giant China.

India is making significant effort to develop its own guidance theory and practice. Jiva[20] is a career guidance system developed for non-Western cultures, with a special focus on India. The intervention is based on strong research and has been developed in two phases with the intention of introducing career and livelihood planning into the national mainstream. As part of this effort, the NGO that developed the model is publishing an English-language journal called The Indian Journal of Career and Livelihood Planning (IJCLP[21]). The main gesture of the advisory model, adapted to the Indian framework, is Gideon Arulmani, founder of the Bengaluru (Bangalore) foundation.

In simplified terms, livelihoods are related to survival needs, and livelihoods are thought to be exercised by people in lower income brackets, such as farmers, artisans and skilled workers, mainly in rural areas. Careers, on the other hand, are more strongly tied to middle- and upper-class urban life and are portrayed as offering better opportunities and higher incomes. Formal education (school and higher education) is seen as an entry point to a career, while the traditional, non-formal practice of skills transfer is linked to livelihood. In many cultures, however, making a living is a reality. Still, there is a common trend among career development professionals to replace livelihood practices with career guidance. (Arulmani, 2014). This misguided practice sums up Arulmani and the Jiva Foundation.

[20] https://jivacareer.org/
[21] https://jivacareer.org/?page_id=2253

The word jiva means 'life' in most Indian languages. The jiva approach to career counselling is based on the premise that a healthy career is intrinsically linked to an individual's life. A career is not just a job – it is a collection of jobs and occupations that harness our potential and give us deep satisfaction. A career is something that lasts a lifetime, in a sense an extension of our lives. Jiva is based on four career development values from Asian cultures.

The Jiva Spiral is a non-linear approach to career development. Ancient Indian philosophy presents a cyclical approach to life. Relying on this principle, Jiva uses the image of a spiral to describe development. During the Jiva workshop, children learn that nature is full of examples of spirals, from the structure of galaxies to snail shells to rosebuds blooming. Through various jiva activities, children discuss the fact that a career rarely develops linearly and sequentially. It has its ups and downs, and it evolves with the individual.

As life plays out, a person often returns to where he started, but qualitatively different: they become older and more mature. One can move away from the path one was part of to a related but different path.[22] Indian philosophy encourages individuals to practice objectivity and dispassion (nishkama) when making (career) decisions. Jiva interprets this to point out that the nature of today's economic development offers countless opportunities for Indian youth. This does not mean that just because an opportunity exists, it should be seized. Career/career development requires the ability to weigh the pros and cons and then accept or reject them.

During the jiva workshop, students consider how well an opportunity or educational path suits their interests and talents. Does an opportunity lead to just a job or a real career?

Finding answers to these questions is key to building a healthy career. Jiva lays the foundation for students to be critical of their career choices.

In India, the state (more precisely, the central state and the member states.) has also made a lot of progress in the past decade, at least in the development of basic job search and career guidance services. In July 2015, the Indian government introduced the country's new online career guidance platform called National Career Service (NCS).[23] The NCS has been designed in collaboration with Indian states (provinces), taking advantage of their experience in employment services and private job portals. NCS has more than 27,000 career advisors. Their main goal is to provide career orientation counselling reaching young people.

Philippines

Finally, let's look at a country from Asia with very different characteristics. The Philippines, with a population of more than 110 million, was the 13th most populous country in South and Southeast Asia in 2023. It is the only predominantly Christian state spread over 7,000 islands. In Europe and here in Hungary, it is known mainly for exporting guest workers. You can only find materials about the description of the country's career guidance and career support system in the libraries of major international organizations (OECD, ADB, ILO), but hardly about their career theories. The World Bank report (2004), which is no longer available online, examined career guidance institutions in seven countries, including the Philippines. The report, now two decades old, concluded: "World Bank customer countries often face specific problems. These include limited public resources, high unemployment and poverty, a large number of informal economies, the need for community capacity building, and sometimes specific family and cultural factors that can have a significant impact on career choices." (World Bank, 2004).

In Asia, parents often have the greatest influence on their children's career choices. This also applies to the Philippines, where ordinary families are cut off from high-quality public services. Career guidance and career counselling often take place in large groups, even in theatre halls, where inspirational speeches are given.

[2222] https://jivacareer.org/?page_id=328
[23] https://www.ncs.gov.in/Pages/default.aspx

In 2019, the President of the Philippines signed the High School Career Guidance and Career Guidance Act, which applies to public and private high schools nationwide. The law also called for the establishment of a National High School Career Guidance and Counselling Program (CGCP) to provide high-quality guidance and counselling services to students. Most of the emerging labour institutions consist of institutions called state-run employment offices (PESOs) while also providing career guidance and job-search advice (OECD/ADB, 2017). One of the consulting services that astound European eyes is mass motivation when stadiums full of people are given career guidance and motivational speeches masse.

In addition to government data releases, mostly subjective professional reports are available on the country's career guidance practice and incomplete theory. "Unfortunately, many Filipino students do not have access to such benefits due to the lack of comprehensive career guidance programs. The availability of surveys such as the Myers-Briggs personality test or other tools is limited. Also, in the Philippine context, their use is severely limited, which hinders students' ability to understand themselves and their potential and exacerbates the career guidance crisis." (Lagon, 2023). We know from the data of the Asia Pacific Advisory Organization (APCDA) mentioned above that there has been an advisory NGO in the country since the late 1970s. CDAP was founded on March 4, 1977 as the Philippine Vocational Training Advisory Association (PVGA) with the primary purpose of promoting career development practices in the Philippines.[24] Articles by local academic authors (Salazar-Clemeña, 2002) address issues similar to those mentioned above: the dominant power of the family, the lack of accessible theories and practices based on local context and imperfect infrastructure. As an interesting fact, it is worth mentioning here that local working materials for the development of career guidance practices in secondary institutions can be found from as early as the 1970s (Aquilizan, 1975). It is beyond the scope of this article that the colonial status of the Philippines and the general use of English have aided, or rather hindered, the development of their own theories of advice. Given the fact that the Philippines was a colony of the United States between 1898 and 1946, it is understandable, for example, that the US-origin HOPE theory took strong root in the country (Niles & Amundson & Neault, 2011).

Oceania

While Oceania covers a vast area, it is made up of countries with a small population (apart from Australia). Due to their territorial location (Australia, USA) Anglo-Saxon influence is strong. Considering Oceania as a single career guidance geographical area would be a major oversimplification. Its territory spans six time zones and does not even have a joint working week due to the international date line (Athanasou & Torrance, 2002). At the same time, the remnants of tribal society and the extensive family system that underlies Pacific cultures, together with the prevailing social structures (matrilinear, patrilinear, tribal systems) and specific ethnic identities also have an impact on career development.

These classic tribal systems are beginning to disintegrate in the face of economic and social development and the shift toward urbanisation. The transformation causes tension, economic inequalities, and social exclusion. In addition, the importance of the role of the leader, the recognition of the leader by the group members, is a topic influencing career choice. Finally, the economic-labour market monoculture and the strong migration drain effect (towards Australia and Singapore) often characteristic to these small countries further shape career guidance practices.

The New Zealand Māori counselling theory, the "meeting house" (Te Whare Tapa Whā)[25] model is essentially an example of a community-based career guidance model.

The wharenui (meeting house) is a symbol used to illustrate dimensions of prosperity. Just as every corner of a house needs to be strong and balanced to support its structure, every dimension of the house and every dimension of well-being must be balanced for health to be maintained, including career choices. This philosophy can be applied to define a good life in all areas, including career management (Durie, 1998). Sir Mason Harold Durie, professor and research academic of Māori Studies

[24] https://asiapacificcda.org/career-development-association-of-the-philippines/

[25] https://www.careers.govt.nz/resources/career-practice/career-theory-models/te-whare-tapa-wha/

at Massey University in New Zealand, has made an undying contribution to the survival and documentation of the Māori model. He is known for his contribution to Māori healthcare.

Summary

The starting point of this article was to show that despite living in a globalised world, career guidance and career counselling should not be exclusively approached in a Euro-Atlanticist framework, where we make the individual the main actor in counselling and career development. Non-European*, non-North American practices also remind us that the role of the community, and within it of the "elders", is imperative when discussing the trajectories and the social division of labour.*

Our region, including Hungary, suffers precisely from the effects of extreme individualization: certain regions of Asia, Latin America, and Africa teach us that it is worth treating the practice of counselling on an *individualist-collectivist scale instead of extremes*. It may easily be disastrous for the pendulum to swing to one side and we only support the individual's career aspirations, or vice versa, the collective has the power to force career decisions, both situations lead to disaster. In one, the individual, in the other, the community does not find itself.

It is also important to note the need to develop local devices and the availability of tools designed for the local counselling population. Many countries suffer from a colonial past, which today is reflected not in direct repression, but the import of "Western" models and advice with a limited range of situational applicability.

Hungary can be grateful in this regard for its career guidance, career choice, pedagogical-psychological history, or more precisely, for the several generations of professionals who built it. In Hungary, we take this fact for granted, even though the examples presented here eloquently prove that this is not self-evident. A different language and relative professional sovereignty are conditions for developing one's advisory models and practices in a region. These exercises should not be isolated from the outside world so they may provide and receive continuous influence on global trends in the career counselling profession. There is no global development without local development and vice versa.

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Language Integration of Adult Immigrants in the EU in the Context of Policy Measures

Introduction

According to data from Eurostat, as of January 1, 2023, there were 27.3 million citizens of non-EU countries residing in the European Union, representing 6.1% of the total EU population. In addition, 13.9 million persons living in one of the EU Member States on 1 January 2023 were citizens of another EU Member State. The four EU countries with the largest numbers of non-nationals are Germany (12.3 million), Spain (6.1 million), France (5.6 million), and Italy (5.1 million), collectively representing 70.6% of the total non-national population in the EU[1] (Migration and migrant population statistics – Statistics Explained (europa.eu)).

Table 1: **Migrant Population in the European Union**

Migrant Population	Number
Non-EU citizens residing in the EU (as of Jan 1, 2023)	27.3 million
EU citizens residing in another EU Member State (as of Jan 1, 2023)	13.9 million
Total migrant population in the EU	41.2 million

(Source: Migration and migrant population statistics – Statistics Explained (europa.eu)[2])

For immigrants´ social and cultural integration, a good knowledge of the host country´s language is among the most important factors. This is also important for socioeconomic success in education and the labor market (Dustmann and van Soest 2002), as, for example, immigrants' language skills in the receiving country positively impact their labor market integration and their earnings (Dustmann & van Soest, 2001). Therefore, learning the language of the receiving country is necessary for immigrants to achieve full integration, which means that they become equal to the country's citizens regarding rights, duties, or opportunities (Sezer, 2010).

It may also be in the interest of the host country to support the integration of immigrants into the labor market, partly because they represent a human resource for the economy (Dustmann & Fabbri, 2003).

It is therefore not surprising that language learning and teaching have been a priority for EU Member States from the outset. The Council of Europe has been supporting linguistic diversity and language learning through the European Cultural Convention since 1954. Their goal is not only to support language learning but also to safeguard and strengthen language rights, mutual understanding, democratic citizenship, and social cohesion (Trim, 2018). Accordingly, the importance and usefulness of promoting learner autonomy have been also recognized since the 1970s as an important prerequisite for lifelong learning.

Since 2016, the European Union has had an action plan[3] for social inclusion. However, national action plans and strategies for the integration of immigrants vary widely between member states (Vareikyté, 2020). In 2007, 2009, 2013, and 2018, the Council of Europe commissioned reports[4] on the linguistic integration of immigrant adults, with the participation of 40 countries (out of 47 member states). These reports assessed the expectations of immigrants and their learning opportunities.

[1] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Migration_and_migrant_population_statistics
[2] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Migration_and_migrant_population_statistics
[3] Action plan on integration and inclusion 2021-2027: https://op.europa.eu/en/publication-detail/-/publication/bb47d489-a2b1-11eb-9585-01aa75ed71a1/language-hu/format-XHTML
[4] https://rm.coe.int/linguistic-integration-of-adult-migrants-requirements-and-learning-opp/16809b93cb

Among the main findings of the reports is that, as part of their migration and integration policies, more and more Council of Europe member states have established formal language and civic knowledge requirements since the early 2000s. Most member states impose formal language and civic knowledge requirements in case immigrants want to apply for citizenship. Every second member state requires migrants to fulfill these requirements for residency – one-third of them even before entry. However, in the language proficiency level which is required, there are big differences between member states. Other problematic issues in many member states are that the tests' quality was not controlled appropriately and vulnerable groups (for example, learners with low literacy levels, minors, and refugees) also have to take the tests, even if their impact on them is very rarely investigated. Language learning opportunities for migrants are offered in almost every member state, but the number of hours provided is different and – especially for vulnerable groups – very often insufficient.

It would be highly advantageous for migrants to be able to learn the language of the host country not only to gain basic communication skills but also to develop their language abilities autonomously. The promotion of autonomous language learning for adult migrants represents a significant area of research and practice in the context of integration policies. There is an increasing acknowledgment that autonomous learning is pivotal for the long-term language development of adult migrants. The Council of Europe posits that "once teaching stops, further learning must be autonomous" and that autonomous learning should be advanced as an indispensable component of language learning (Little, 2012, p. 8). In accordance with this, information and communication technologies (ICT) are increasingly regarded as instruments to facilitate autonomous learning among adult migrants, exemplified by ICT-based language course delivery. Information and communication technologies (ICT) can facilitate access to learning resources beyond the confines of formal classroom settings, thereby supporting the continued autonomous learning process (Kluzer et al., 2011). Furthermore, recent research has delved into the implementation of learner-centered education in language programs designed for adult migrants. This approach strives to empower learners to ascertain their own learning needs and goals, in alignment with the tenets of autonomous learning (Gravani et al., 2024).

The adult migrant population is characterized by significant heterogeneity, encompassing a wide range of needs, goals, and backgrounds. The diversity of this group presents challenges for language education policies, necessitating flexible approaches that can support autonomous learning (Kluzer et al., 2011). The concept of autonomous language learning is regarded as a means of facilitating the attainment of broader integration objectives. Research indicates that language proficiency acquired through autonomous learning can facilitate migrants' integration in several areas of their lives, including employment and social interactions (Little, 2012; Gravani et al., 2024). Researchers and policymakers are increasingly recognizing the importance of promoting autonomous learning within the framework of integration policies, as it can support long-term language development and broader integration goals for adult migrants. This paper aims to examine the relationship between linguistic integration in the context of policy measures and the success of integration in the European context.

The Study

Research Design and Methodology

The research is based on a secondary analysis of data from the following sources: MIPEX[5] (Solano & Huddleston, 2020) and descriptions (N=27) of policy measures on the European Website on Integration[6] (EWSI) which is an initiative of the European Commission.

Main Research Questions

- RQ1: What are the common characteristics of measures of countries most successful in integrating immigrants?
- RQ2: What are the differences in the investigated host countries' policies regarding linguistic integration?

[5] https://mipex.eu/
[6] https://ec.europa.eu/migrant-integration/country-governance/governance-migrant-integration-across-europe_en

Methods

We conducted the secondary analysis of MIPEX[7] (Solano & Huddleston, 2020). MIPEX considers 56 countries around the world and examines 3 dimensions that are crucial to the integration of migrants. These are basic rights, equal opportunities, and a secure future. The dimension of basic rights, for example, raises the question of whether immigrants can enjoy rights like citizens. In other words, do citizens enjoy the same rights as immigrants?

The investigation of the dimension of equal opportunities tries to answer the question of whether immigrants can be supported to enjoy opportunities like those of nationals. Meaning, are they entitled to equal opportunities with nationals (for example, do they receive specific assistance in health, education, or political participation)?

Examining the dimension of a secure future aims to determine whether immigrants can settle in the country and feel secure in the long term. Important issues in this context are family reunification, permanent residence, and access to citizenship.

The eight areas of policy covered are access to citizenship, anti-discrimination, education, family reunification, health, labor market mobility, permanent place of residence, and political participation. The indicators in each area were chosen after interviews and/or email exchanges between the MIPEX team and leading experts on integration policies. At least one national expert per country completed the questionnaires.

Table 2 shows how the MIPEX survey groups the EU member states and how many points each of them receives.

Table 2: **MIPEX Scores of Member States of the EU**

MIPEX group description	EU Member State and MIPEX score
Top Ten: the ten countries with the best scores worldwide (out of 56 MIPEX countries) (average score: 75/100).	Sweden (86), Finland (85), Portugal (81), Belgium (69), Ireland (64)
Comprehensive integration – Slightly favorable (average score: 60/100)	Luxembourg (64), Spain (60)
Temporary integration – Halfway favorable (average score: 57/100)	Germany (58), Italy (58), Netherlands (57), France (56)
Comprehensive integration – Halfway favorable (average score: 50/100)	Czech Republic (50), Estonia (50), Malta (48)
Equality on paper – Halfway favorable (average score: 49/100)	Slovenia (48)
Temporary integration – Halfway unfavorable (average score: 48/100)	Denmark (49), Austria (46)
Equality on paper – Halfway unfavorable (average score: 43/100)	Romania (49), Hungary (43), Bulgaria (40), Slovakia (39)
Equality on paper – Slightly unfavorable (average score: 39/100).	Greece (46), Poland (40), Croatia (39), Latvia (37), Lithuania (37)
Immigration without integration – Most unfavorable (average score: 28/100).	Cyprus (41)

Source: https://mipex.eu/

The experts' responses were reviewed by the MIPEX team to make sure that the country experts answered them consistently, the same way as in other countries. The questions were also double-checked against publicly available data and legal texts. Finally, the MIPEX team reviewed the questionnaires for all the countries. If there were doubts, researchers went back to the country expert and asked for further information.

[7] https://mipex.eu/

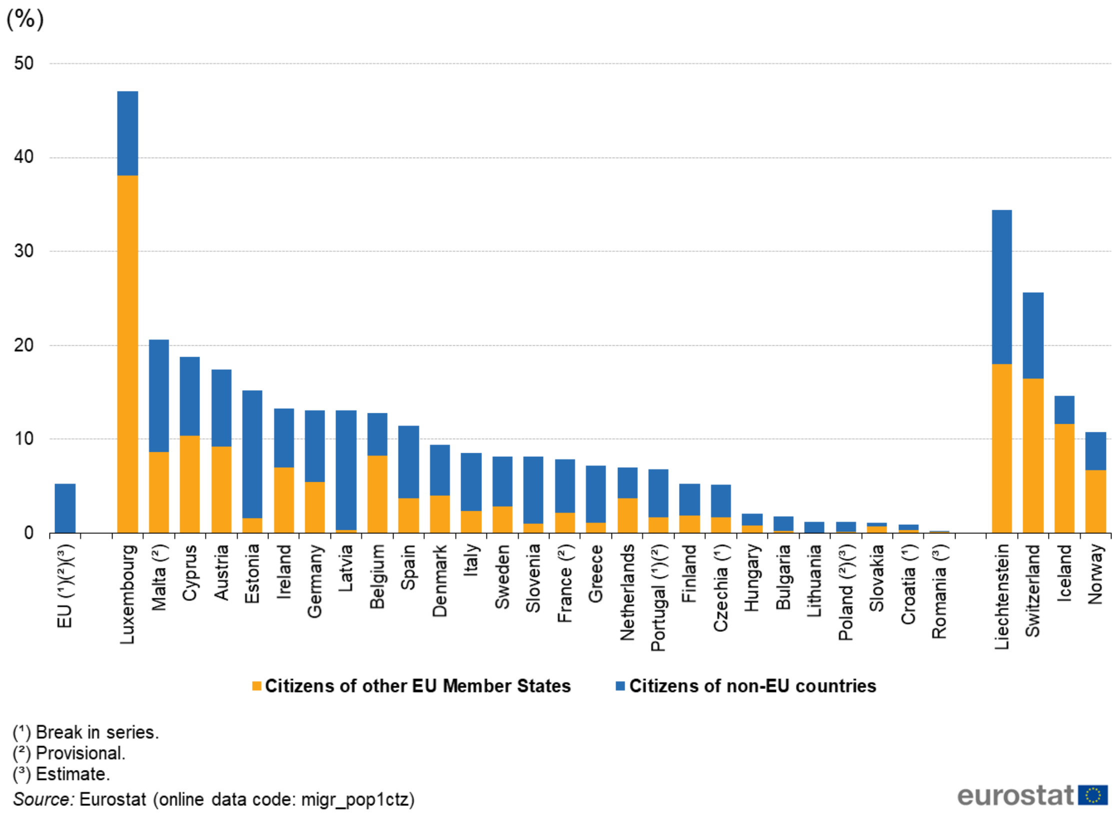
The MIPEX score can be used therefore, due to its careful preparation, as a trustworthy source for assessing the success of countries in integrating migrants. As mentioned before, there is an indicator for "education", but this does not include language education for immigrants. Therefore, the present research can provide a new perspective on successful integration by linking successful integration to host country policies related to language integration.

The source of integration policy measures is the descriptions of the country policies on the European Website on Integration created by so-called Country Coordinators. They are experts from the 27 EU countries with experience in the field of integration. As all country policy descriptions have the same structure (Statistics, Integration Strategy, Integration Programme, Evaluation, Legislation, Public Authorities, Civil Society, and Funding) they can be easily compared with each other.

These policy descriptions contain both qualitative and quantitative data, and for this reason, we used a mixed-mode inquiry. Our analysis proceeded in 2 steps.

Initially, employing the Microsoft 365 Excel program, we generated graphs to assess the quantitative data within the policy descriptions. The analysis encompassed various measurements, including the number of immigrants, the percentage of the country's population represented by immigrants, and the distinction between immigrants from within the EU and those originating from outside the EU. This examination revealed substantial disparities among EU member states in the challenges they encounter concerning immigrant integration.

Figure 1: **Share of Non-nationals in the Resident Population in EU Member States**



Source: (Kraszewska et al., 2020[8])

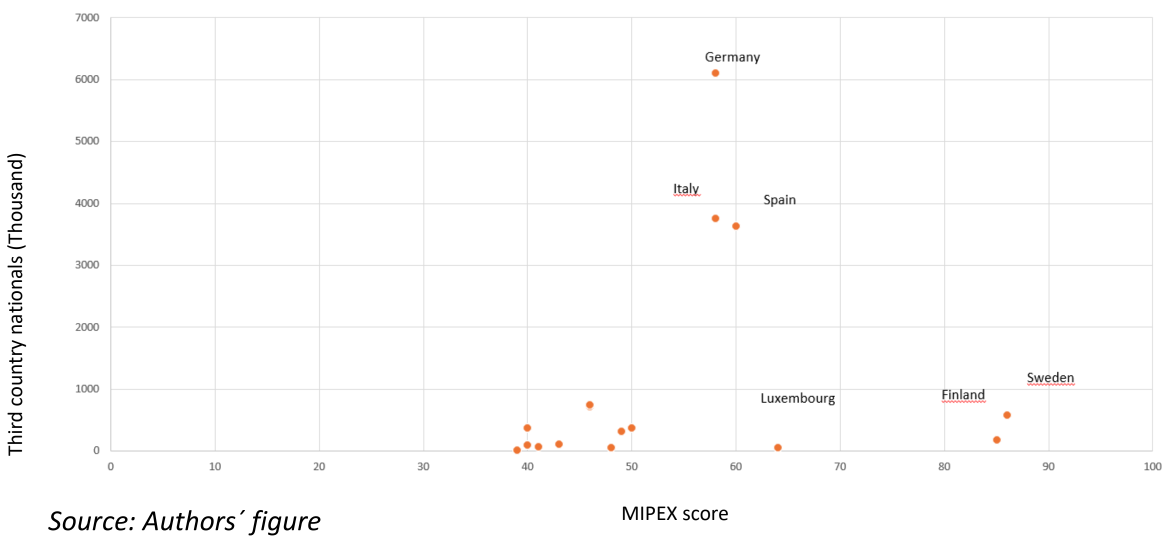
The perceived language barrier of immigrants highly depends on their country of origin and how different the language of the receiving country is from the language that the immigrant already speaks. For example, when the language of the receiving country is the same as the native language of the immigrant (e.g., Brazilian immigrants in Portugal), the language barrier is smaller than in the case of e.g., Arabic-speaking immigrants in Germany.

[8] https://ec.europa.eu/eurostat/en/web/products-statistical-books/-/ks-06-20-184

Hence, as a second step, we selected for further analysis those countries (N=6) that face above-average challenges but still have above-average MIPEX scores.

For this reason, we have not included Portugal, with many immigrants from Brazil (the common language is Portuguese). We have also excluded Belgium and France, with many immigrants from a country where French is the common language. We have also excluded Ireland because of the large number of immigrants from the UK, India, and the USA, where the common language is English. Nor have we included the Netherlands, because many immigrants come from the Republic of Suriname and the Netherlands Antilles, where Dutch is the official language. In Estonia, Latvia, and Lithuania, most immigrants come from the former Soviet Union, and in Croatia and Slovenia from the former Yugoslavia, so these countries have also been excluded from the analysis. Finally, we have also excluded Romania because the majority of immigrants are Romanians from Moldova and Ukraine.

Figure 2: **Selection of Countries for the Study** (data based on Eurostat's Non-national population by group of citizenship, 1 January 2021)



Source: Authors´ figure

Finally, based on the MIPEX ranks and the policy descriptions, from the remaining countries we chose Finland (85 MIPEX points) and Sweden (86 points) which were in the “Top Ten”, followed by Spain (60 points) and Luxembourg (64 points) with “Comprehensive Approach” and finally Germany (58 points) and Italy (58 points) with “Temporary Integration”.

We employed a hybrid form (Swain, 2018) of the grounded theory approach (GTA) (Corbin & Strauss, 2008) to analyze the integration policy descriptions of the selected countries. This approach, as recommended by Corbin and Strauss (2008) involved three distinct phases. In the first phase, after becoming familiar with the data, we created a table of codes, establishing priori coding constructs based on existing literature and **our prior knowledge of the subject matter.** Moving on to the second phase, we initiated coding, supplementing the code table with additional information and new codes based on the empirical data through open/posterior coding. Appendix 1 presents a concise profile of each country based on information from the European Website of Integration.

For the third phase, we gathered text excerpts that effectively illustrated the identified coded constructs. Subsequently, we consolidated both the prior and posterior codes into code groups through axial coding. Open and axial coding were executed using Atlas.ti software (version 23). Axial coding was guided by the re-occurrence of coded constructs (cf. Schiller et al., 2023), serving as a pivotal method during the comparison of the selected countries.

Results

In this section, the "categories" employed stem from qualitative, posterior coding of the descriptions and are not recognized as official "policy categories." Consequently, we refrain from including additional literature references.

In Atlas.ti, we coded the descriptions on the EU integration website for all 27 countries, and then further analyzed the 6 selected countries. Table 3 shows the a priori code structure of the study.

Table 3: **A Priori Codes of the Study**

A priori codes	Sweden	Finland	Luxembourg	Spain	Germany	Italy
MIPEX score	86	85	64	60	58	58
Existence of an integration program	yes	yes	yes	yes	yes	yes
Mandatory integration program	yes	yes	no	no	no	no
Support for labor market integration	yes	yes	no	yes	yes	yes
Language courses for immigrants	yes	yes	yes	yes	yes	yes
Civic integration courses for immigrants	yes	yes	yes	yes	yes	yes
Support for the social participation of immigrants	yes	yes	yes	yes	yes	yes
Decentralized governance of integration issues, regional and local integration measures	yes	yes	yes	yes	no	yes
Individual integration plans for immigrants	yes	yes	yes	no	no	no

(The posterior code structure and frequencies are given in Appendix 2.)

Source: Authors´ table

RQ 1: What are the common characteristics of measures of countries most successful in integrating immigrants?

As for all the investigated 6 countries, common characteristics regarding the applied policies of integration strategies and programs (RQ1) concerned the presence of a mainstream approach to integration (Frequency f=79), early intervention and language acquisition (f=31), labor market integration (f=28), local involvement and flexibility (f=24), support for integration partnerships (f=20), and civic education (f=10), but also continuous evaluation (f=7) implying that they are generally considered important by policymakers.

Table 4: **Code Group Frequencies Finland and Sweden** (Gr: number of codes, GS: number of quotes)

	Governance of migrant integration in Finland Gr=21	Governance of migrant integration in Sweden Gr=33	Sum
Characteristics of integration strategy Gr=41; GS=23	5	11	16
Civic Integration Requirements Gr=10; GS=4	1	3	4
Civil society Gr=12; GS=10	1	0	1
Continuous Evaluation and Monitoring Gr=7; GS=8	2	1	3

Early Intervention and Language Acquisition Gr=31; GS=5	2	6	8
Emphasis on Active Citizenship Gr=33; GS=12	4	11	15
Labor market integration Gr=28; GS=11	3	13	16
Local Involvement and Flexibility Gr=24; GS=14	4	4	8
Mainstream Approach to Integration Gr=79; GS=28	11	26	37
Support for Integration Partnerships Gr=20; GS=5	2	3	5
Sum	35	78	113

Source: Authors´ table

Sweden and Finland, as members of the "Top Ten" group, share several common political measures and characteristics in their approach to migrant integration:

- *Mainstream Approach to Integration (f=37):* Both countries prioritize integration through mainstream policies and services, rather than relying solely on targeted integration programs. This approach aims to integrate newcomers into society seamlessly by providing access to education, employment, healthcare, and social services alongside the native population.
- *Emphasis on Active Citizenship (f=15):* Both countries promote active citizenship as a key aspect of integration. This includes encouraging newcomers to participate in civic life, engage in local activities, and contribute to their communities. Active citizenship is seen as a way to foster social cohesion and a sense of belonging among newcomers.
- *Early Intervention and Language Acquisition (f=8):* Early language learning is emphasized in both Sweden and Finland, with language courses provided to newcomers as soon as possible after arrival. This focus on language acquisition is crucial for enabling migrants to participate in society, access employment opportunities, and fully integrate into their new communities.
- *Local Involvement and Flexibility (f=8):* Both Sweden and Finland recognize the importance of local involvement in migrant integration. Local authorities play a key role in tailoring integration measures to the specific needs of their communities, ensuring that newcomers are connected to local resources and support networks. Additionally, both countries have implemented flexible integration pathways that allow for adjustments based on individual needs and circumstances.
- *Civic Integration Requirements (f=4):* Both countries have established civic integration requirements for permanent residency, which typically involve language proficiency exams, knowledge of Swedish or Finnish society, and participation in civic education courses. These requirements aim to ensure that newcomers acquire the skills and knowledge necessary to become active and responsible members of society.
- *Support for Integration Partnerships (f=5):* Both Sweden and Finland have established partnerships between government agencies, local authorities, civil society organizations, and the private sector to coordinate their integration efforts. These partnerships aim to pool resources, share expertise, and ensure that integration services are tailored to the needs of the migrant population.
- *Continuous Evaluation and Monitoring (f=3):* Both countries engage in ongoing evaluation and monitoring of their integration policies and programs to assess their effectiveness and identify areas for improvement. This commitment to evidence-based policymaking ensures that integration efforts adapt to changing needs and circumstances.

In summary, Sweden and Finland share a strong commitment to migrant integration through mainstream policies, early language acquisition, civic integration requirements, local involvement, active citizenship support, integration partnerships, and continuous evaluation. These common approaches reflect their shared values of social cohesion, inclusion, and active participation in society.

Nevertheless, code groups revealed also differences between the country groups, which we inquired as suggested by our research question (RQ2), namely, what are the differences in the investigated host countries' policies regarding linguistic integration?

Tables 5 and 6 show a comparison of the political measures regarding migrant integration between the groups of Finland and Sweden, Luxembourg and Spain, and Germany and Italy.

Table 5: **Comparison of the Political Measures Regarding Migrant Integration** (between Countries) (Gr: number of codes, GS: number of quotes)

	Top Ten		Comprehensive Approach		Temporary Integration		
	Governance of migrant integration in Sweden Gr=33	Governance of migrant integration in Finland Gr=21	Governance of migrant integration in Luxembourg Gr=24	Governance of migrant integration in Spain Gr=20	Governance of migrant integration in Germany Gr=17	Governance of migrant integration in Italy Gr=15	Sum
Civic integration Gr=9; GS=2	3	1	2	1	1	1	9
Integration system centralization Gr=23; GS=4	5	4	4	3	4	3	23
Language acquisition Gr=15; GS=3	5	1	4	1	2	2	15
Sum	13	6	10	5	7	6	47

Table 6**: Comparison of the Political Measures Regarding Migrant Integration between the Groups of Finland and Sweden, Luxembourg and Spain, and Germany and Italy**

	Finland and Sweden	Luxembourg and Spain	Germany and Italy
Civic integration measures	Stricter civic integration requirements	Less stringent civic integration requirements	Focus on integration into the labor market
Integration system centralization	More centralized integration system	More decentralized integration system	More decentralized integration system
Language acquisition approach	Strong emphasis on early language acquisition	More flexible approach to language acquisition	Less stringent language requirements
Overall approach	Assimilationist approach	Integrationist approach	Integrationist approach

Finland and Sweden

Civic integration: Finland and Sweden have more stringent civic integration requirements for permanent residency than Luxembourg, Spain, Germany, and Italy. This includes language proficiency exams, knowledge of Finnish or Swedish society, and participation in civic education courses.

Integration system centralization: Finland and Sweden have more centralized integration systems than Luxembourg, Spain, Germany, and Italy. This means that the national government plays a greater role in developing and implementing integration policies.

Language acquisition: Sweden has strong language learning requirements for newcomers, with language courses provided as soon as possible after arrival. Interestingly, if we look at the frequencies only, there is a big difference between Sweden and Finland. However, the fact is that in Finland local integration services offer individual integration plans for immigrants who newly arrived. Participation is mandatory for them, and it contains language courses among other things. Frequency of occurrence as an indicator does not allow for a more in-depth analysis of differences between Sweden and Finland, therefore future research should include other approaches or data collection tools.

Luxembourg and Spain
Civic integration: Luxembourg and Spain have less stringent civic integration requirements for permanent residency than Finland and Sweden.

Integration system decentralization: Both countries have more decentralized integration systems than Finland and Sweden. This means that local authorities and civil society organizations play a greater role in tailoring integration measures to the specific needs of their communities.

Language acquisition: Both countries have more adaptable approaches to language learning than Finland and Sweden. This includes allowing for personalized learning journeys and targeted support. There is, once more, a significant disparity between the two countries. Further research is thus required to determine the extent of these differences.

Germany and Italy
Civic integration: Germany and Italy have civic integration requirements that are more flexible than those of Finland and Sweden, or Luxembourg and Spain. The main focus is on labor market integration.

Integration system decentralization: Germany and Italy have more decentralized integration systems than Finland and Sweden, comparable with Luxembourg and Spain.

Language acquisition: Germany and Italy have language requirements that are less stringent than those of Luxembourg and Spain.

In general, Finland and Sweden have a more assimilationist approach (Bowskill et al., 2007) to migrant integration, aiming to integrate newcomers fully into the Finnish or Swedish society. This is reflected in their stronger language requirements (Sweden), stricter civic integration measures, and more centralized integration systems. In contrast, Luxembourg, Spain, Germany, and Italy have a more integrationist approach (Bowskill et al., 2007) , recognizing the value of diversity and aiming to create a more inclusive society where migrants can retain their cultural identities while also participating fully in the host society. This is reflected in their more flexible language acquisition approach, less stringent civic integration measures, and more decentralized integration system.

Discussion

While we acknowledge that several dimensions play a role in immigrants' integration, our analyses have revealed that the support of migrants' active engagement in and ownership of their integration (Emphasis on Active Citizenship) and their labor market integration (Labor market integration) are important factors in the success of integration. Countries need a strong mainstream strategy, but it is also beneficial if local support for integration is arranged.

Unfortunately, the descriptions of integration programs were not detailed enough to enable a precise comparison of language learning-related characteristics. This suggests that "linguistic integration" is not necessarily highlighted as a priority at the policy level. This represents a limitation of the study. Further research is necessary to adequately demonstrate the need for EU-wide policies to prioritize the support of tailor-made local language learning initiatives to support immigrants to integrate more effectively.

Considering the findings of the MIPEX study and the results of this study, a crucial policy recommendation concerning the linguistic integration of adult migrants is the formulation of evidence-based language policies. It is recommended that research and data from studies such as MIPEX be employed to inform language integration policies, ensuring that they are based on empirical evidence rather than political assumptions.

Furthermore, the provision of accessible language learning opportunities is also a crucial component of supporting migrants' language learning. It is recommended that free or low-cost language courses, which are designed to meet the diverse needs, backgrounds, and goals of adult migrants, be made available to new arrivals in the host country. Conversely, the promotion of autonomous learning is also of significant importance. It is recommended that migrants be encouraged and supported in their self-directed language learning. This may be achieved through the implementation of a learner-centered approach, which would empower migrants to determine their own learning needs and goals.

It is also imperative at the policy level to guarantee fair and appropriate language requirements for newcomers. It is essential that language proficiency requirements for residence, citizenship, and entry are reasonable and do not impede the process of integration.

While it is indubitable that learning the language of the host country is of the utmost importance for migrants, it is equally crucial to recognize and value their existing language skills while providing support for the acquisition of the host country's language(s). Language learning should be integrated with broader integration goals. For instance, language education should be connected to other aspects of integration, such as employment, social participation, and cultural understanding. To achieve this, it is necessary to provide migrants with targeted support. Language support programs must be devised for those who are most vulnerable, such as refugees or migrants with low literacy levels. Furthermore, it is of the utmost importance that language requirements and policies do not infringe upon the human rights of migrants or create unnecessary barriers to integration.

In conclusion, a two-way approach to integration should be encouraged. It is important to recognize that linguistic integration is a two-way process, involving both migrants and the host society and that policies should reflect this understanding. The objective of these policy proposals is to create a more inclusive, effective, and rights-based approach to the linguistic integration of adult migrants, which takes into account the complexity and diversity of migrants' needs and experiences.

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Appendix 1: Country profiles

Top Ten

Sweden *(MIPEX score: 86)* has a long history of migration and has been implementing integration policies since the 1970s. The government has set up various integration programmes, the centrepiece of which is the Establishment Programme, which aims to help migrants learn Swedish, find work and become self-sufficient. The programme is run by the Swedish Public Employment Service and includes language courses, job coaching and civic orientation courses. Integration in Sweden is a cross-sectoral issue, with different ministries and agencies working together to achieve different goals. Authorities such as the Ministry of Employment and the Ministry of Culture have a coordinating role. County councils are responsible for coordinating regional and local integration policies, and municipalities are responsible for providing accommodation for refugees. There are various sources of funding for integration in Sweden, including EU funds such as the Asylum, Migration and Integration Fund and the European Social Fund. Other public and private sources of funding are also available. Several actors, such as the Swedish Red Cross and Save the Children Sweden, play a role in providing integration services, and statistics on migration and integration are published by Statistics Sweden, the Swedish Migration Agency and the Swedish Public Employment Service. Sweden has been rated as one of the top 10 countries in the world in terms of integration according to the 2020 Migrant Integration Policy Index (MIPEX).

Finland *(MIPEX score: 85)* has experienced an increase in international migration since the 1990s, with a significant number of migrants coming from Russia. The government has implemented a National Integration Programme to promote the integration of migrants, focusing on areas such as education, labour market participation and combating racism. Local integration services are required to draw up individual integration plans for newcomers, including language courses, civic education and vocational training. The Ministry of Economic Affairs and Employment is responsible for developing and guiding migrant integration policy. Municipalities are responsible for implementing integration policies in cooperation with the Employment and Economic Development Offices. Civil society organisations, such as the Centre of Expertise in Integration of Immigrants, support practitioners working in the field of integration. Funding for immigrant integration is available through EU funds, such as the Asylum, Migration and Integration Fund and the European Social Fund. Other public and private funding is also available. The Ministry of the Interior is the national managing authority for the Asylum, Migration, and Integration Fund, while the Ministry of Economic Affairs and Employment and the Centres for Economic Development, Transport and the Environment are the national managing authorities for the European Social Fund. Finland's approach to integration has been evaluated through the Ministry of Economic Affairs and Employment's annual reports and the Migrant Integration Policy Index. The country has also adopted legislation on foreigners, asylum, integration, citizenship and anti-discrimination.

Various public authorities, such as the Ministry of Economic Affairs and Employment, and stakeholders, including trade unions, private companies, and educational institutions, play a role in providing integration services and implementing integration programs. There are also organizations that campaign and publish statistics on migration and integration in Finland.

Comprehensive integration – Slightly favorable

Luxembourg *(64)* has been a country of immigration for over 100 years, attracting both EU citizens and third-country nationals. To facilitate the integration of migrants, Luxembourg has implemented an integration strategy, including a national action plan on integration and against discrimination. The country also has an integration program known as the Integration Contract, which offers language and civic integration courses.

The government is responsible for evaluating integration efforts and reports every five years on the situation of migration, integration, and anti-discrimination. Various laws have been enacted to support the integration of migrants, including laws on foreigners, asylum, integration, citizenship, and anti-discrimination.

Public authorities involved in the integration of migrants include the National Reception Office (ONA), the Ministry of the Family, Integration and the Greater Region, and the Consultative Committee for Integration in each municipality. Civil society organizations such as the National Council for Foreigners also play a role in promoting integration.

Funding for integration initiatives comes from various sources, including EU funds such as the Asylum, Migration, and Integration Fund (AMIF) and the European Social Fund (ESF). Other public and private funding is also available.

Several stakeholders are involved in the provision of integration services, the implementation of the integration program, and the publication of statistics on migration and integration in Luxembourg. These actors include organizations such as ASTI, Caritas Luxembourg, and the Luxembourg Reception Office.

Overall, Luxembourg has adopted a comprehensive approach to migrant integration, providing support programs and resources to help migrants successfully integrate into society.

Spain *(60)* Spain has a decentralized governance system for migrant integration, with responsibilities shared between the central government, regional governments (Autonomous Communities), and local authorities. The central government is responsible for overall policy development, while the regional governments are responsible for implementing integration measures in their respective territories. Local authorities play a key role in providing integration services and support to migrants at the community level.

Spain's integration policy is based on the principle of integration as a two-way process, to enable migrants to participate fully in Spanish society while also respecting their cultural identities. The country has a comprehensive range of integration measures in place, including language training, vocational training and education, access to the labor market, and social support.

In recent years, Spain has made significant progress in improving its integration policy. These efforts include the introduction of a new integration law, the development of regional and local integration plans, and the increased involvement of civil society organizations in integration initiatives.

Despite these advances, Spain continues to face challenges in integrating migrants. These challenges include the high concentration of migrants in certain regions, the diversity of their backgrounds, and the need to integrate them into a society that is already experiencing demographic and socioeconomic changes.

Overall, Spain has a well-developed and multifaceted integration policy framework. However, continuous efforts and adaptation are required to ensure that the policy effectively addresses the needs of migrants and fosters social cohesion.

Temporary integration – Halfway favorable

Germany *(58)* has a multi-level governance system for the integration of migrants, with responsibilities shared between the federal government, the Länder, municipalities and civil society organisations. The federal government is responsible for overall policy development and coordination, while the Länder are responsible for implementing integration policies in their respective jurisdictions. Municipalities play a key role in providing integration services and support to migrants, and civil society organisations are involved in a variety of initiatives to promote integration.

Germany's integration policy is based on the principle of integration as an opportunity for all and aims to enable migrants to participate fully in German society. The country has a range of integration measures, including language training, vocational training and education, access to the labour market and social support.

In recent years, Germany has taken a number of steps to improve its integration policy. These include the introduction of a new Integration Pact, which sets out clear expectations for migrants and provides them with a roadmap for integration. Germany has also increased funding for integration measures and is working to strengthen cooperation between different levels of government.

Despite these efforts, Germany still faces challenges in integrating migrants. These challenges include the large number of migrants arriving in the country, the diversity of their backgrounds and the need to integrate them into a society that is already experiencing social and economic tensions.

Overall, Germany has a comprehensive and well-developed integration policy. However, it is a complex policy that requires continuous effort and adaptation to ensure that it effectively meets the needs of migrants in the country.

Italy *(58)* has a multi-level governance framework for the integration of migrants, with regional governments having autonomy in policy planning and implementation. The country does not have a stand-alone integration law, but integration measures are implemented through administrative regulations. Newly arrived immigrants are required to sign an integration agreement in which they commit to achieving specific integration goals within two years. The fulfillment of these goals is a condition for the renewal of residence permits.

The Ministry of Labour and Social Policy is responsible for monitoring and evaluating the socio-economic integration of migrants and publishes annual reports on this topic. However, there is no systematic evaluation of integration policies in Italy, except for those funded by the EU's Asylum, Migration and Integration Fund (AMIF).

The main actors responsible for implementing integration policies are local authorities and public services, supported by civil society organizations. Non-state actors are consulted in the policy-making process, but their participation depends on the willingness of the government.

Funding for integration measures in Italy comes from various sources, including EU funds such as the AMIF and the European Social Fund (ESF). There are also other public and private funds available to service providers and stakeholders. The ESF is managed by the Ministry of Labour and Social Policy, while the AMIF is managed by the Ministry of Citizenship and Immigration.

Several organizations in Italy provide integration services, such as ARCI, Diaconia Valdese and ANOLF. These organizations offer a range of services including counseling, language courses, and social support.

In terms of legislation, Italy has laws on foreigners, asylum, citizenship, and anti-discrimination. The main legal framework for immigration and integration is Legislative Decree 286/1998, while asylum legislation is based on EU directives. There is also legislation on anti-discrimination, although it is not a separate law.

Overall, Italy's integration policy has been categorized as focused on temporary integration, with some integration measures in place but little change in recent years.

Appendix 2

Code Structure and Frequencies (Gr: number of codes, GS: number of quotes)

	Governance of migrant integration in Finland Gr=21	Governance of migrant integration in Germany Gr=17	Governance of migrant integration in Italy Gr=15	Governance of migrant integration in Luxembourg Gr=24	Governance of migrant integration in Spain Gr=20	Governance of migrant integration in Sweden Gr=33	Sum
○ Centralized integration strategy Gr=14	1	3	2	3	2	3	14
○ Characteristic of integration strategy Gr=0	0	0	0	0	0	0	0
○ Characteristic of integration strategy: mobilization of all stakeholders Gr=3	0	1	0	1	1	0	3
○ Civic education Gr=10	1	1	3	1	1	3	10
○ Civil society Gr=12	1	1	2	5	3	0	12
○ Civil society: adult education Gr=1	0	0	0	0	1	0	1
○ Civil society: consultative role Gr=1	0	0	1	0	0	0	1
○ Civil society: Forum for the Social Integration of Immigrants Gr=1	0	0	0	0	1	0	1
○ Civil society: integration summit Gr=1	0	1	0	0	0	0	1
○ Civil society: language training Gr=1	0	0	0	0	1	0	1
○ Civil society: main responsibility for implementation of measures Gr=1	0	0	1	0	0	0	1

	Governance of migrant integration in Finland Gr=21	Governance of migrant integration in Germany Gr=17	Governance of migrant integration in Italy Gr=15	Governance of migrant integration in Luxembourg Gr=24	Governance of migrant integration in Spain Gr=20	Governance of migrant integration in Sweden Gr=33	Sum
○ Civil society: many activities Gr=2	0	0	0	1	1	0	2
○ Civil society: ministry support for practitioners in the field of integration r=5	1	0	0	3	1	0	5
○ Civil society: National Council for Foreigners Gr=1	0	0	0	1	0	0	1
○ Continuous Evaluation and Monitoring Gr=1	1	0	0	0	0	0	1
○ Continuous Evaluation and Monitoring (2) Gr=7	2	1	1	1	1	1	7
○ Continuous Evaluation and Monitoring (2): comprehensive review of integration after each government term Gr=1	1	0	0	0	0	0	1
○ Continuous Evaluation and Monitoring (2): on project level Gr=1	0	0	0	0	1	0	1
○ Continuous Evaluation and Monitoring (2): through an independent committee Gr=2	0	0	0	1	0	1	2
○ Continuous Evaluation and Monitoring (2): through ministry Gr=6	1	1	1	1	1	1	6

	Governance of migrant integration in Finland Gr=21	Governance of migrant integration in Germany Gr=17	Governance of migrant integration in Italy Gr=15	Governance of migrant integration in Luxembourg Gr=24	Governance of migrant integration in Spain Gr=20	Governance of migrant integration in Sweden Gr=33	Sum
○ Continuous Evaluation and Monitoring (2): through MIPEX Gr=6	1	1	1	1	1	1	6
○ Continuous Evaluation and Monitoring (2): through municipalities r=1	1	0	0	0	0	0	1
○ Focus of integration strategy Gr=34	3	3	1	10	6	11	34
○ Focus of integration strategy: civic orientation Gr=4	0	0	0	2	1	1	4
○ Focus of integration strategy: cooperation of local and national authorities with civil society Gr=2	0	0	1	1	0	0	2
○ Focus of integration strategy: cooperation of local authorities with civil society Gr=1	0	0	1	0	0	0	1
○ Focus of integration strategy: cultural diversity Gr=1	0	0	0	0	1	0	1
○ Focus of integration strategy: development of a local integration strategy Gr=1	0	0	0	1	0	0	1
○ Focus of integration strategy: equal rights, obligations and opportunities Gr=1	0	0	0	0	0	1	1

	Governance of migrant integration in Finland Gr=21	Governance of migrant integration in Germany Gr=17	Governance of migrant integration in Italy Gr=15	Governance of migrant integration in Luxembourg Gr=24	Governance of migrant integration in Spain Gr=20	Governance of migrant integration in Sweden Gr=33	Sum
○ Focus of integration strategy: fighting discrimination Gr=7	0	0	0	3	3	1	7
○ Focus of integration strategy: fighting racism Gr=4	1	0	0	1	2	0	4
○ Focus of integration strategy: fostering equality in schools Gr=1	0	0	0	0	0	1	1
○ Focus of integration strategy: immigrants´participation in higher education Gr=1	1	0	0	0	0	0	1
○ Focus of integration strategy: immigrants´participation in labour market Gr=16	2	2	0	2	2	8	16
○ Focus of integration strategy: immigrants´participation in society Gr=1	1	0	0	0	0	0	1
○ Focus of integration strategy: language training Gr=6	0	0	0	4	1	1	6
○ Focus of integration strategy: mainstream policies Gr=3	0	0	0	1	1	1	3
○ Focus of integration strategy: multi-level governance Gr=1	0	1	0	0	0	0	1

	Governance of migrant integration in Finland Gr=21	Governance of migrant integration in Germany Gr=17	Governance of migrant integration in Italy Gr=15	Governance of migrant integration in Luxembourg Gr=24	Governance of migrant integration in Spain Gr=20	Governance of migrant integration in Sweden Gr=33	Sum
○ Focus of integration strategy: participation of migrants in leisure activities Gr=1	1	0	0	0	0	0	1
○ Focus of integration strategy: using migrants´cultural strength to enhance innovation Gr=1	1	0	0	0	0	0	1
○ Focus of integration strategy: vocational education Gr=4	0	2	1	0	0	1	4
○ Funding for labour market integration measures Gr=1	0	1	0	0	0	0	1
○ Funding for language courses Gr=1	0	1	0	0	0	0	1
○ Funding for recognition of professional qualifications Gr=1	0	1	0	0	0	0	1
○ Integration programme Gr=22	2	5	2	6	0	7	22
○ Integration programme: access to internships (labour market) Gr=2	0	0	0	0	0	2	2
○ Integration programme: adult education Gr=1	0	0	0	0	0	1	1
○ Integration programme: civic education Gr=7	1	1	1	1	0	3	7
○ Integration programme: financial support for migrants Gr=1	0	0	0	0	0	1	1

	Governance of migrant integration in Finland Gr=21	Governance of migrant integration in Germany Gr=17	Governance of migrant integration in Italy Gr=15	Governance of migrant integration in Luxembourg Gr=24	Governance of migrant integration in Spain Gr=20	Governance of migrant integration in Sweden Gr=33	Sum
○ Integration programme: integration contract Gr=2	0	0	1	1	0	0	2
○ Integration programme: language course Gr=12	1	1	2	3	0	5	12
○ Integration programme: mandatory Gr=3	1	0	1	0	0	1	3
○ Integration programme: non mandatory Gr=2	0	0	0	2	0	0	2
○ Integration programme: support of labour market integration Gr=9	0	3	1	2	0	3	9
○ Integration programme: support of self-sufficiency Gr=1	0	0	0	0	0	1	1
○ Integration programme: validation of previous educational and occupational experience (labour market) Gr=3	0	2	0	0	0	1	3
○ Integration programme: vocational training Gr=8	1	3	2	1	0	1	8
○ Integration work Gr=15	3	0	2	2	4	4	15
○ Integration work: at commune level Gr=5	0	0	1	1	3	0	5
○ Integration work: centralized general development, but municipalities implement Gr=2	1	0	0	0	0	1	2
○ Integration work: individual integration plans Gr=2	1	0	0	0	0	1	2

	Governance of migrant integration in Finland Gr=21	Governance of migrant integration in Germany Gr=17	Governance of migrant integration in Italy Gr=15	Governance of migrant integration in Luxembourg Gr=24	Governance of migrant integration in Spain Gr=20	Governance of migrant integration in Sweden Gr=33	Sum
○ Integration work: intercultural activities organised by migrant associations Gr=1	0	0	0	1	0	0	1
○ Integration work: mainstream policies complemented by targeted measures Gr=4	0	0	0	1	2	1	4
○ Integration work: trans-sectorial issue Gr=2	0	0	0	0	1	1	2
○ Language course Gr=16	1	4	4	3	2	2	16
○ Law Gr=30	5	5	4	5	4	7	30
○ Law: anti-discrimination Gr=6	1	1	1	1	1	1	6
○ Law: asylum law Gr=6	1	1	1	1	1	1	6
○ Law: citizenship law Gr=6	1	1	1	1	1	1	6
○ Law: integration law Gr=4	1	1	0	1	0	1	4
○ Law: law on foreigners Gr=6	1	1	1	1	1	1	6
○ Law: permanent residence permit only for self-subsistent migrants Gr=2	0	0	0	0	0	2	2
○ Municipalities role Gr=9	1	0	2	3	2	1	9
○ Municipalities role: civic education Gr=1	0	0	0	0	1	0	1
○ Municipalities role: education Gr=1	0	0	1	0	0	0	1

	Governance of migrant integration in Finland Gr=21	Governance of migrant integration in Germany Gr=17	Governance of migrant integration in Italy Gr=15	Governance of migrant integration in Luxembourg Gr=24	Governance of migrant integration in Spain Gr=20	Governance of migrant integration in Sweden Gr=33	Sum
○ Municipalities role: individual integration plans Gr=3	1	0	0	2	0	0	3
○ Municipalities role: labour market integration Gr=1	0	0	1	0	0	0	1
○ Municipalities role: language education Gr=2	0	0	1	0	1	0	2
○ Municipalities role: providing adult education Gr=1	0	0	0	0	0	1	1
○ Municipalities role: providing civic orientation Gr=1	0	0	0	0	0	1	1
○ Municipalities role: providing language course Gr=1	0	0	0	0	0	1	1
○ Municipalities role: substantial Gr=5	1	0	1	1	1	1	5
○ Municipalities role: vocational training Gr=1	0	0	1	0	0	0	1
Summe	47	50	50	85	60	92	384

Fatma HAMDI & Ahlem KHEFACHA & Míra MAKAI & Beatrix SÉLLEI

The key of academic success – different keys to different faculties

Introduction

Engineering skills in a broader context

As the world continues to evolve, discoveries and research findings constantly shape our understanding of it. These advancements in knowledge help us adapt and develop innovative solutions to human challenges, however alongside the gained knowledge, individuals must also acquire new skills and experiences to keep up with the evolving labour market. The field of engineering is an excellent example of this, as engineers were required to be primarily proficient in their scientific, mathematics, and practical fields. In addition to that, nowadays, they are also expected to have a set of soft skills that encompasses problem-solving, effective communication, emotional intelligence, and leadership skills (Itani and Srour 2016; Kamaruzaman et al. 2019). The Accreditation Board for Engineers and Technology (ABET) also followed the flow of world development and nowadays emphasizes the importance and need for engineering students to be proficient in non-technical skills (Felder 1998).

In addition to the technical skills students and engineers will acquire in their curriculum, they are also expected to develop their soft skills. However, research shows a gap between the corporate needs and what students have learned (Kamaruzaman et al. 2019), which makes it the educational institution's responsibility to ensure their students' proper development and learning to meet the labour market requirements and avoid having a skills gap. A recent study of Gesun et al. (2021) shows that changing the approach in STEM undergraduate education in a transformative and sustainable way will be the only way to achieve "*engineering thriving* as a process by which engineering students develop optimal functioning in undergraduate engineering programs" (19p.). A recent experiment in a university in Russia where students learnt soft skills as a compulsory subject showed positive outcome with future employers appreciating the initiative (Romanenko et al, 2024).

Academic success vs. drop-out

Soft skills, including emotional intelligence, coordination, social influence or complex problem solving, are now considered not only a must-have for individuals and engineers in the job market (Kamaruzaman et al. 2019) but also play a crucial role during the educational phase of engineering students, especially their first year of engineering studies. Therefore, the better understanding and more intensive exchange between the academia and the job market is essential to reshape the education and curricula for students of the field in order to make them more likely to succeed in the long term (Barni de Campos, Martins de Resende & Borges Fagundes 2022).

Transitioning from high school to university can be a challenging, stressful, and transformative experience (Brooks and DuBois 1995; Pratt et al. 2000). The difference between these two environments requires students to learn to cope with the increased responsibility and independence. More responsibilities come with change that many students need help accepting and handling, which can harm their academic performance and raise their risk of dropping out.

Approximately one-third of students globally opt to drop out, making this a critical issue (Ulrich 2014; Baranyi et al. 2020). While universities must address students' drop-out issues, they must first assess the possible factors that might lead to such a decision. Traditionally, dropout investigations look into the previous achievements of students, such as their grades and non-cognitive characteristics, which can be a strong way to predict their success (Kumar et al. 2017; Alyahyan and Dustegor 2020).

While it can be a good predictor, other studies showed that considering psychological factors can also predict dropout and indicate potential interventions to improve academic performance and retention (Séllei et al. 2021).

Renewing our ways to define academic success of engineering students and broaden the traditional definitions by investigating multiple external (e.g. academic) and internal (personal or contextual) contributing factors might provide us with a more profound understanding of the phenomenon and also with more accurate actions overall (Gesun, 2021).

A few students might decide to shift their studies to another field, however, studies showed that most of them have a low level of soft skills (Muammar and Alhamad 2023; Shvedova et al 2022; Khefacha and Séllei 2023), which can result in difficulties in managing the change and lead them to leave the university.

As the study of Caeiro-Rodríguez et al. (2021) also shows, university students are expected to create sustainable, yet innovative solutions to complex problems that definitely goes beyond of technical knowledge and expertise or competencies and include many of the so called soft skills such as problem solving, strategic thinking teamwork or aquiring new skills.

This emphasizes the importance of having the mentioned soft skills, in addition to rather interpersonal examples of them, such as coping skills, stress management, emotional intelligence and considering psychological factors to predict academic success, failure, and university performance (Séllei et al. 2021).

Psychological attributes in the background of success and dropout

Differences in personality traits of students can be an accountable factor to take into consideration. Studies found a difference in students' personality traits in different areas of study, such as engineering or social sciences studies (Kline and Lapham 1992). Engineers, for example, had a high score on the mindedness factor; additionally, scientists students had the conformity and conscientiousness factors (Kline and Lapham 1992). Acknowledging that these factors might differ from one field of study to another is essential. There are studies that confirm that there is a personality difference between faculties (Morstain and Smart 1976). For example, students enrolled in engineering faculty were found to have a higher level of conscientiousness and conformity than other faculties (Kline and Lapham 1992).

Acknowledging the emotions effect on an engineering academic life is crucial for a successful educational journey and life (Lönngren et al. 2023). Emotional Intelligence (EI) was identified as one of the key soft skills that would help students thrive and succeed in their academic life (Parker et al. 2004; Yeo and Carter 2011; Chapin 2015). Daniel Goleman confirmed in 1995 in his book “Emotional Intelligence: Why it Can Matter More than IQ” and still confirms in 2024 in his new co-written book “Optimal” that EI is twice as important as Intelligence Quotient (IQ) for professional and personal success (Goleman 1995; Goleman and Cherniss 2024). Emotional intelligence encompasses the ability to be aware of our own and others' emotions and use that knowledge for interpersonal relationship management. It also brings in the ability to regulate emotions and influence others' motivation. Such a skill is an excellent addition for first-year engineering students who want to adapt to changes. Emotional ability refers to the ability to have control over our behavior, help with decision-making, and enhance general well-being/quality of life. Many studies showed that EI is one example of the possible factors that can affect academic achievement, providing support in predicting dropout rates (Parker et al. 2004; Lam and Kirby 2002; Jaeger 2003; Chapin 2015; Saklofske et al. 2012). However, emotional intelligence levels differ in natural sciences, social, and health studies at the University of Ataturk (Karaman Özlü et al. 2016). Another study also found a difference in the level of EI between law and governance students and education students in India (Kant 2019).

Other psychological factors can also impact student’s academic outcomes. These mostly relate to well-being (Rüppel et al. 2015; Cárdenas et al. 2022; Upadyaya and Salmela-Aro 2013; Goodday et al. 2019). The first way is based on positive education and the Penn Resiliency Program (Seligman et al. 2009). On the other hand, many well-being-enhancing activities strengthen the individual's PERMA factors

(Kovich et al. 2023). The PERMA includes five factors that a person needs to flourish: positive emotions, engagement, relationship, meaning, and accomplishment (Seligman 2011). To focus on well-being is in accordance with United Nations Educational & Scientific & Cultural Organization's goal (2016).

Another main factor beyond success is the coping skills of students. Problem-focused coping strategies seem to be adaptive and enhance students' satisfaction, too (Alimoglu et al. 2011). Other studies found that academic coping is a mediator variable behind success (Kirikkanat and Soyer 2017; Saklofske et al. 2012; Khan 2023). Meanwhile, maladaptive coping strategies can change university life perception and failure in studies (McNaughton-Cassill et al. 2021).

Determining the psychological factors that can lead a student to drop out of university would allow universities to prevent such events. It is important to remember that these factors might differ from one faculty to another, even in the same university. We can see during the literature search and review that nursing, medicine, engineering, social sciences, economics, human sciences, and law fields have their journals to share educational topics, respectively. They differ in which soft skills are primarily important in their field.

This research aims to outline the difference between the aforementioned psychological factors linked to students' dropping out, depending on their field of study within one university, to offer characterized solutions to the universities.

Methodology

Research design

This study is a quantitative research using a list of psychological questionnaires. First-year bachelor engineering and economics students of 2020 and 2021 at the Budapest University of Technology and Economics were approached in a psychology class to volunteer for the study. Students were enrolled in different faculties within the university, and they were assured of the anonymity of the data collected. This paper focuses on analysing the possible differences between the factors of dropout and success depending on the faculty within one university.

To better understand the psychological factors that affect students' risk of leaving their studies, a set of surveys were shared with them. The original assessment battery contained more tools, the total approximate completion time required is 1h30 to 2 hours. This paper only presents the relevant questionnaires for this study's aspect, which contains five sets of psychological factors-related questionnaires and demographic data.

The demographic data contained questions about age, gender, family, and other living circumstances. We used the Emotional Intelligence Inventory, developed by Bar-On (Bar-On 1997a; 1997b). The test contains 121 items and uses a 6-point Likert-scale as a self-report, divided into 5 scales also divided in a total of 15 second level of subscales: intrapersonal scale (self-regard, emotional self-awareness, assertiveness, independence, and self-actualization), interpersonal scale (empathy, social responsibility, and interpersonal relationship), stress management scale (stress tolerance and impulse control), adaptability scale (reality-testing, flexibility, and problem-solving) and general mood scale (optimism and happiness). The PERMA Profiler allowed us to measure the positive source competencies, which represent the first holistic tool of well-being (Butler and Kern 2016). We used the 23-item questionnaire with 10-point Likert scales. It has seven subscales, five from the original PERMA structure: positive emotion, engagement, positive relationship, meaning or purpose in life, accomplishment, and two new factors of the refined model: negative emotion and physical health (Butler and Kern 2016). To measure the perseverance and passion to reach a long-term goal, we used the Grit-Short (Grit-S) questionnaire. This questionnaire contains 8 items answered using a Likert scale (Duckworth and Quinn 2009). On the behavioural level, we used the coping preferences test and the psychological immune system which focuses on mental and psychological aspect of stress management. Both tests were developed in Hungary by Oláh (Oláh 1995; 2005), contain 80 items each and are answered using a 4 points Liker-scale. The coping test measures a total of 8 coping mechanisms; problem-focused strategies, support-finding strategies, and emotion-focused strategies (impulse control, emotion-focused actions, acting out, self-punishment, acquiescence, and attention diversion). The psychological immune system (pi) focus on the following 16 subscales; positive thinking, sense of control, sense of coherence, feeling of growth, challenge seeking, social source monitoring, goal orientation, self-efficiency, creativity, mobilizing skills, social source founding skills, learned optimism), mindfulness, synchronization skill, impulse control, irritability-control, and control of emotions.

For the success and dropout analysis we got students' educational data (credit, GPA) from the Central Learning Office.

This study used machine learning techniques, specifically the XGBoost algorithm, to analyze the most important psychological factors influencing student dropout within different university faculties. The XGBoost algorithm combines decision trees and live-variable analysis in the training process (Du 2022; Du et al. 2022). In order to consider interactions between features and get an understanding of feature impact, we chose to use SHAP (SHapley Additive exPlanations) values. This an approach that stems from game theory and is used to explain the output of any machine learning model. "It connects optimal credit allocation with local explanations using the classic Shapley values from game theory and their related extensions" (Lundberg and Lee 2017). For our model we decided to use the SHAP beeswarm plot to analyse the most important factors leading to student drop out. Features appearing on the y-axis of the plot are organized by their mean absolute SHAP values, which means they are in descending order of importance. Each point on the plot represents a student in the study. The position of each point on the x-axis shows the impact that feature has on the model's prediction for a given individual, in our case meaning that points on the left side of the axis impact dropout and points on the right side impact success.

Results

Sample description

We received 1097 answers from women and 1857 from men, totalling 2947 participants. The Budapest University of Technology and Economics contains different faculties that include engineering such as Mechanical engineering, Civil engineering, Electrical Engineering, and Informatics, and non-engineering such as the faculty of Economic and Social Sciences.

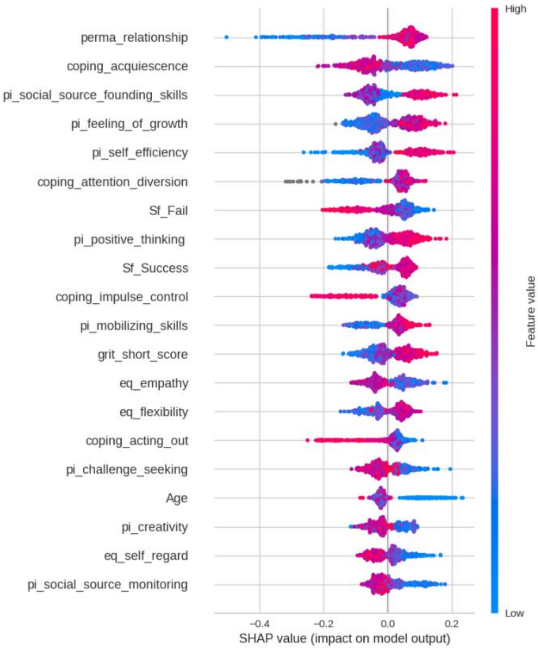
We analyzed the answers with two groups, the economics and engineering students, which encompass engineering faculties and natural science. In this paper, we merge the data of natural science students to the engineering subsample; they should be partly similar to engineering students because their field of science is the same. In the two subsamples, there is a higher number of male engineering students, and the opposite is a higher number of female students participating in this study from the faculty of economics and social science. The economics student subsample contain 844 records, with 517 female and 327 male respondents. The engineering subsample contains 2103 records, with 578 female and 1525 male respondents. These distributions represent the gender characteristics of the university faculties.

The average age at the time of completing the questionnaire was 20.65 years.

Analysis

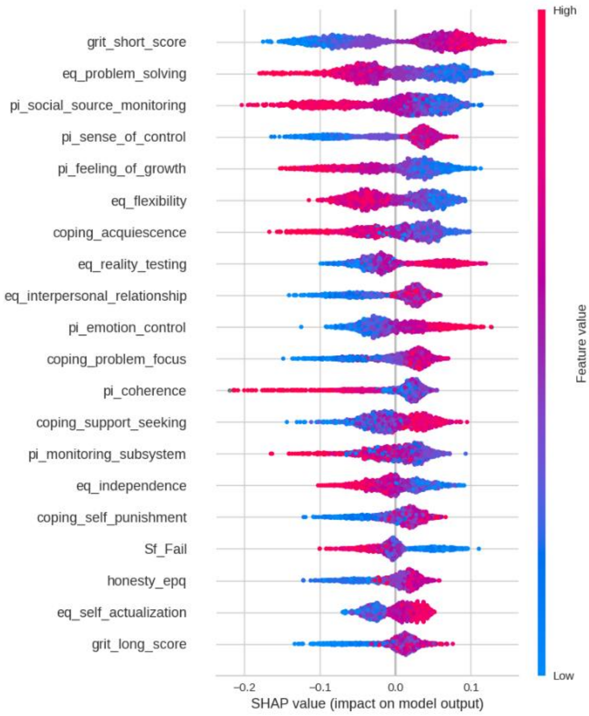
As seen in figures 1 and 2, psychological factors do have some effect on the prediction of students' success alongside dropout as it can be seen that few possible factors have SHAP values stretching away from the 0 axes. The further it is from the 0 axis, the bigger impact it has. The SHAP values figures are both shown in order of the most important to the least important in terms of affecting dropout.

Fig. 1. **Economics students factors**



Source: Authors

Fig. 2. **Engineering students factors**



Source: Authors

Table 1 shows the interrelation between the first 5 most important factors from the economics and engineering faculties regarding the level of value of the factors related to success and dropout.

Table 1. **Most important factors for economics and engineering affecting students' outcome**

<table>
<tr><th rowspan="2"></th><th colspan="2">Engineering</th><th colspan="2">Economics</th></tr>
<tr><th>Factors related to success</th><th>Factors related to dropout</th><th>Factors related to success</th><th>Factors related to dropout</th></tr>
<tr><td rowspan="4">High value</td><td>Grit Short score</td><td>EI Problem solving</td><td>PERMA relationship</td><td rowspan="4">Coping acquiescence</td></tr>
<tr><td rowspan="3">Psychological immunity (PI) sense of control</td><td>PI social source monitoring</td><td>PI social source founding skills</td></tr>
<tr><td rowspan="2">PI feeling of growth</td><td>PI feeling of growth</td></tr>
<tr><td>PI self-efficiency</td></tr>
<tr><td rowspan="4">Low value</td><td>EI Problem solving</td><td>Grit score</td><td rowspan="4">Coping acquiescence</td><td>PERMA relationship</td></tr>
<tr><td>PI social source monitoring</td><td rowspan="3">PI sense of control</td><td>PI social source founding skills</td></tr>
<tr><td rowspan="2">PI feeling of growth</td><td>PI feeling of growth</td></tr>
<tr><td>PI self-efficiency</td></tr>
</table>

Source: Authors

In the case of the Faculties of Engineering and Natural Science, our analysis identified grit short score, problem-solving from the emotional intelligence framework, and psychological immunity social source monitoring, sense of control and feeling of growth factors. This suggests that factors related to student engagement and problem-solving skills are central to student persistence in engineering programs. Similar to the life of engineers.

The grit short score and psychological immunity sense of control, it is when they have a high value that they are most likely to succeed, while if they have a low value, they are most likely to fail or to drop out. The grit factor indicates the degree of perseverance and determination that makes one highly motivated and less likely to give up in front of obstacles. Having a sense of control in their studies can maintain students' motivation as they take ownership of their results, allowing them to set realistic goals and effective study strategies. Low scores in these factors are most likely to drive them to drop out of their studies. The second most important factor after the grit score is the EI problem solving, where Figure 2 and Table 1 show that when they have a high value in it, they are most likely to fail and drop out of university. This might be explained by the fact that a high level of problem-solving can drive students into overconfidence, taking away their chance to be team players and focusing on finding a solution to a specific problem might lead them to have poor time management, which can lead to missed deadlines and project failures. This can drive them to have negative feelings about themselves. The results shows that having a high level of feeling of growth can push engineering students to drop out while it is the opposite for economics students whom having a high level would be an indication for success. This might be related with engineering curriculum, in which the expectation are very high even at the baseline.

For the Faculty of Economics and Social Sciences, our analysis found the following psychological factors to be the most important contributors to student success: PERMA relationship, psychological immunity source founding skills, feeling of growth, and self-efficiency scales. The high value of coping acquiescence contributes to dropout. These factors collectively shed light on the importance of a student's emotional well-being in student success and personal achievement as key features leading to dropout. For economics students, having a high level of acquiescence coping can be discouraging as social and economics students might not feel challenged, which can lead to boredom and procrastinating over their studies and lead to dropping out or letting control go. On the other hand, having a low level of self-efficiency can predict dropout as they wouldn't feel the additional value they are bringing, which might affect their self-confidence in their ability to succeed. A low level of relationship skills is also among the top 5 factors that can affect economics students ' reason. A low level of this skill can lead to miscommunication, isolation, and a sense of not belonging.

Discussion

The study demonstrates that although the psychological factors affecting student success and dropout in higher education may vary across different university faculties, highlighting the need for faculty-specific interventions to enhance student retention, it is unquestionable that it needs more and more attention from the educational system. The insights derived from our analysis can inform the development of targeted support programs and interventions to address attrition issues more effectively within each faculty to support students not only in broadening their professional knowledge and viewpoints but also their intra- and interpersonal set of skills to get profoundly prepared for the current challenges and for transitioning successfully to the labor market in the future.

The main differences came from the differences among the fields of study, such as social sciences and engineering. Social science students have a varied set of skills and different importance regarding psychological attributes. This can be seen in the example of the grit short score, which is the most critical factor affecting the success of engineering and natural science students; it is only the twelfth on the list of important features for social and economic sciences. On the other hand, while the feeling of growth is only one level different between economics and engineering students, it is interesting to note that they have opposite effects on both fields. A high value would predict dropout for engineering and natural science faculties, while it would be a predictor for success for social and economics faculty. This could be linked to the difference that social and economic science students are more theoretical, and engineering students have more applicable studies.

As an overall conclusion, it is safe to say, that having these competencies from the start of their studies would allow students to sharpen them throughout their studies and even develop new relevant ones, essential for university success. Furthermore, these presented skills seem to play significant part in their future job success as well, therefore, universities must rethink not only their curricula, but their approach altogether to somehow provide specified soft skill development training for their students in order to support their success in the long run in a more efficient and sustainable way.

Further research directions

The generalizability of this study is limited by the fact that we only analysed the students of one university, so in the future, it is worth working with national and international sampling. In the case of a sample with a larger number of elements, the differences between engineering faculties may also be the subject of further investigation.

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Katalin TORKOS & Anikó KÁLMÁN

Reducing Higher Education Drop-Out Rates in a Disadvantaged Region

Inroduction

Today, many universities in Hungary are in crisis due to the drastic decline in student numbers. There are universities where the decline is so high that the institutions have already been fighting for their existence. Due to the targeted higher education policies (EMMI Cselekvési term, 2016-2020; Goldfárthné, 2020; Government Decree 339/2022. IX. 7.), a slow growth process could be detected from 2019 to 2024 at the national level but not at every universities and regions. This reduction at the national level is partly attributed to demographic reasons, but several other reasons can be interpreted only in a socioeconomic context. It is not enough that fewer and fewer people enroll in higher education each year, but the dropout rate is also very high. Dropout is unsuitable for the individual, the university, or the state.

In recent decades, there has been much research that has examined higher education dropout and retention (Behr-Giese-Kamdjou, 2021,2020; Bean-Eaton, 2000; Pusztai-Szigeti ed. 2018, 202; Fónai, 2021; Nieuwoudt-Pedler 2021), and also many proved there is just little chance for disadvantaged children for mobility, for social advance despite living in an open society in terms of mobility in principle (Coleman et al., 1966; Borman-Dowling, 2010; Mogyorósi, 2012). Even the most recent research has also proved that for many people living in poverty and being socially marginalized, there is almost no hope for getting out of poverty and segregation on their own, and their children are waiting for a similar life, inheriting their parents' social position (Gábos, Tomka, Tóth, 2021; Gábos, Ciani, Tomka, 2021; Limani et al., 2021).

Several researchers also have already examined why disadvantaged children drop out of university, why they underperform at exams, and why they leave the university from one semester to another even though they had entered university with great effort and talent (Sosu-Pheunpha, 2019; Hjorth et al., 2016; Rumberger-Lim, 2008; Costa et al., 2018). They concluded and tried to find solutions to school failure, but primarily as experts, from their point of view. There are only a few exceptions when the researchers were curious about the experience and opinion of the other side, namely the dropout students (Torkos, 2005; Forray, 2015; Ceglédi, 2018; Hüse-Ceglédi, 2018). In 2020/2021, 287,500 students were registered in 62 higher education institutions in Hungary. Despite this, only 24.6% of the Hungarian population aged 15-74 had a higher education degree in 2021, compared to the EU average of 28% (KSH, 2022).

To explore the reasons and factors contributing to the dropout of disadvantaged students and graduates, they were asked how they could have done well in their studies, how they could have gotten university degrees, what inhibitory factors they could encounter, how they could have been resilient students (Gonçalves, 2017), and what they thought the key to their success was. The question is no more what experts think is practical but what students do. The questions are how they explain their school success, why they think they were successful in higher education, what factors positively influenced their school achievement, what motivated them to learn, and what made them continue their studies.

Due to the negative tendencies of recent years, the time has come to recognize that only the researchers or experts dealing with education policy are the only ones who have to find solutions (this way of thinking and such policies have just partly been successful during the past years) but also the successful graduates who were potentially at risk. They could help show the proper way of higher education policies, telling us their experience, feelings, and needs. Researchers who come from different social classes than these students at risk are not able to think with the disadvantaged students' heads. Culture, origin, history, social strata, social status, socioeconomic context, and many other things can influence thinking and the meaning of life and, consequently, their attitude to higher education studies. That is why only disadvantaged students and graduates were interviewed in this research, not experts, and that is why the qualitative method was chosen. The findings and consequences are based only on student interviews and individual experiences. Now, this study analyses their experience in only one dimension, namely the mentor role, how it helped their learning progress during their university years, their integration into campus life, and last but not least, their way of socialization into an "intellectual milieu" in society (Geiger, 1975; Gramsci, 1975; Bourdieu, 1975; Bocsi, 2013). In summary, this paper examines the mentor role and its efficiency in avoiding higher education dropout from the perspective of at-risk students and graduates who have participated in mentoring programs.

This paper has two more significant parts: the first part reveals the background of statistics of higher education student enrollment decline and dropout, then presents the main concepts of education policies concerning the number of higher education students and dropout dropouts; the second part analyses the interviews made from the perspective of disadvantaged mentored. Regarding the social science research method, retrospective biography research was applied as a qualitative method for thematic life course research, namely narrative interviews (55 people) focusing on a special segment of life. Lastly, the type of disadvantages, the mentor roles, the mentor fields, and the mentoring could be differentiated could be differentiated level could be differentiated. I collected the indicators that supported their school achievement and examined the mentor role and its efficiency in avoiding higher education dropouts. Of course, not only can disadvantaged students drop out, but I have dealt with them only this time. I was also interested in whether a mentor system at a higher education level is needed, effective, and has a raison d'être, or is it just a sounding, trendy, empty attempt like many other inefficient practices before.

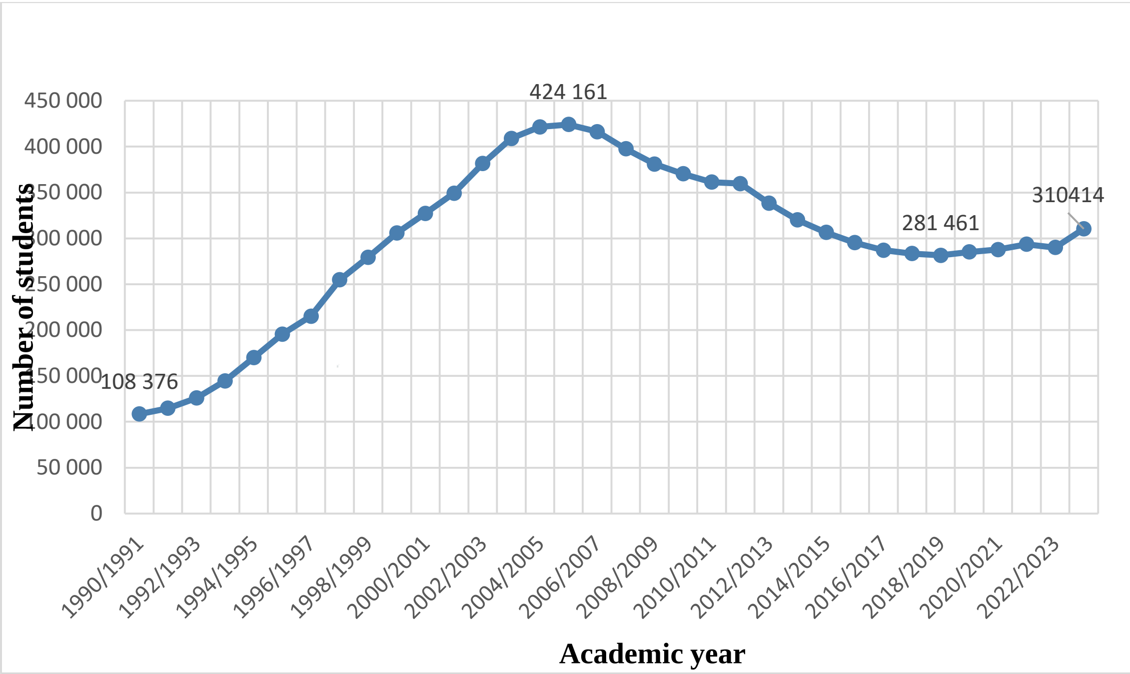
Changes in students number in recent decades in Hungary

International statistical studies have repeatedly shown for many decades since the seventies that the expansion of higher education is continuous (Craig, 1981; Craig et al., 1982; Meyer et al., 1979, 1992; Shofer-Meyer, 2005). However, this does not mean that this is true in all cases. Around the turn of 2000, the question was when the expansion of higher education would reach a breaking point where it stopped (Kozma, 2004). Furthermore, today, it is also a question of what will happen next if it starts to stagnate or even decline, as has recently happened in some European countries. Therefore, the current state and tendencies of expanding higher education are worth re-examining.

Nowadays, many universities in Hungary experience a drastic decline in student numbers. Between 1990 and 2001, the number of students in higher education in Hungary increased threefold (before 1990, elite higher education: 18-22 years old participation of higher education less than 10% of the age group; 2001 mass higher education: up to 35% age group participation) (Derényi, 2012; Hrubos, 2006; Kozma, 2010; Lukács, 2001; Major, 2001; Polónyi, 2004; KSH 1990-2001) This increase was a consequence on the one hand of a demographic wave, between 1974 and 1980, that reached higher education, on the other hand of the fact that many people could not go on higher education owing quotas limiting the number of admissions that existed before 1990, the change of regime. This latter could be detected in the outstandingly rising number of correspondence students (Farkas, 2002; Kozma, 1998).

The increase in the number of students took about 15 years, from 1990 to 2005, but from 2005 to 2018, a drastic decrease (35 percent decrease, from 424.161 to 281.461 students) could be detected (Derényi-Temesi, 2016; KSH, 1990-2024). This reduction is partly attributed to demographic reasons, but several other reasons can be interpreted in a socioeconomic context. Due to the targeted higher education policy, we can witness a slow growth process again from 2019 (285.110 higher education students) to 2024 (310.414 higher education students). (Fig. 1)

Figure 1: **Number of students in higher education 1990-2024**



Source: KSH 2024

Overall, the number of students in the higher education age group 18-24 has decreased the most (full-time students). Although this change varies by county and region, the decline in the number of students in higher education is on the rise everywhere, except in the traditional universities of the capital and some big cities (KSH, 2005-2024). There are universities where the decline is almost 80 percent. In these cases, the institutions are already fighting for their existence.

Experience shows that the larger universities have been able to handle it, but some of the smaller ones have been forced to close their doors, and others are still struggling to survive with minimal student numbers. The latter universities are trying to develop strategies that will re-engage students. The question is how to increase the number of both enrolling and graduating students at small universities.

The country's largest, oldest, and most popular universities with the highest prestige do not need such strategies, especially if it is in an economically prosperous region, as most of their majors are still over-applied. However, smaller universities, especially in socially disadvantaged areas, need to invent survival strategies. Today, there are several ideas, and one of them is to attract and retain students previously underrepresented in higher education, namely disadvantaged students. Few of these young people have entered higher education in the past and did not form a significant group, which is why they have not been given special attention. Today, they are present in increasing numbers in higher education in these disadvantaged areas, and their high dropout rates are a significant and serious threat to their higher education institutions.

Current social problems, crises, and other factors that affect higher education student numbers

The most common social problems that have changed the intention to continue learning at higher education are the following: declining birth rate, a kind of labor market crisis (changed labor market needs, i.e., labor shortage in case of essential skilled workers), the changing social structure (widening lower social strata) and the pandemic (covid). Nowadays, these changes negatively affect the number of higher education students. By examining them, we can better understand these effects.

The demographic crisis, namely aging society, has existed since the 80s (permanent population of Hungary in 1990: 10,37 million people; 2021: 9,89 million people; 2024: 9,585 million people) (KSH, 1990, 2021, 2024). It means a dramatic increase in the proportion of older people and a continuous decrease in the number of births. The decrease in the number of full-time higher education students is almost precisely to the same extent as the number of students in society due to the demographic data (OECD, 2008-2024).

The labor market crisis also exists in Hungary. Although a 25–64-year-old with a tertiary degree with income from full-time, full-year employment earns more than the same with secondary school education, after secondary school, many young enter the labor market instead of continuing their education (OECD, 2008-2024). A reason for this is that there is currently a severe shortage of skilled workers in the industry and service sector, so high wages are already offered to beginners which is very attractive. The problem is not unemployment but rather labor shortages, affecting higher education participation.

The Pandemic (COVID) crisis has led to several processes affecting the further education of high school graduates. Higher education institutions switched to online training for several semesters, which, on the one hand, was unattractive for some young people. On the other hand, many families got in such a financial situation due to complete shutdowns that they could not afford to let their children continue their education.

Lastly, the social structure crisis is also a problem concerning further education. In the last decade, an unexpected process has started. The social strata have begun to move further and further apart, and the gap between the social strata has begun to widen. Moreover, the biggest problem is the widening of the lower social strata (e.g., because of economic crises), to which most families with children belong. As a result of this process of social declassification, many families are unable and unwilling to invest in higher education studies despite the many student scholarships and loans. Their children lack opportunities in education and life. Social class characteristics shape their achievement, school outcomes, further education, and career.

Change of maintenance and efficiency

By the academic year 2021-2022, Hungary's most significant state universities had been transferred to foundations. A key element in the renewal of higher education is the change of model, and the overall aim is to provide universities with a flexible background to the competitiveness of the region and the country in response to local social and economic development needs (Magyar Kormány, 2021). This transformation aims to make the universities stronger, more self-sufficient, and more survive. These changes intend to manage the universities more efficiently. As a result, the institutional management of the universities will be taken much more strictly. This means that there will be cost-benefit calculations, and it is clear that students generate most of the revenue for universities. The problem is twofold because not only has the number of students decreased in the last decade, but the number of dropout students has also increased, leading to a significant loss of revenue for universities. Of course, there are also other sources of revenue, e.g., research and development, cooperation with companies, real estate utilization, etc. Professors can take part in several of them. It has already been expected so far, but professors are much more expected to be actively involved in these extracurricular activities. Apart from the mentioned sources and focusing on the number of students as a serious source of revenue, professors, and teachers can also play a role in increasing it, e.g., as a mentor.

Dropout rates in higher education

Measuring dropout, especially international comparisons, is difficult, based on different definitions and calculation methods. Nonetheless, standardized comparative analyses use specific definitions, showing that dropout rates in Hungary are higher than average (OECD overviews, 2008-2024). Another problem is that it is not enough to be that high, but it is still increasing at some universities (KSH statistics). Looking at the last 10 years, the dropout rate in Hungary has been 10 percentage points higher in international comparisons, compared to the average rate of 25-30 percent in the EU member states (Vida, 2021).

Another problem is that the number of passive semesters also increases in Hungary. Moreover, not only is the incidence of these semesters high, but the average number of passivated semesters is also high, especially in the case of non-full-time students. The danger of a passive semester is that the student gets used to moving away from learning during this time. Local experience shows that the longer you are in your passive semester, the less likely you are to return to higher education. In addition, students in the passive semester are much harder to reach because they do not have personal contact with their teachers. From a mentor's point of view, this is a severe problem.

Factors Contributing to High Dropout Rates in Higher Education

Socioeconomic Barriers impact on dropout rates

One of the most important contributors to university student dropout rates is financial instability. Research shows that university students from low-income family backgrounds are more likely to drop out of higher education before graduation due to the cost of tuition, living expenses, and job demands (Tinto, 2012). Financial support programs, scholarships, intensive training, and work-study options have been identified as important interventions to reduce these barriers (Oreopoulos & Petronijevic, 2013).

Academic Preparation and Institutional Challenges

Lack of academic preparation, often associated with inadequate higher education, affects university student retention rates. Many poor students struggle with essential curriculum content, leading to low grades and disengagement (Kuh et al., 2006). Institutional challenges, including limited access to academic counseling, inadequate student support services, inadequate research support programs, and large class sizes, exacerbate the risk of dropping out (Braxton, 2000).

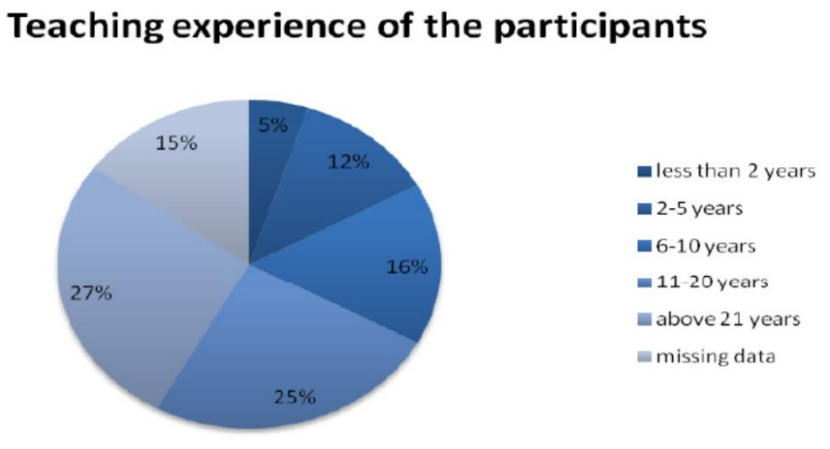
Psychological Factors and Student Engagement

Social integration plays a significant role in student retention. According to Tinto's Student Integration Model (1975), students who feel connected to their academic community are more likely to persist in their studies. Many students in deprived areas face challenges such as family responsibilities, mental health problems, and lack of peer support, all of which contribute to their dropout from higher education (Wilcox et al., 2005).

Teaching experience impact on Dropout Rates in Higher Education

The researcher studied 8 HEIs, and the number of respondents in institutions ranged from 1 to 16. 76% of the respondents were teachers, 4% were research fellows, and 20% were administrative staff. More than half of the respondents had more than 11 years of teaching experience, while 32% were teachers with less experience, as shown in Fig. 2.

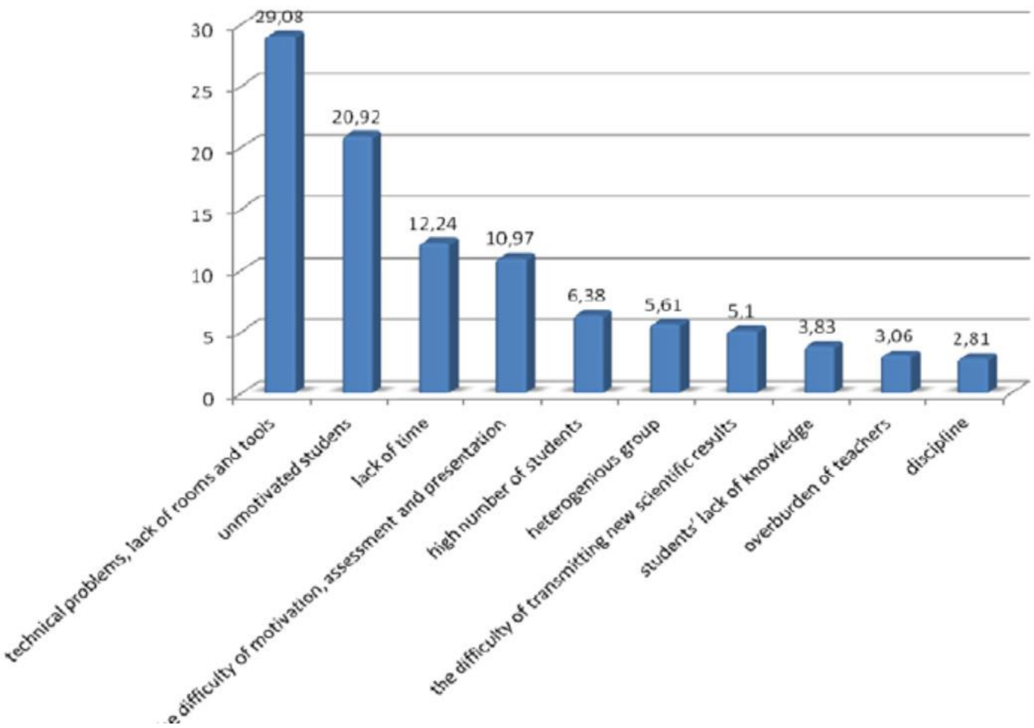
Figure 2: **Teaching experience impact on Drop-Out Rates**



Source by Anikó Kálmán: Comparative analysis of trainers' needs in higher education network, 2013

According to Anikó Kálmán (2013), most respondents (29.1%) highlighted technical problems that caused difficulties during teaching, meaning that the technical background was inadequate, the classrooms were not suitable for teaching, or the lack of sufficient and appropriate tools for practical work in Figure 2. This response was followed by listing unmotivated students (20.9%) as having difficulties in teaching. The third difficulty was the discrepancy between the amount of curriculum and the course duration: lack of time (12.2%). The next category included teachers' inability to motivate students, how to promote interest in the subject, and how to assess students (11%). The same proportion (5-6%) listed the difficulties of high student numbers, heterogeneous groups, professional development, and the delivery of new scientific results. These answers included the excessive workload of teachers, lack of knowledge of students, and difficulties in discipline (3%).

Figure 3: **Difficulties during the teaching situation**



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According to Anikó Kálmán (2013), most respondents (29.1%) highlighted technical problems that caused difficulties during teaching, meaning that the technical background was inadequate, the classrooms were not suitable for teaching, or the lack of sufficient and appropriate tools for practical work in Fig. 3. This response was followed by listing unmotivated students (20.9%) as having difficulties in teaching. The third difficulty was the discrepancy between the amount of curriculum and the course duration: lack of time (12.2%). The next category included teachers' inability to motivate students, how to promote interest in the subject, and how to assess students (11%). The same proportion (5-6%) listed the difficulties of high student numbers, heterogeneous groups, professional development, and the delivery of new scientific results. These answers included the excessive workload of teachers, lack of knowledge of students, and difficulties in discipline (3%).

Conclusion

Disadvantaged students must overcome obstacles that other people, such as teachers and fellow students, would not even think of. Most of them cannot rise above the disadvantages on their own; they need external help. They usually cannot expect help from their family or environment, so universities, government entities, or other supporting services must increase opportunities for them. It emerged from the research that the personal presence of university teachers in the helping process has a prominent effect on the disadvantaged students' development. University professors and assistant professors are a special group who can take a profound role in it as they have the advantage of being in regular personal contact with the students on at least a weekly basis. Furthermore, in the case of a personal relationship, professors know the students very well, and the students open up sooner; they talk more easily about their problems concerning their studies and are more receptive to accepting help. Of course, besides teacher mentoring, peer support, and private mentoring programs have also an important role to play in the same way. The university mentoring system needs to be developed in the future, and many professors and teachers who feel it is possible need to be involved. It can mean patronage, mentoring, and holding individual or customized preparation courses.

Looking to the future, the question of subsequent research could be where these resilient graduates are now. Could they succeed in the labor market and life without a mentor? Isn't there a danger of making them less independent and individual? In their case, doing a career and life path examination a few years later would be worthwhile. I would like to know whether they could stand their place in society on their own, whether they could position themselves according to their education, and whether they were satisfied and successful. Later, can they break out of their low social class and move into a higher social one? If mentors detach after completing their higher education studies, will they still be able to progress in life? Alternatively, get used to getting help and become over-mentored. Moreover, how to avoid over-mentoring? These can be the questions of the following research helping to create the suitable role of mentor and to create the stable and independent living of the mentored.

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Emese BERZSENYI

The Relationship Between Talent Development and Civic Protestant Ethics in the Horthy Era

Introduction

The ideas articulated in Max Weber's *The Protestant Ethic and the Spirit of Capitalism* (2018) can be traced with remarkable precision in Rita Kattein-Pornói's doctoral dissertation, *The History of the National Hungarian Rural Talent Rescue* (2018). This dissertation explores the history of talent identification and development in Hungary from the late 19th century to the mid-20th century. It provides an exceptionally detailed examination of the role of Reformed secondary schools in this process, as well as the state initiatives that emerged from these efforts under a predominantly Catholic state leadership.

As a historian of education specializing in religious history, I find this topic especially intriguing, as it reveals the religious-philosophical features that stem from the differences between Catholic traditions and the ethics of the Calvinist Reformation. Even without an explicit discussion of religious-philosophical frameworks, the dissertation provides a precise portrayal of the divergent approaches between the grassroots efforts of Reformed secondary schools and the initiatives of a Catholic-oriented state, which had not yet entirely abandoned feudal power structures. With the author's consent, I examine the religious aspects that expand and complement the interpretative framework in the present study. The relevance of this perspective is underscored by the fact that in the decades preceding World War II, religion, religious doctrines and teachings, faith-based principles, and ethics played a much deeper role in shaping society than contemporary perspectives might suggest.

In this study, using a comparative-analytical method, I juxtapose only these two works, searching for traces of Emil Maximilian Weber's (1864-1920) social philosophy in Kattein-Pornói's dissertation. The renowned German economist and sociologist lived and worked precisely in the period that this research examines. The retrospective analysis of his work serves as an explanation of his era. At the same time, the patterns that emerge from it reflect Hungary's close connections with German and Austrian culture at the time. For my analysis, I have used the most recent and comprehensive version of Weber's work – the critical edition published by L'Harmattan in 2018, translated by Zoltán Ábrahám – as it represents the most up-to-date and complete edition available.

The Value of Learning in the Context of Work and Vocation

Protestantism placed a high value on knowledge, as its religiously based ideological framework redefined work in civil society – not as a biblical punishment for sin, but as a life mission. The concept of "vocation" (*Beruf/calling*) first appeared in Martin Luther's 1522 translation of the Bible. Beyond serving basic bodily needs, it carried profound ethical significance and became part of realizing divine order. Thus, from the early modern period onward, the specific interpretations of religious education and instruction gave rise to psychological incentives, cultivated through the practice of religious discipline, that shaped the course of life and ensured that the individual – motivated by the hope of salvation – would always adhere to it. (Berzsenyi, 2024. 142-145.)

Traces of the doctrine of predestination can be found in fundamental aspects of lifestyle and worldview. Within Protestantism – particularly in the Calvinist perspective – every activity was to serve only and exclusively the glory of God, making it an obligation performed within the community to benefit society. (Weber, 2018. 150.) Rita Kattein-Pornói cites educational scholar and public education policymaker Árpád Kiss (1907-1979), who stated that "*the individual exists for the community, and the community exists for the individual*." (Kattein-Pornói, 2018. 30.) Kiss set the goal that the state should educate honorable individuals for the leadership class – individuals who, possessing the proper knowledge, would be able and willing to act in service of the nation (Kattein-Pornói, 2018. 30.).

In the Protestant ideological framework, every believer was obligated to regard themselves as chosen for salvation; failure to do so would signify a sinful lack of true faith and divine grace at work within the individual (Weber, 2018. 91.). Within the religious principles of child-rearing, learning was seen as the appropriate activity for a given stage of life. Education was to be pursued for the glory of God and as a means of attaining salvation. The notion of goodness and moral integrity was not viewed as a cyclical pattern of fluctuation punctuated by forgiveness, as in Catholicism, but rather as a continuous and rigorous pursuit of personal salvation. (Berzsenyi, 2024. 144.) It was an integral part of Protestantism's religiously grounded educational approach, which, from an early age, became ingrained in children's sense of self and shaped their strict worldview.

The Ethical Relationship Between Faith, Life Mission, Learning, and Teaching

At this juncture, Protestant teachings bring together the belief in the afterlife – considered more important than worldly happiness – with discipline in learning and work and with societal ethics. Poverty was not regarded as a sin; however, resignation, missed opportunities, and failure to seize possibilities were seen as manifestations of laziness and were unequivocally equated with sinful negligence and wastefulness. (Weber, 2018. 89) "*God helps those who help themselves. […] The Calvinist […] 'creates' their own blessed happiness. […] However, this creation cannot mean the gradual accumulation of merits through individual achievements (as in Catholicism); rather, it is a systematic self-control, confronting the alternative of election or damnation at every moment*". (Weber, 2018. 96.)

As a result, there was no division between the individual and ethics, nor was there room for sinful inner conflict – this, in fact, was a distinctive feature of the Protestant ethic's concept of vocation (*calling/Berufung*). According to Protestant theologians, the constant practice of vocational work within the divinely ordained order was the means to dispel doubt and attain the assured state of divine grace. (Weber, 2018. 96.) The notions of fides efficacy (practical faith) and effectual calling legitimized divine order in a strict and puritanical form, upheld social and professional ethics, and, consequently, laid the foundation for civil society's work- and knowledge-based value system. (Weber, 2018. 95.)

According to István Harsányi (1908-2002), the Reformed educator who organized talent rescue efforts in Sárospatak, one of the most significant obstacles to the healthy functioning of the selection system ensuring the nation's strengthening during the Horthy era (1920-1944) was the caste-like nature of the leadership class. This elitist perspective, which permeated the entire Horthy era, created the social structure that historian and publicist Gyula Szekfű (1883-1955) called neo-baroque. (Kattein-Pornói, 2018. 31-32.)

Count Kuno von Klebelsberg (1875-1932), a Hungarian jurist, Member of Parliament, and Minister of Religion and Public Education of the Kingdom of Hungary from 1922 to 1931, played a crucial role in talent identification and development. One of his most significant decrees was the 1926 Act VII, which concerned "*the establishment and maintenance of rural schools serving the interests of the agricultural population*." (Kattein-Pornói, 2018. 34.) This legislation laid the groundwork for the National Hungarian Rural Talent Rescue Program.

"*The construction of rural schools provided the masses with the opportunity to acquire at least the most fundamental knowledge in educational institutions. This law was one of the most significant milestones on the road to eradicating illiteracy, as by 1931, 5,784 classrooms and 2,778 teacher residences had been built, enabling children from rural and lowland areas to acquire essential skills*". (Kattein-Pornói, 2018. 35)

The concept of sanctification through deeds, *Werkheiligkeit*, gave rise to today's pragmatic work ethic and established the ethical framework for work as a social obligation. This concept required a methodically rationalized ethical lifestyle – an organized and systematized sanctification of actions. In child-rearing and children's education, this meant conformity, moral excellence, and learning as the appropriate life mission for each age group – what could be considered the age-appropriate level of *Werkheiligkeit*. These expectations were consistently imposed on children as well. (Weber, 2018. 98-109)

Kattein-Pornói echoes these ideas by citing János Cser, who argued that a nation can only keep pace with the development of other peoples if, alongside economic progress, it also addresses social welfare. Thus, it is necessary not only to enhance intellectual standards but also to improve moral values. Social conditions are closely interconnected with a country's overall economic situation. When examining talent development, it is essential to consider the societal, economic, and cultural factors – including religion as an institution and faith as an individual's internal orientation. (Kattein-Pornói, 2018. 93-94.)

The Relationship Between Faith and Knowledge

The inner light of revelation, the close connection between faith and reason, guides the individual toward proper understanding and, through their vocation, toward salvation. When accepted with the heart and grasped with the intellect, faith, and knowledge converge on the plane of insight. Their light illuminates a common path for the benefit of both the individual and society and, most importantly, for the glory of God. (Weber, 2018. 141.) Although not yet formulated in its modern sense, the idea that "time is money" had already emerged. "*Only action serves to increase the glory of God, and the wasting of time is the gravest of all sins*." (Weber, 2018. 150.) Intellectual work was thus also considered labor; knowledge, as theoretical understanding, found its place and recognition within the ethical order. Beyond mastering a vocation, it was the individual's duty to explore all its aspects, developing themselves for the greater glory of God and the benefit of society. (Weber, 2018. 145-150)

Citing educator and cultural policy scholar Sándor Imre (1877-1945), Rita Kattein-Pornói states that although talent is an intellectual quality, it cannot be fully realized without the guiding force of moral elements. Educating and developing children is not enough; they must also internalize fundamental ethical imperatives that profoundly shape their character, traditionally rooted in religious foundations. These include punctuality, diligence, responsibility, social awareness, and similar attitudes – qualities that, in an ideal case, define a responsible and talented individual. Without these, talent can easily be led astray and "*falling into the trap of recklessness and superficiality, may become more of a danger than an asset to society due to its lack of moral quality*." (Kattein-Pornói, 2018. 92.)

Max Weber also considered laziness, wasted time, the indulgence of the body, and anything not serving the glory of God to be sinful. Even sports were justified only in improving physical strength and endurance, as life was divided between vocational practice, participation in religious life, and the necessary rest – nothing else was permissible under the expected ethical norms. (Weber, 2018. 150-151) "*God keeps us and our activities alive for action; work is the manifestation and natural goal of ability… Action best serves God and expresses the greatest respect for Him… Many's common good or well-being must take precedence over our welfare*". (Weber, 2018. 150)

Within the concept and practice of vocation, a God-pleasing family life, the upbringing and education of children, any form of knowledge transmission, and learning itself were all included. Over the centuries, this perspective significantly elevated the prestige of teaching and learning. (Pornói, 2016) Only secular literature aligned with strict moral discipline – carrying social, economic, political, or professional information – was permitted. Consequently, learning processes became intertwined with the lifelong acquisition of theoretical and practical knowledge and the mastery of associated intellectual content. Talent, which in the Middle Ages was barely considered valuable (Berzsenyi, 2024. 72-73.), under the influence of Protestantism came to be expressed by the German term *Begabung* (giftedness), referring to a divine endowment. Although this gift manifests in the individual, it belongs to the community and is part of God's work. It is a treasure that elevates both the gifted person and those who nurture their talent, but it cannot be considered a personal merit – it must be understood solely as a life mission. (Kattein-Pornói, 2023)

Narrowing the focus to the Reformed College of Sárospatak and Protestant ethics, it is evident that the Reformed Church had supported talented students from impoverished backgrounds since the 1500s. In this sense, every rural teacher, principal, and educator was also a talent scout, and schools functioned as talent-nurturing centers. However, the Sárospatak College was not supported by the Catholic-state ideology that dominated Hungary, nor by the fact that historically, Zemplén County was a stronghold of anti-Habsburg Catholic opposition. (Pornói, 2015) Many of the college's students came from the lower classes. While this approach could be called democratic in spirit, it was rooted in Protestantism's longstanding commitment to social responsibility, which had been passed on as a fundamental value to students for nearly five centuries. (Kattein-Pornói, 2018. 95-96.)

István Harsányi, who – as mentioned earlier – became a leading figure in this initiative, was born on January 20, 1908, in Sárospatak. His parents were deeply connected to Calvinist Protestantism, profoundly influencing his career path. His father studied at the local Reformed secondary school and theology faculty, later serving as a teacher in these institutions until the end of his life. During his university years, Harsányi received a scholarship to study at the European Center of the Reformation in Geneva. (Kattein-Pornói, 2018. 97-98.) Kattein-Pornói also cites the 1934 remarks of Sándor Novák, a former principal of the Sárospatak College, who stated that "*Protestantism remains an indispensable force in shaping Hungary's future*." (Kattein-Pornói, 2018. 100-101)

Advancement, progress, the cultivation of knowledge and skills, and the intellectual enrichment derived from talent became widely accepted ethical norms. At the same time, in the framework of *Werkheiligkeit* (sanctification through action), resisting the divine order – neglecting or squandering one's abilities and skills – was considered a sin. As the ideal of sanctified life evolved, a more profound sense of vocation and a faith-rooted sense of social responsibility strengthened. Teaching as a vocation, the transmission of knowledge, and lifelong learning became moral imperatives that elevated the practitioner to a higher ethical plane. (Weber, 2018. 159-160)

Talent Rescue as an Obligation Toward God and Society

"*If God shows you a way in which you may gain more profit, in accordance with His laws, than by following another path – without harming your soul or others – and you still choose the less profitable way, then you nullify one of the purposes of your calling. This means you refuse to be God's steward, rejecting the gifts He has given you so that you may use them when He calls upon you. You are free to labour hard for wealth in service of God, but not for flesh and sin.*". (Weber, 2018. 159., quoting *Baxter Christian Directory*, I/10. 9 (I/378.))

This attitude toward learning became foundational to modern educational systems. It was no longer sufficient merely to perform; one had to understand, strive with dedication, progress, and ultimately become an exemplar within the professional framework of civil society. (Weber, 2018. 159.)

"[…] The Reformed Church's support for impoverished yet talented individuals has deep historical roots. However, there were certain periods when this mission became exceptionally crucial. One such era was the interwar period, burdened by numerous challenges". (Kattein-Pornói, 2018. 126.)

Initially, talent rescue efforts in Hungary were carried out exclusively within Reformed Church-maintained secondary schools in Sárospatak, Hódmezővásárhely, Miskolc, Szeghalom, and Nagykőrös. These initiatives were funded solely by church resources, contributions from the faithful, donations, and other alternative financial sources. (Kattein-Pornói, 2022) The state program began in 1941 with Decree No. 57.436 issued by the Minister of Religion and Public Education of the Kingdom of Hungary, which provided subsidies for the secondary education of talented rural students from impoverished backgrounds. (Kattein-Pornói, 2018. 127.) In doing so, the Catholic state leadership adopted and institutionalized Protestant practices nationally. In 1940, under the governance of Miklós Horthy (1868-1957) – twenty years into his regency over a Hungary that remained primarily influenced by remnants of feudal society – a significant foundation was established to support the education of talented but impoverished children. (Kattein-Pornói, 2018. 129.)

Several questions arise concerning the fundamental differences between state-led and church-led talent rescue initiatives: Why was the Reformed Church's talent support work considered more effective? "*The Sárospatak initiative, which served as the model for the state program, was a bottom-up, faith-driven effort. That is, the support of underprivileged children was rooted in a faith-inspired humanitarian vision, which was reinforced by the active involvement of the church community*". (Kattein-Pornói, 2018. 190.) Furthermore, its practical implementation and success often depended on a single charismatic individual who viewed it as their life's mission.

Kattein-Pornói also concluded that Klebelsberg's efforts played a significant role in the conscious development of an elite class and in establishing the institutions necessary for this purpose. However, these efforts did not focus on significantly improving the broader educational conditions of lower social classes. Nonetheless, it is undeniable that Klebelsberg's rural school-building program significantly increased educational opportunities for this demographic. (Kattein-Pornói, 2018. 194.)

The ruling class, or gentry society, aimed to maintain control over governance. It was only willing to grant power to those who shared its values and beliefs or had assimilated them over time. A direct consequence was a societal phenomenon in which employment in various offices and positions largely depended on personal connections and patronage. (Kattein-Pornói, 2018. 195)

The Traditional Catholic Perspective on Talented Individuals from Poor Backgrounds

In this study, I intend to briefly touch upon the traditional Catholic perspective, as I feel that at least a fundamental explanation of its absence is necessary. The subject's most essential and accurate depiction can be drawn from two major papal encyclicals of the period under discussion. These are documents issued solely by the highest teaching authority of the Church–the reigning Pope. Their content consists of written decisions through which the Pope exercises his pontifical jurisdiction over the entire Church. (Bánk, 1982)

On May 15, 1891, Pope Leo XIII (1878–1903), known in secular life as Count Gioacchino Pecci, took a historically significant step by issuing the encyclical *Rerum Novarum*. A social encyclical – an official ecclesiastical statement on the labor question – was published for the first time in the Holy See's history. The ideas expressed in this document faithfully reflect the views of the Catholic-oriented social leadership of the turn of the century regarding the fundamentally impoverished social classes.

According to the papal position, the Church must take a stance and encourage the initiation and transformation of aid for the poorest members of society, as state institutions, in the Pope's view, no longer manage their fate by religious norms. (Leo XIII, 30)

Looking back from a vantage point of more than a century, the papal perspective is intriguing and explanatory in many ways:
"We confidently and with full right take up the discussion of this matter, for it is a problem for which there is no suitable solution without the help of religion and the Church. [...] However, we state without hesitation that all human efforts will be in vain if the Church is disregarded. [...] The Church not only seeks to cultivate the minds of individuals but also strives to regulate their lives and value systems through its laws." (Leo XIII, 35)

The encyclical also mentions a perspective on labor–specifically, physical labor–that diverges significantly from Protestant religious philosophy, emphasizing its punitive nature:
"As for physical labor, man would not have been exempt from it even in the state of paradise; however, whereas before it would have been freely undertaken for the soul's delight, it is now imposed upon us as a burdensome duty, as a punishment for sin. 'Cursed is the ground because of you; in toil you shall eat of it all the days of your life.' (Gen 3:17-18). Similarly, the other earthly hardships will never cease, for they are harsh and difficult consequences of sin, which must be endured as such, necessarily accompanying man throughout his life." (Leo XIII, 35)

Another crucial idea in the encyclical is the still-prevailing aristocratic principle of divinely ordained rule. Power comes from God, making it a form of participation in divine authority; therefore, it must be exercised paternalistically, modeled after God's rule. (Leo XIII, 43) This spirit is reflected in state efforts to support talent, yet paternal care does not focus on individuals but instead elevates an opportunity for the sake of maintaining the system. Although only in a rudimentary form compared to today's child protection measures, the encyclical already calls for the protection of children and emphasizes the importance of their education:
"In the case of children, special care must be taken to ensure that they are not put to work before their bodies, intellectual, and spiritual faculties have sufficiently developed. The premature exertion of their budding strength in childhood will only weaken them, rendering all education and training futile." (Leo XIII, 46)

In his *Quadragesimo Anno* encyclical, issued in 1931, Pope Pius XI reexamined, interpreted, analyzed, and further developed the teachings of *Rerum Novarum* from the perspective of four decades. A fundamentally new standpoint, introducing significant reforms, would only gradually emerge with the teachings of the Second Vatican Council (1962–1965). (Cserháti and Fábián, 1971)

The Fate of Talented Individuals of Other Faiths: The Jewish Intellectuals in the Horthy Era

Both sources in my comparative analysis – Max Weber and Rita Kattein-Pornói – mention Jewish communities and their approach to learning and work. For this reason, I will briefly touch upon this issue without aiming for a comprehensive discussion.

According to Weber, Protestantism adopted from Jewish ethics the ethos of civic enterprise and rational work organization, whose fundamental characteristics bear similarities to the Puritan moral principles of Talmudic Judaism. The idea that success is a sign of God's blessing is not foreign to Jewish tradition either. (Weber, 2018. 164-165.)

In Hungary, after 1920, social tensions arose due to the disproportionately high number of intellectual workers, which became one of the factors fueling the antisemitism of the era. While the proportion of Jewish-born and Jewish-religious professionals – such as engineers and doctors – was increasing, the state-employed middle class, which had been predominantly Christian (mainly Catholic) due to the labor division of the Dualist period, faced significant layoffs and financial hardship. The Teleki government attempted to address this middle-class crisis with the 1920 Act XXV, known as the *numerus clausus* (law of closed numbers). This law sought to limit university and college admissions by ensuring that "*the proportion of youth belonging to different ethnic groups and nationalities among students should correspond to their proportion in the national population*." (Kattein-Pornói, 2018. 195-196.)

Many public commentaries attempted to justify this policy as a social measure, claiming it aimed to provide the agricultural population's children with greater access to higher education. However, this argument was flawed from the outset, as no significant increase occurred in university enrolment among children of agricultural workers after 1920. In 1914, agricultural laborers, who constituted the majority of the rural population, comprised only 0,6% of university students – a percentage that remained virtually unchanged even after the introduction of Jewish quotas in 1930. The same trend applied to the children of landowning farmers. (Kattein-Pornói, 2018. 195-196.)

Until World War I, literacy rates among religious communities closely correlated with their regional and settlement-type distribution and their practiced faith. (Kattein-Pornói, 2018. 197.) Catholic, Protestant, and Jewish religious groups implemented different educational programs for children, which further divided and segregated society in yet another layer of social stratification.

Conclusion

A recurring theme in my lectures, courses, and publications is the assertion that religious threads can be traced in every social phenomenon. Naturally, not every scholar in the humanities is expected to analyze historical periods and social issues through the lens of theology and religious studies. However, it is worth considering the perspective of Marc Depaepe, rector of KU Leuven, who argues that general historians and cultural scholars often miss the opportunity to enrich educational history research with their specialized insights, new problem formulations, and alternative approaches. With its distinct viewpoint from religious philosophy, my study aims to contribute to a more complex understanding of Rita Kattein-Pornói's pioneering research, incorporating details, elements, and scholarly literature that were previously beyond the scope of her investigation. (Depaepe, 2013. 10.)

The contribution of this study is to examine the intricate background factors of early talent development and talent rescue in Hungary – factors that may help researchers answer specific key questions. These include the issue of illiteracy and children's willingness to learn, that is, their attitude toward education. In an environment where learning and knowledge are valued, where daily reading – if only at the level of biblical passages – is a norm, where parents, despite their poverty, provide a supportive setting for their children's studies and accept it as part of divine providence, the work of an educator with a mission becomes significantly easier. Such an educator can align a child's talent with available support, backed by the community's engagement and the ethical teachings of religious discipline. They do not impose unrealistic demands but create opportunities; they do not extract children from their environment but integrate them into a meaningful framework; and they are not distant outsiders but active members of the same community. As a result, children found it easier to integrate into the well-established system of Protestant Puritanism, experiencing divine assistance not as a burden but as a gift. Children could still find familiarity and spiritual continuity within this approach, even in significant transitions.

State-run talent rescue programs – as clearly shown in Rita Kattein-Pornói's research – attempted to harmonize a child's home environment with the conditions of educational institutions. Yet, they primarily viewed the process in terms of costs and demanded self-sacrificing, obedient adaptation. Their support was almost exclusively financial, but their expectations failed to accommodate the needs of the children. They did not regard these children as individuals entrusted to them by God, as part of a divine mission, but rather as instruments for achieving a goal comprehensible only to a select few. The state system lacked great pedagogical personalities, clear objectives, and a spiritual approach. Even though Protestant Puritanism subordinated the individual to the community within the context of its time and customs, it undeniably addressed the necessity of spiritual development.

For children from impoverished backgrounds placed in unfamiliar institutional dormitories, faith was often their only source of support. Its strength in fostering perseverance, resilience, and moral navigation in a complex ethical framework should not be underestimated.

While bottom-up, faith-driven Reformed secondary schools aimed to uplift the individual for the benefit of the community, state-led talent rescue efforts sought to save the community by elevating select individuals. The emphasis, the approach, and thus the treatment and care differed fundamentally. It makes a significant difference whether a child is the **subject** or merely the **object** of an educational program.

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Khalid Mohammed IDRIS & Anikó KÁLMÁN

Facilitation of reflective practice as a collaborative and improvement-oriented professional learning: A teacher educator's self-study experiences

Introduction

Teacher educators' roles and qualities are considered enabling (Marshall et al., 2022) and central (Russell, 2022) when facilitating reflective practice in general and teacher education in higher education settings. However, the mechanisms by which such roles and qualities are recognized and developed depend on contextual considerations (Boud & Walker, 1998) and biographical and institutional factors (Bullock & Ritter, 2011). As such, the facilitation of reflective practice constitutes developing explicit pedagogy of reflection (Clarà et al., 2019), modeling its advocated values in professional learning (Russell, 2022), and co-engagements in transformative action (Glasswell & Ryan, 2017). This paper draws on the first Author's self-study experiences of intentional co-engagements in embedding reflective practice in a teacher education course in Eritrea. Reflection being an atypical yet popularly advocated practice in the study context, the authors, as teacher educators, were challenged to develop reflective qualities while teaching about reflection (Russell, 2022) and enact context-sensitive pedagogy of reflection during one academic semester (Author1, 2023). Additionally, we intended to develop experiences in which reflective practice is not only seen as a teaching and learning strategy but as a professional stance of enhancing "contextualized understanding of what works, how it works, and for whom it works, and can enable educators to make positive changes in their professional practices" (Francisco et al., 2024, p. 501).

Accordingly, this paper positions the intentional and explicit initiative of facilitating reflection as professional learning for praxis development (Francisco et al., 2024; Kemmis, 2024). While professional learning is understood as "informed and formed by local conditions and designed based on the characteristics of the educational site at hand" (Salo et al., 2024, p. 448), praxis development is "morally-politically informed and oriented, reflective, agentic, context-specific, and transformative; it involves taking a moral stand in educational work and working towards positive change" (Mahon et al., 2020 as cited in Francisco et al., 2024, p. 440). A site-based and time-bounded professional action that foregrounded social dimensions of power and solidarity, trust, recognition, agency, and time (Salo et al., 2024) frames the analysis of a self-study intervention on facilitation of reflective practice. Hence, an intervention embedded within and enabled by a community of practitioners not only seeks to explore practices that work, in this case, relevant reflective teaching strategies, but also develop a situated and critical understanding of what conditions enable and constrain practices (e.g., Kemmis et al., 2014). Crucially, such situatedness within practice and community allows for developing nuanced perspectives of possibilities that could be shared beyond an immediate study context (Kemmis et al., 2014; Vanassche & Kelchtermans, 2015).

Self-study of teacher education practices as a methodology and a professional stance provided teacher educator-scholars possibilities to uncover and publicize the complexities of their work (e.g., Pinnegar et al., 2020). Specifically, self-study has been closely associated with facilitating reflective practice in teacher education. On the one hand, "studying one's own teaching is an outstanding way to begin modeling reflective practice" (Russel, 2022, p. 9). On the other hand, how teacher educators learn to navigate such modeling becomes a critical issue as it involves "exposure to emotional involvements in practice" (Beauchamp, 2015, p. 136). These form an additional layer of complexity towards developing a pedagogy of teacher education in general and reflection in particular (Korthagen, 2016). Situated within such debates, this article shares a site-based and intentionally framed self-study on embedding reflective practice among a group of student teachers during a 16-week-long academic semester. It also (re)presented these experiences as professional learning for praxis development (Francisco et al.,

2024) as the self-study initiative was couched in and for collective improvements that influenced my (reflective) facilitation roles and qualities. Accordingly, the following research question underpinned the development of this article:
In what ways did the self-study on facilitation of reflective practice help create a context for developing collaborative and improvement-oriented professional learning experiences?

Teacher educators' professional learning as a transformative practice

Before describing the study context and the professional learning community that enabled the self-study initiative, they will explore discourses that situate teacher educators' professional learning as a transformative practice. Notions of practice-based professional development of teacher educators underline that the knowledge and dispositions needed for educating teachers emerge *in* and *from* practice (Vanassche et al., 2021). It entails the development of a teacher educator's professionalism rooted in researching 'own' teaching, developing context-relevant pedagogies, and collegiality (Vanassche, 2022). Ping et al.'s (2018) review of the contents, activities, and reasons for teacher educators' professional learning further highlighted affective and motivational dimensions that inspired improvement initiatives. It is despite the often heavy workload and limited time afforded and/or allocated for professional learning (Malm, 2020).

These experiences indicate that educators' proactive engagement in professional learning is not only about improving technical proficiencies (e.g., learning strategies for reflective teaching) but seems to be more about "goals and purposes of learning about teaching that go beyond the technical acquisition of knowledge and skills or making teacher education practice more effective or efficient" (Vanassche & Berry, 2020, p. 197). Hence, learning to facilitate reflective practice purposefully goes beyond developing technical proficiencies toward problematizing and positioning roles (Pinnegar et al., 2020) and attending to and responding to peculiarities and complexities of contexts (Boud & Walker, 1998).

Higher education-based teacher educators' competing roles as teachers of teachers and researchers have recently attracted scholarly interest (Smith & Flores, 2019). Such an interest also presents a transformative potential of sharing understandings of the meditative roles of teacher educators in excelling in fulfilling their duties. Similarly, adapting context-sensitive and need-based strategies, i.e., reflective teaching, could uncover possibilities for changing practices within a given contextual constraint and affordances. This article shares such experiences of transformative practices during a self-study initiative while embedding reflective practice among student teachers in a teacher education program.

Context

The Asmara College of Education (ACE) has been the only higher education-based teacher education institution in Eritrea, a sub-Saharan country in East Africa, since 2018. It has established a one-year postgraduate diploma (PGD) in Education for candidates with bachelor's degrees in subjects taught in secondary schools in the country. The PGD program offered general and subject-specific pedagogy and psychology courses and a semester-long practicum in schools. During the study semester in the spring of 2021, the program enrolled candidates with more than 3 years of school teaching and leadership experiences from all the regions[1] of the country. It was unprecedented for most colleague educators in the program as we often facilitated undergraduate courses for prospective teachers with no formal school teaching experiences.

In this context, I was part of a proactive learning community of educators who initiated collaborative action research in improving course management practices in our colleges (e.g., Author et al., 2023). Such an improvement initiative was meant to revitalize our roles in positively influencing student teachers' school practices and redress the low regard for the teaching profession (Hailemariam et al.,

[1] Eritrea has six administrative regions

2010). The self-study initiative on a PGD course titled "Social Sciences Teaching Methods" (SSTM) was embedded in and a continuation of these team initiatives. The study semester reported in this article was concerned with how the college community construed reflection as a mere requirement instead of its transformative potential advocated in the teacher education literature (Author1, 2023). Reflection should be the primary approach in managing the PGD courses, taking stock of them, and developing the diverse schooling experiences of the candidates. It prompted the adoption of a self-study methodology (LaBoskey, 2004) on facilitation interventions while embedding reflective practice in a teacher education course.

Methods

Self-study methodology, mainly qualitative, was developed in teacher education contexts as teacher educators were challenged to align their beliefs (e.g., about teaching teaching) with their practices (Fletcher, 2020). Additionally, teachers' unique positioning allowed them to understand and uncover the complexities of educating teachers (Fletcher, 2020). As such, self-study suited to research situated concerns on whether and how the proactive facilitation supported the reflective practices of a group of student teachers (N=45) (Author1, 2023). The general objective of the SSTM course was to learn the foundations and pedagogies of teaching social sciences in middle and secondary schools through and in reflection. We have developed a course design for embedding reflective practice in the SSTM course by encouraging a series of reflective writing assignments, creating collaborative opportunities, and modeling (Author1 et al., 2024). The required individual reflective writing assignments submitted for feedback (N=8) were meant to support the student teachers in making sense of course reading during sessions and reconstructing their experiences (Berry, 2007). In line with the course objective of valuing reflective practice, a group reflective assignment was designed to support the student teachers, organized into 10 study groups, reflect research, and improve their learning practices during the PGD program at the college.

Self-study is as collaborative as it is self-reflective (LaBoskey, 2004). Accordingly, we were engaged in proactive collegial practices among groups of critical friends (Fletcher et al., 2016) who not only established the trustworthiness of the research (LaBoskey, 2004) but also provided a crucial context for improving my facilitations during the course through our professional conversations. A colleague teacher educator volunteered to attend and observe a class (N=15) and offer her intimate insights following every session during the study semester. These interactions with my colleague, who herself was passionate about interactive teaching, were beyond a practice-centered interviewing and more of a "litmus test for quality which allowed [me] to grabble with the tensions, issues, and problems that naturally arise" (Cuenca, 2020, p.465) while studying to align my belief and practice. As the management of reflective assignments was a commonly reported challenge in the PGD program, colleague educators and the leadership (N=7) were keen to discuss self-study experiences. These interactions (N=5) were essential for discussing perspectives of turning problems into possibilities. Members of a team of educators (N=4), which I am part of, constituted another layer of critical friendship. The other team members were not officially affiliated with the ACE during the study semester. Hence, in-person meetings (N=6) were arranged outside the college to discuss the facilitation experiences. Essentially, the team served as 'meta-critical friends' (Fletcher et al., 2016), providing contextually rich and relevant perspectives and expert inputs due to our closer familiarity and previous interactions in similar collaborative course management initiatives (Author1 et al., 2023).

Data and analysis

We draw from the self-reflective and collaborative data sets generated during the research to address how the study on our proactive facilitation of reflective practice helped develop collaborative and improvement stances. These data sets constitute a self-reflective account of 18 entries, formally recorded conversations (total of over 18 hours) with the groups of critical friends transcribed in more than 40,000 words. We also used course materials, e.g., guidelines developed during the process of facilitation. The practice and process-centered self-reflective accounts and professional conversations have not only informed the teaching but also established the trustworthiness (LaBoskey, 2004) of the study as they were used both to frame problems of practice and generate action-present facilitation moves (Bullock & Ritter, 2011). The self-study was institutionally supported through a formal letter from the acting dean to all departments. The research proposal was also shared among most of the colleague educators who participated before the study semester started. For the formally recorded conversations, colleague educators filled out and signed a consent form.

The transcribed data sets had at first gone through a sifting process of open coding, identifying patterns within and across the data sets, and generating categories (Robson & McCartan, 2016). We developed the themes discussed as findings in this article in line with the theoretical frame of professional learning as praxis development. Hence, the analytical approach in this study aligns with what Braun and Clarke (2019) called reflexive thematic analysis in that "themes are creative and interpretive stories about the data, produced at the intersection of the researcher's theoretical assumptions, their analytic resources and skills, and the data themselves" (p.594). Accordingly, we developed two interlinked themes as significant aspects of the self-study on the reflective facilitation, which have triggered professional stances of togetherness and practice-centered explorations for improvements.

Facilitation of reflective practice as praxis development

In this section, I present two sets of findings related to the main theme of this article. The first refers to improvements while aligning my beliefs and practice in context, and the second relates to positioning the PGD program and student teachers' learning challenges as conditions for developing professional experiences. I translated the extracts of collegial conversations into a mix of English and a locally used Tigrinya language.

Researching self-in-practice

Facilitating reflective practice in a customarily teacher-led classroom context where knowledge transmission modes of interactions are dominant (Tadesse et al., 2023) could seem daunting. However, the experience in this self-study shows that proactively researching facilitation moves affords unique possibilities for professional learning and improvements from within. For example, the following conversation excerpts with the visiting colleague educator indicate the motivations I was developing for embedding reflective practice and how the facilitations needed to be reframed in line with the lived experiences and needs of the student teachers.

We [PGD educators] were just in the business of throwing reflective assignments to student teachers assuming that they could understand its value by themselves; there was a lot that the student teachers wanted to reflect on when given the space and time (Author1, 23.03.2021)

A student-teacher was telling [during a session] that you were criticizing, this is a straightforward way of saying that [he was not] getting what you are saying and you are not getting what is happening among the student-teachers study groups; it was pronounced that there was a gap. (Visiting educator, 29.03.2021)

In the first excerpt, the student teachers were engaged in collaborative reflection based on a reading assignment about their school experiences. After the session, I communicated the possibility of engaging in class interactions when facilitation designs foreground student teachers' experiences. In an Eritrean secondary school context, Tadesse et al.'s (2023) study shows engaging dialogic possibilities due to facilitation tweaks a teacher introduced in a large-sized and frontal teaching classroom. The second excerpt relates to the reactions of student teachers to the individual and collaborative course reflective requirements. It shows tensions between adapted reflective approaches and student teachers' lived experiences and needs (see Author 1, 2023).

The value of researching self-in-practice was apparent in learning to articulate such facilitation tensions among the student teachers and colleagues (Cuenca, 2020) and mobilizing discussions for improvements. The following excerpts demonstrate such experiences during the study semester as I learned to recognize, manage, and act on the tensions encountered.

Group 5B impressively shared how they intended to informally retrieve information about peer student teachers' experiences in discussions in their course works…informality is a powerful and relevant methodology, the issue is how groups view and utilize their experiences as a resource. (Author1, Reflective entry#4, 20.02.2021)

We advocate for reflection in the college, yet we do not seem to have a common understanding of what reflection is because student teachers are getting different meanings out of the reflective assignments required in the PGD course. (PGD educator2, 11.03.2021)

Interactions with the PGD educators should lead to action, one way of doing that is the planned college forum on reflective practice where you [Author1] should take the least roles during the presentation while proactively and informally leading the preparations; this is important for the imbuing team and collective spirit of improvement initiatives at the college. (Critical friend1, Team discussions, 14.03.2021)

The practice-centered reflective account and discussion excerpts among the critical friend groups highlight action-oriented reflective practice. While managing the previously mentioned facilitation tension between intent and practice, we were developing a "powerful way of listening to one's students with a view to understanding their professional learning and to improving both one's own classes and the program in which one is teaching" (Russell, 2022, p.5). In a way, we realized how the student teachers learned 'informally' and how they could be supported in capitalizing on such experiences while co-engaging in their reflective tasks for their professional development. Such a realization also needed to consider the learning experiences of student teachers in the other PGD courses, particularly in the formally required reflective tasks. The second excerpt indicates that the SSTM student teachers encountered differing reflective requirements, which did not necessarily deepen their learning experiences. Accordingly, the evident need to synergize the reflective experiences for the student teachers, apparent in our discussions with colleague PGD educators, required "a *communicative action* kind of action that happens when people aim to reach intersubjective agreement about how to understand their world, mutual understanding of others' positions and perspectives, and uncoerced, unforced consensus about what to do" (Kemmis et al., 2014, p. 9, emphasis in original). Such a communicative action led to the organizing of a college-level forum on reflective practice attended by more than 150 student teachers and educators during the semester.

Synergizing the seemingly singular reflective experiences in the SSTM course with the other PGD courses was further acknowledged during discussions with the educators outside the ACE team. The perspective of the critical friend during the discussion relates to the forms of power (Salo et al., 2024) that should be delicately enacted to mobilize the solidarity of colleagues for collective improvements in the interest of fostering student teachers' positive reflective experiences. Researching proactive facilitation of reflection invokes potent professional learning opportunities necessitating collaborative actions to improve practice site reflective experiences.

Challenges as conditions for developing professional experiences

The premise of the PGD program was based on the problematic assumptions around content and pedagogy in teacher education (see Segall, 2004). Preoccupations with' how to teach' field-related content taught in secondary schools over how teachers learn to teach as professionals were familiar. For example, the consecutively arranged course offerings[2][2] reflect how school subjects are taught. Such a program arrangement was challenging as it tended to fragment the reflective experiences intended to be developed during the SSTM course (Author1, 2023). However, through the self-study,

[2] The SSTM course student teachers were attending 4 other PGD courses during the study semester.

these challenges were not seen as mere constraints but essential conditions for developing relevant professional experiences. In this section, facilitation arrangements introduced in the SSTM course to mediate the contextual challenges proactively are analyzed as conditions of possibilities for developing teaching and learning experiences (Kemmis et al., 2014). Such arrangements include introducing course design, expanding contact hours, and adapting a responsive assessment mechanism.

In line with the explicitly stated and justified objective of the SSTM course for teaching and modeling reflective practice, an assignment guideline was developed to support the student teachers in better managing their professional learning experience during their stay in the PGD program. Explicated tasks excerpted from the guideline stated as follows:

- *Study groups discuss mature key challenges in identified learning practices during the current semester at the ACE.*
- *Study- groups engage in reflective discussions in developing alternative practices in improving identified challenges during the semester* (Assignment guideline #1, 10.02.2021)

The course reflective assignment's focus on the learning practices of the student teachers during the semester was motivated by their learnability concerns, as reiterated by the visiting colleague educator.

They must acknowledge their limited competencies in coping with the PGD requirements, as they said they were not into many professional development activities in their schools. (16.03.2021)

Hence, it was fitting to focus and build on such concerns beyond the programs' prescribed contents and requirements. In a Finnish teacher education context, Kostiainen et al. (2018) discuss the significance of course designs while facilitating what they called meaningful learning among student teachers through adapting approaches that allow expressions of concerns and emotions. Accordingly, the reflective spaces created in addressing and improving the learning practices of the student teachers were meant to develop their learnability, which, according to Senese (2017), and in line with my belief, had a direct and meaningful influence on their school teaching and leadership practices.

However, such a requirement necessitated committing to facilitations modalities of working with study groups beyond the formal contact hours and classroom space. Cognizant of this need, we deliberated on experiences with the visiting educator on how such facilitation interventions could be enacted.

So what I was doing was checking if they [her former student teachers] were getting what was being asked of them, they had to know my expectations, so I was deliberately finding ways to informally discuss with the groups which I later found out was called pedagogic talk, it's not enough to explain the nature of the assignment but discussing about it has to be a teaching and learning process somehow, so I made sure there were consultations with every group for the rest of the semester. (visiting educator, 10.03.2021)

Our colleague's experience raises the significance of relationality when conceptualizing and developing teacher educators' professionalism in that our "actions and decisions in practice are professional messages or reflections of one's personal stance, values, and norms (goals) and a particular idea of "good" meaningful) teaching" (Vanassche, 2022, p.5). My colleague also used an elaborate concept of pedagogic talk drawing from professional development opportunities, which we both took part in with Finnish experts (see Author et al., 2021). This shows the importance of exposure and interactions with scholarship and teacher education scholars in enhancing our 'brokerage' roles in supporting teachers' learning by connecting lived experiences (and initiatives) with broader forms of knowledge (Knight, 2024). Crucially, the insight on positioning the assignments as a learning opportunity for developing facilitation experiences and meaningfully supporting the student teachers was critical during the self-study. Hence, beyond my commitments to spending time to work with study groups, I was also motivated to research these very efforts in improving the relevance of the course and rigor of the self-study (Author et al., 2024; LaBoskey, 2004; Vanassche & Kelchtermans, 2015).

Consequently, commitments to closely follow and support the reflective practice of the student teachers led to adapting fitting assessment modes. The student teachers' readiness and motivation to improve their English writing competencies was instigated by the consistent feedback I shared on their weekly individual reflective reports (Author1, 2023). Hence, these interest and reflective opportunities were taken as part of the continuous assessment schemes encouraged in the PGD program. The relevance of this scheme was evaluated with the student teachers during one of the sessions, following this my colleague shared her observations as follows:

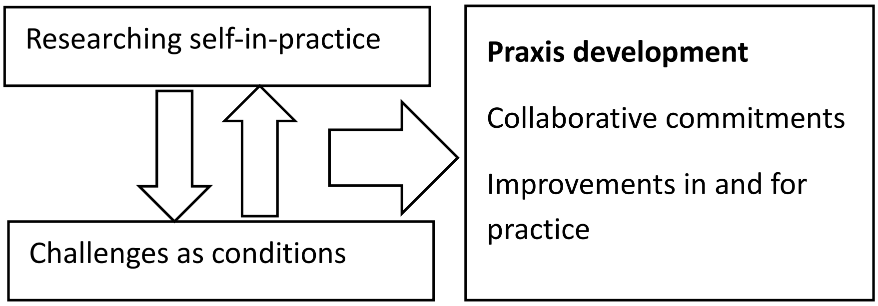
- *What I realized in this class when you were talking about how you give feedback was that they are learning how to do things by modeling. You are doing what you want them to do, and you are communicating how you are following, which means they can also start to develop their assessment mechanisms, which they should communicate as well.* (Visiting educator, 16.03.2021)

The colleague referred to the weekly written reflections we shared with the student teachers during course discussions. This move was part of the course's facilitation design, modeling what and how I was learning from the interactions during the course. The positive reactions of the student teachers relate to Perry and Booth's (2024) experience of when "professional development facilitators model a pedagogical approach; this pedagogical approach forms part of the content and pedagogy of the professional development" (p.152).

Discussion

This article addressed how a teacher educator's self-study on the facilitation of reflective practice in a teacher education context has created conditions for proactive collegiality and improvement stances in and for practice. The self-reflective and collaborative course artifacts showed the value of researching self-in-practice in recognizing and explicating the tension of practices on which the purposeful and collaborative *initiatives* for improvements were predicated. The course experiences also showed how developing a purposeful orientation towards the facilitation practice allowed for identifying possibilities for changing practices within the affordances and constraints of the teacher education program. Figure 1 captures such dynamics as researching self-in-practice led to searching conditions of possibilities. The created conditions, e.g., synergizing facilitation experiences among PGD educators, in turn, honed my researcher' self' because I was learning to "articulate exemplars that represent contextually bound claims and interpretations about knowledge and understanding in practice rather than to seek solutions for practice in ways that are expressed as formal knowledge" (Fletcher, 2020, p. 276). I argue that these dynamics transpiring during the self-study were imbued with manifestations of professional learning as praxis development (Salo et al., 2024).

Figure 1: Researching facilitation of reflective practice as praxis development



The dimensions of professional learning as praxis development that needed to be attended during the self-study, including power and solidarity, trust, recognition, reflection, and time, were critical in prefiguring the collaborative commitments and improvements sought in and for practice (Kemmis, 2024; Salo et al., 2024). For example, during the discussions with PGD colleagues and educators, there were practical views on how we understood the meaning and facilitation of reflection among our student teachers. Such views showed solidarity with the need to revisit our teachings, at least trust, and recognize the significance of the self-study beyond the SSTM course, which led to co-planning a pertinent forum at a college level. This experience is analogous to other educators' experiences of collaborative action research in creating conditions for positive changes during and as a result of their professional learning in practice (Francisco et al., 2024). This research's experience also manifested the hybrid nature of self-study between self and community (Fletcher, 2020) during the deliberations for creating a *sense of ownership* of the initiative among colleague PGD educators. Such forms of power (Salo et al., 2024) are critical social conditions that foster collaborative commitments among communities of practitioners toward positive and sustained changes in teacher education practices (Demoz, 2024).

The self-study experience further resonates with perspectives on the practice-based professional development of teacher educators as what they *do* within a site's affordances and constraints should be the starting points for their learning (Vanassche et al., 2021). At the same time, the competencies of teacher educators in developing their motivations to learn (Nguyen, 2023) and enhancing their research skills in working towards what Mikkilä-Erdmann et al. (2024) called 'epistemic agency' are critical issues forward. My and the visiting colleague educator's sensitization and exposure to professional development opportunities in our practices factored in developing our motivations to position our initiative as a form of scholarship development.

Limitations and Implications

While framing and conducting the self-study, I did neither assume the perspectives to be generalized nor to resonate with colleague educators' professional concerns. The aim was to intimate lived facilitation concerns and document and publicize artifacts of improved sayings, doings, and relatings (Kemmis et al., 2024) during and as a result of the self-study initiative. Hence, the findings and discussions should be read as insights from site-based and time-bounded professional actions (Salo et al., 2024) for approaching complexity with complexity (Demoz, 2024). Future research could focus on cross-course and institution-led collaboration for researching (teaching) practices.

As teacher educators work to navigate their complex roles of educating and researching (Smith & Flores, 2019), modeling while learning to become reflective practitioners is key to constructively synergizing roles and influencing the professionalism of student teachers. One way of fostering modeling as a practice among teacher educators could be by creating the time and timing for professional learning. While institutions could encourage such a time, it's often the intrinsic motivations of educators (Malm, 2020) that orchestrate the timing of professional learning opportunities with educational and inclusive benefits. Another implication for the pedagogy of reflection in teacher education contexts could be the significance of community and collaboration. In contexts where professional development opportunities in practice settings are neither available nor formalized, building on student teachers' experiences and building collaborative commitments is critical in developing competencies and professionalism.

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Gábor BOMBA & Tamás CSÁNYI

Narrative Review of validation studies of the versions of the Physical Activity Enjoyment Scale for adolescents and older adults

Introduction

The positive effects of physical activity on physical, cognitive, and mental health are well known (Poitras et al., 2016), yet 80% of adolescents are considered physically inactive (Guthold et al., 2020). Within the different developmental stages of youth, adolescence is particularly important in establishing a lifelong commitment to healthy lifestyles (Batista, 2019), thus contributing to developing physical activity-rich lifestyle habits.

Research consistently confirms that an activity-related motivational system is a key component of physically active lifestyles (Kälbli, 2021; Carl et al., 2020; Dallinga et al., 2018). An essential element in a favorable motivational structure is the regular experience of positive experiences related to physical activity (Révész, 2021), which contributes significantly to achieving adequate physical activity levels (Gu et al., 2018). An important question is in which domain, with what frequency and intensity these positive experiences occur, and how they could be characterized and measured as factors.

The questionnaire method is a widely used scientific approach to exploring different characteristics of young people. It is also true for the enjoyment associated with physical activity among young people (children, adolescents, and youth). The Physical Activity Enjoyment Scale (PACES), developed by Kendzierski and DeCarlo (1991), was designed to measure the level of enjoyment of physical activity among young people using a standard method. It determines motivation for physical activity, including its associated enjoyment, for the preschool and adolescent age groups (Berki & Tarjányi, 2022). Several versions of the PACES have been validated in several countries in school-age children and adult age groups and can be used to measure the enjoyment level of physical activity (Burns et al., 2017; Chen et al., 2021; Román et al., 2014; Jekauc et al., 2013).

The quantity and quality of physical activity among school-age children is paramount for maintaining and developing physical and mental health, given today's increasingly sedentary lifestyles (Mitchell, 2019). According to the 2018 US Physical Activity Guidelines, 3 hours of moderate-to-moderate daily physical activity would be ideal for preschool-age children. Still, inactivity is already common at this age (US Department of Health and Human Services, 2018), and inactivity rates increase steadily with age (Poitras et al., 2016). Physical inactivity in school-age children negatively affects physical fitness and mental and cognitive abilities (Janssen & LeBlanc, 2010; Poitras et al., 2016). For example, Biddle and colleagues (2011) have shown that physical activity benefits children's mental health, so a clear goal for future societies is to ensure that school-age children spend as much time as possible in physical activity.

At the societal level, the frequency and amount of regular physical activity people engage in is strongly influenced by their financial situation and the amount of leisure time they have (Földesiné, 1991). For young children, the role of parents and their attitude towards sport is the most important in encouraging regular physical activity (Holt et al., 2011; Downward et al., 2014). Later on, physical activity can also function as a source of pleasure and a means of releasing free energy (Sterbenz & Géczi, 2016), during which time the role of sports professionals (physical educators, coaches, sports leaders) becomes of paramount importance (Csáki et al, 2013), as the child's liking for the person leading the physical activity sessions, usually the coach or PE teacher, increases the child's commitment to regular physical activity (Rottensteiner et al., 2015).

Motivation, particularly intrinsic motivation, plays a key role in increasing the quantity and quality of physical activity in children (Ng et al., 2012). An essential part of intrinsic motivation for physical activity is the enjoyment and excitement generated by the physical activity (Owen et al., 2014). It can be most effectively increased for children through different games (Mak et al., 2021). Engagement in and enjoyment of physical activity in children depends to a large extent on the community and peers with whom they can engage in the physical activity, as the majority of young children engage in sporting activity because a friend or classmate is also doing the activity (Gyömbér et al., 2016). In addition to parents and peers, schools (school sports) and teachers are also essential players in this process (Curtis, McTeer, and White, 1999).

The study of motivation is a very complex and challenging area. PACES is a tool to help develop this area, particularly in physical activity. The level of motivation is regulated by both external and internal influences (Várhegyi & Dóczi, 2021); the enjoyment of physical activity can be classified as an internal influence; therefore, by increasing the enjoyment level of physical activity, the intrinsic motivation of the Syrians can be increased (Berki & Pikó, 2018). However, it is also important to stress that not all community or group members can be equally intrinsically motivated to do the same thing (Ryan & Deci, 2000b).

Understanding individual characteristics and differences is essential from a pedagogical point of view, and we have therefore set our study the following objectives:

- A literature review and collection present the PACES questionnaire method's theoretical basis and scientific soundness.
- Seven studies used the PACES questionnaire, a modified, validated version of which was used to measure the level of enjoyment of physical activity in adolescents or adults.

Method

The present study is a narrative (descriptive, not systematic), critically synthesizing English-language articles. As a first step, we conducted a literature search using Google Scholar and PubMed databases. Our keywords were "Physical Activity Enjoyment Scale," "Physical Activity," "Physical Education," "enjoyment," "motivation," and "PACES validation study." In the first step, two researchers collected the literature, identifying the publications (N=17) considered most relevant to the objectives of our study based on the citation indexes. In a second step, we identified the publications (1) in which the authors had validated PACES in a national language. In the second step (2), we summarized the results of the scientific work using PACES and the focal points of this research and used the selected (N=7) publications to present this research area.

The PACES is a questionnaire method, the original version containing 18 statements rated by the participants on a 7-point Likert scale. Over the years, the questionnaire and its modified versions have been validated in several languages. Some versions of the PACES differ from the original questionnaire either in the number of items included in the Likert scale (Dunton et al., 2009) or both (Motl et al., 2000). The different PACES versions are similar in that the statements are divided into two poles, and the number of negatively worded statements is less than that of positively worded statements.

Results

The first step of our results was to classify the selected studies (Table 1). Of the seven studies, one was written in the 1990s, 2 in the 2000s, and four after 2010. 5 deal with the school environment, 1 with the sports environment, and 1 with other settings. Sample sizes varied between N=57 and N=5934. In terms of research methodology, four versions of the questionnaire were used. Regarding age groups, most surveys (N=6) covered people under 20 and (N=1) those aged 60-91.

Summary of the validation studies analyzed

Year Method Population Country/language Age Sport Key conclusions
1995 confirmatory factor analysis, consistency test (Cronbach's alpha) 392 USA 10-17 years basketball, football, tennis The measurement tool showed a good fit, but it is one-dimensional, so much depends on how the claims are formulated.

2008 multivariate analysis of variance (MANOVA), consistency testing 5934 Italy 11-19 years physical education in school The Italian version of the PACES has high internal consistency and reliability. It can be used effectively to assess the enjoyment and pleasure of physical activity in a physical education classroom setting. 2009 confirmatory factor analysis, structural equation modeling 387 USA 15-18 years physical education in school Despite the gender differences, the single-factor study confirmed the usefulness of the PACES as an effective measure of physical activity enjoyment.

2013 confirmatory factor analysis (CFA), consistency test (Cronbach's alpha) Study 1: 504, Study 2: 196 Germany 9-17 years physical education in school The German version of PACES is reliable; however, the factorial validity and invariance of the measure can only be partially verified.

2019 univariate normality analysis, confirmatory factor analysis (CFA) 4051 China 9-20 years physical education in school The comparison tests found a significant correlation between gender and the three levels of education studied and confirmed the one-dimensionality of the questionnaire. The analyses also confirmed the applicability and reliability of the Chinese version of the instrument.

2018 confirmatory factor analysis (CFA), fit analysis (chi-square/df, SRMR, RMSEA), comparative fit analysis (CFI) Study 1: 168. Study 2: 57 Brazil 60-91 years general sports The Brazilian Portuguese version of PACES effectively measures the enjoyment level of physical activity; with this instrument, the measurement results are almost perfectly reproducible over a 7-14 day interval.

2021 content analysis, exploratory factor analysis, consistency check Study1: 182, Study 2: 3219 Germany 11-17 years physical education in school The PACES-S is a reliable and valid measurement method that can be particularly useful for measuring physical activity enjoyment in large-scale studies. However, its main limitation is that its effectiveness has only been tested in a German-speaking population.

Table 1: Key data from the validation studies analyzed

Summary of the validation studies analysed

Year	Method	Population	Country/language	Age	Sport	Key conclusions
1995	confirmatory factor analysis, consistency test (Cronbach's alpha)	392	USA	10-17 years	basketball, football, tennis	The measurement tool showed a good fit, but it is one-dimensional, so much depends on the way the claims are formulated.
2008	multivariate analysis of variance (MANOVA), consistency testing	5934	Italy	11-19 years	physical education in school	The Italian version of the PACES has high internal consistency and reliability and can be used effectively to assess the level of enjoyment and pleasure of physical activity in a physical education classroom setting.
2009	confirmatory factor analysis, structural equation modelling	387	USA	15-18 years	physical education in school	Despite the gender differences, the single-factor study confirmed the usefulness of the PACES as an effective measure of physical activity enjoyment.

2013	confirmatory factor analysis (CFA), consistency test (Cronbach's alpha)	Study 1: 504 Study 2: 196	Germany	9-17 years	physical education in school	The German version of PACES is reliable, however, the factorial validity and invariance of the measure can only be partially verified.
2019	univariate normality analysis, confirmatory factor analysis (CFA)	4051	China	9-20 years	physical education in school	The comparison tests found a significant correlation between gender and the three levels of education studied and confirmed the one-dimensionality of the questionnaire. The analyses also confirmed the applicability and reliability of the Chinese version of the instrument.
2018	confirmatory factor analysis (CFA), fit analysis (chi-square/df, SRMR, RMSEA), comparative fit analysis (CFI)	Study 1: 168 Study 2: 57	Brazil	60-91 years	general sports	The Brazilian Portuguese version of PACES effectively measures the enjoyment level of physical activity and with this instrument the measurement results are almost perfectly reproducible over a 7-14 day time interval.
2021	content analysis, exploratory factor analysis, consistency check	Study1: 182 Study 2: 3219	Germany	11-17 years	physical education in school	The PACES-S is a reliable and valid measurement method that can be particularly useful for measuring physical activity enjoyment in large-scale studies, however, the main limitation of the PACES-S is that its effectiveness has only been tested in a German-speaking population.

Review of validation studies of the Physical Activity Enjoyment Scale

Crocker and colleagues (1995) carried out one of the first validations of the original PACES questionnaire developed by Kendzierski and DeCarlo (1991). In this validation study, the 18 items of the PACES were rated on a 7-point Likert scale. On the 7-point scale, the statements were divided into two opposite poles. The maximum score was 126, and the minimum score was 18.

The original sample was 392 youth sports camp participants aged between 10 and 17. There was some concern among the authors that younger participants might not understand or be clear about all the statements in the PACES. In order to more accurately define the sample, it was decided to exclude all participants aged 10 and 11, as well as those who lacked any knowledge of the sports chosen to conduct the study. Furthermore, due to their small size (n = 17), all 17-year-olds were excluded from the sample. The final sample was 279 (159 males and 120 females) with an average age of 14.4 years. Participants played boys' and girls' basketball, boys' and girls' football and tennis.

The research aimed to determine the minimum number of factors underlying the observed variables (gender differences, differences between different ages, or years of schooling). The fundamental objective was to test the original PACES questionnaire on a sample with a mean age of 14 years using factor analysis and Cronbach's alpha coefficient for consistency. The statistical analysis showed that the questionnaire was valid with a high confidence value of α=0.96.

In the sample analysis, the correlation value ranged from r = 0.38 to r = 0.76. The internal consistency assessed by Cronbach's alpha coefficient was α = 0.90. These results were similar to those of Kendzierski and DeCarlo (1991), the developers of PACES. Interestingly, no gender differences were found in the questionnaire analysis. The results obtained suggest that the proposed structure of the PACES was a good fit. Due to its one-dimensional structure, several research questions have been raised, particularly concerning measuring enjoyment. One issue is the rating scale of the statements within the PACES.

The original version of the PACES has undergone several minor modifications, but Dunton and colleagues (2009) validated a version of the questionnaire on the most significant sample of items. The original version of the PACES was used (Kendzierski & DeCarlo, 1991), with the modification that the 18 items assessing enjoyment of the exercise (e.g., "I think it's pleasant," "Very stimulating," "It feels good,") were rated on a 6-point scale rather than 7. Participants were asked to respond to each statement on a 6-point scale (1 = strongly disagree, 6 = strongly agree). Seven statements were negatively worded (e.g., "Not fun at all," "I don't like it," "It frustrates me"). Consideration was also given to previous research that supports the factorial and construct validity of the PACES among secondary school girls (Motl et al., 2001) and children (Paxton et al., 2008).

Dunton and colleagues' (2009) research aimed to examine the factorial validity and gender invariance of the PACES in a sample of older adolescent boys and girls (ages 15-18). The primary objective of the research was to determine the wording of the questionnaire statements to ensure that they were applicable and valid in younger populations. Secondarily, the researchers sought to determine whether the factor structure, item ratings, and item errors were equal for boys and girls.

The study involved 387 secondary school students. The students were recruited from a suburban high school in the northeastern US. The participants were in 10th grade. They participated for over one year until the start of 11th grade. For practical reasons, adolescents enrolled in special classes (e.g., severe learning disabilities, English as a second language) were not included in the study sample (Dunton et al., 2009).

There were no significant differences in age, gender, and ethnicity data for the PACES questionnaire (n = 21). There were also no significant differences between those who answered all questions and those who did not answer all questions (n = 366). Therefore, the researchers also accounted for some data being missing by chance. Individual mean scores for statements ranged from 4.06 to 5.68 (on a 6-point scale). Boys (M = 4.98, SD = 0.77) and girls (M = 4.88, SD = 0.84) had comparable cumulative gender mean scores when using PACES: t(364) = 1.15, p = 0.252.

The results showed that the fit of the single-factor model was correlated with error terms and positively worded items. These did not impair or limit the evaluability of the various data (e.g., factor loadings and correlations between error terms). Despite gender differences in physical activity levels (Grunbaum et al., 2004), the single-factor test is equally and effectively used. It is essential to note that the measurement should be standardized because if the questionnaire works differently for boys and girls, it may confound the interpretation and evaluation of research results (Horn & McArdle, 1992).

Jekauc and colleagues (2013) conducted a German validation of the PACES adapted from Motl and colleagues (2000) in their study. The PACES developed by Motl et al. (2000) contains 16 statements, starting with "When I am physically active..." The response categories were shortened to a 5-point Likert scale. The authors aimed to investigate reliability, factor and criterion validity, and measurement invariance between age and gender for the German version of the PACES in the German-speaking child and adolescent population. One of the aims of the authors' study was to resolve the problem of contradictory gender invariance results reported by Moore et al. (2009) and Dunton et al. (2009). The authors conducted two consecutive studies. Based on responses to questionnaire disguises, confirmatory factor analyses were applied to a cross-sectional sample of 250 girls and 254 boys (Study 1) and a longitudinal sample of 109 boys and 87 girls (Study 2). Both studies involved students aged 9-17.

Correlation at 7-day intervals assessed test-retest reliability. Cronbach's alpha and the composite reliability coefficient based on CFA assessed internal consistency. Participants in the first study were 250 girls and 254 boys aged 9-17 years (M=13.9; SD=2.2), who also served as the sample for the MoMo study (Motorik-Modul). The MoMo study is a representative study conducted in Germany among children and adolescents aged 9-17 (Woll, Kurth, Opper, Worth, and Bo¨s, 2011). In this first study, four different factors were used to model the reliability of the questionnaire. The resulting scale averages, confidence intervals, standard deviations, Cronbach's alpha coefficient, and the results of the composite reliability analysis indicated that Cronbach's alpha coefficient ranged between 0.92 and 0.93, indicating that the internal consistency of the questionnaire was considered good.

In Study 2, 109 boys and 87 girls participated, all aged 9-17 years (M=12.8; SD=1.6). Participants were collected from secondary schools in Konstanz, Germany, from all three types of schools in the three-tier secondary school system: Hauptschule (n=28), Realschule (n=63), and Gimnázium (n=105).

Cronbach's alpha coefficient in this analysis ranged from α = 0.89 to 0.91. This validation study showed that the German version of the PACES is sufficiently reliable and comparable to the original English version (Jekauc et al., 2013). The researchers agreed that the factorial validity and invariance of the measure can only be partially confirmed based on previous research results because the method's effect depends on how positive and negative items and statements are formulated.

The PACES is a well-known and used measurement instrument in Europe and worldwide, especially in Asian countries, as the questionnaire has been validated in several studies in China (Chen et al., 2019; Chung & Leung, 2018; Chen et al., 2021). Chen et al. (2019) conducted the first version of the questionnaire validated in Chinese based on the version developed by Motl et al. (2001). The validation survey involved N = 4051 (originally 4074, remaining 4051 after data cleaning) students aged between 9 and 20 years. All students were enrolled in 37 primary and secondary schools in 37 public institutions in 8 different geographical areas of Mainland China. 50.5% of the participants were boys and 49.5% were girls. At least one trained administrator was present in each school to ensure the study was conducted properly. The students participated in the study voluntarily and completed the Chinese version of the PACES (S-PACESC) in a classroom setting.

The study's primary aim was to validate the Chinese version of the PACES questionnaire by demonstrating factor validity, measurement equivalence, and predictive validity. Previous studies have well documented the importance of enjoyment of physical activity in physical education class participation (Sallis et al., 1999; Schneider et al., 2009; Williams et al., 2008). Based on these, the authors found that an accurate and valid measure can be conducted using their questionnaire version. The two-way MANOVA results revealed a significant correlation between gender and school grade using Wilks' statistical coefficient. Separate univariate ANOVA parameters revealed a significant association between gender and level of enjoyment of exercise. Separate univariate ANOVA parameters also found a significant association between the level of enjoyment of physical activity and the school year. These findings suggest that gender and educational attainment should be included as covariates.

In a study by Chen and colleagues (2019), measurement equivalence and latent mean comparison tests found significant associations between gender and the three levels of education. The results also support the unidimensional nature of the PACES and the validity and applicability of the Chinese version of the questionnaire. Chen and colleagues (2021) adapted and created a shortened version of the PACES, which they named PACES-S. This version of the questionnaire was designed with 16 items instead of the original 18 items, which can be rated on a 4-point Likert scale instead of the original 7 (Chen et al., 2021). They wrote their study with the two aims of (a) creating a new, shortened version of the PACES using content analysis and (b) validating the applicability of their new version of the PACES (Chen et al., 2021) to an adolescent (11-17 years old) sample by examining the psychometric properties of the new PACES-S questionnaire (validity, internal consistency, test-retest reliability, and concurrent validity).

The content analysis was conducted by six researchers, four of whom had PhD degrees in sports sciences, based on the work of Lynn (1986), who stated that a minimum of five researchers are required for content analysis to ensure that matches are sufficiently verifiable (Chen et al., 2021). The content validity index was determined based on Scherer's (1987) component process model. When evaluating the 16 statements in the questionnaire, the researchers paid close attention to evaluating negatively worded statements (Chen et al., 2021). A modified 4-point Likert scale (1 = "does not meet the definition"; 2 = "somewhat meets the definition"; 3 = "fairly meets the definition"; 4 = "very meets the definition") was used to assess the content validity of the statements (Jekauc et al., 2013), based on the work of Davis (1992). The content analysis researchers chose the following for each value on a 4-point Likert scale of statements based on content validity: 'I enjoy,' 'I find it pleasant,' 'Very pleasant,' and 'It feels good.' The k* of the four selected items was higher than 0.74, which was used in the PACES-S.

The researchers' internal consistency, test-retest reliability, construct—and concurrent validity of the newly created German-language PACES-S were assessed using data from two coherence studies (Jekauc et al., 2013; Mauz et al., 2020) (Chen et al., 2021). The enjoyment level of the sample subjects was examined in two separate studies (Chen et al., 2021). The first study (Study 1) investigated a sample of 182 members (N=182), consisting of 103 males (n=103) and 79 females (n=79) (Chen et al., 2021). All sample members were from a German city's regular secondary schools, from all three types of traditional secondary schools: Hauptschule, Realschule, and Gimnázium (Chen et al., 2021). They also completed the MoMo-PAQ physical activity questionnaire and the PACES-S questionnaire developed by Chen et al. (2021) on two measurement occasions, with 7 days between each measurement. During this 7-day measurement period, all subjects wore an ActiGraph GT1M (Pensacola, FL, USA) accelerometer and kept a physical activity diary.

To replicate the reliability and validity analysis of the PACES-S, Mauz et al. (2020) based on the tests and results of Study 1 and the psychometric properties of the PACES-S were also evaluated using the measurement data from Study 2 (Chen et al., 2021). For this second study, the researchers chose a sample of adolescents aged 11-17 who participated in the German KiGGS national fitness measurement similar to the Hungarian NETFIT measurement between 2014 and 2017 (Woll et al., 2021). After providing their data (age, gender, type of school) and being assessed for physical fitness, participants completed the PACES-S questionnaire developed by Chen et al. (2021) on several occasions (Wagner et al., 2014). They wore an accelerometer for 8 days to assess their physical activity (Chen et al., 2021).

Exploratory and confirmatory factor analysis identified and confirmed the factorial validity of the PACES-S. Results showed good test-retest reliability ($r = 0.76$) and internal consistency ($\alpha = 0.82$-0.88). In this context, in addition to parallel validity, the results showed positive correlations with the physical activity questionnaire (Study 1: $r = 0.36$), physical activity diary (Study 1: $r = 0.44$), and accelerometer data (Study 1: $r = 0.44$). Study: $r = 0.32$; Study 2: $r = 0.21$). A study by Chen and colleagues (2021) using a relatively large sample (Study 2) and a smaller sample (Study 1) investigated the psychometric properties of the PACES-S.

The results show that PACES-S is a reliable and valid measurement method that can be particularly useful for measuring the enjoyment of physical activity in large-scale studies. The shortened German PACES-S shows comparable measurement properties to the original PACES (Kendzierski & DeCarlo, 1991). However, the authors of the validation study point out that there are limitations to their PACES-S (Chen et al., 2021). They mention that, as a limitation, the study of emotions using quantitative measurement methods remains controversial within the scientific community (Barrett, 2006), and the results obtained are based only on studies of German-speaking participants.

In their study, Alves and colleagues (2018) adapted and validated the Brazilian Portuguese version of the PACES. Their study involved 75 subjects and used a test-retest method to assess the data and the internal consistency of the questionnaire. To test the reproducibility of the questionnaire measurement, the researchers performed an intraclass correlation coefficient analysis (Alves et al., 2018). In this validation study, Alves and colleagues (2018) validated a Brazilian Portuguese adaptation of the original version of the PACES developed by Kendzierski and DeCarlo (1991): 18 statements rated on a 7-point scale (1 = "enjoy," 7 = "hate," 4 = "neutral"). The scores for each statement are summed to give a score, with a maximum score of 126 and a minimum score of 18 (Alves et al., 2018), giving a one-dimensional measure of enjoyment of the physical activity. The questionnaire was translated in 4 stages, following the method developed by Beaton et al. (2007): in the first stage, two translators translated the original English questionnaire into Brazilian Portuguese, one of whom was familiar with PACES and the other not (Alves et al., 2018); in the second stage, a third translator checked the versions prepared in the first stage, and in the third stage, a native English speaker - but fluent in Brazilian Portuguese - translated it back into English. In the fourth stage, all the pre-translations and materials were reviewed by the study's authors and used to produce the final version of PACES in Brazilian Portuguese, using the method of Stork et al., 2015.

The Brazilian Portuguese version of PACES showed very high scores on the reproducibility test (CCI = 0.910, 95% CI 0.858, 0.943), which also demonstrated the effectiveness of the translation method (Alves et al., 2018). Based on the results of this study, the researchers concluded that the Brazilian Portuguese version of the PACES was effective in measuring physical activity enjoyment levels and that the measurement results were almost perfectly reproducible over a 7-14 day time interval using this measure (Alves et al., 2018).

Carraro et al. (2008), in their validation study of the Italian version of the PACES, "*assessed the factorial invariability and reliability between gender and age in a sample of Italian students*[1][1]".

Participants in the study were selected from lower and upper secondary schools in the Northeastern region of Italy, with a total of N = 5934 (3079 girls, 2855 boys) aged 11-19 years (Carraro et al., 2008). During data collection, the questionnaire was completed by students at the end of physical education classes in a relaxed environment without the presence of a physical education teacher (Carraro et al., 2008). During data analysis, the sample was divided into four subcategories according to age and gender, and confirmatory factor analysis was performed on these subcategories.

During the data analysis, the researchers removed univariate or multivariate outliers from the sample. Thus, 84 individuals were removed from the original sample to form the final sample of 5934 individuals (Carraro et al., 2008). Multivariate analysis of variance (MANOVA) was conducted to examine differences in sex and age. The fit parameters of the data and their comparison were examined using an RMSEA indicator based on Hu and Bentler (1999). In the internal consistency test, the Italian language PACES Cronbach's alpha index showed values between .78 and .89, i.e., the instrument under study had strong internal consistency. Also, it showed a good fit for gender and age (Kelloway, 1998). Based on the results of this validation study, it can be concluded that the Italian version of the PACES has high internal consistency and reliability and can, therefore, be used effectively to assess the level of enjoyment and pleasure of physical activity in a physical education classroom setting (Carraro et al., 2008). The authors point out that understanding the relationship between the motives for the enjoyment of physical activity revealed in this study and other psychological variables associated with physical activity may help to inform future intervention strategies (Carraro et al., 2008).

Summary and future directions for development and research

The validation studies analyzed in this research explored the applicability of the Physical Activity Enjoyment Scale (PACES) to scientific measurement. They focused on validating different questionnaire versions across different populations and cultures. However, research on the questionnaire has a much broader spectrum, as it is not limited to its practical applicability. As a

[1] Carraro, A. & Young, M. C. & Robazza, C. (2008). A contribution to validating the physical activity enjoyment scale in an Italian sample. *Social Behavior and Personality*: An international journal, 36(7), 913.

measurement tool, the PACES can also investigate the relationship between physical activity and enjoyment in different cultures and populations.

Crocker and colleagues (1995) validated the PACES in a study of adolescent youth in a sporting environment. They also concluded that enjoyment and its level can significantly influence participation motivation for a given physical activity (Crocker et al., 1995).

Chen and colleagues (2019) focused their study on validating the Chinese version of the PACES and obtained significant results on the factorial validity of the questionnaire. The Chinese-language version of the questionnaire they created is widely applicable – even considering the limitations identified by Jekauc and colleagues (2013) –and can be used in large-scale research (Chen et al., 2019).

A study by Dunton and colleagues (2009) examined the factorial validity of the questionnaire and gender invariance among older adolescent youth. The results showed that the scale is equally applicable to both genders.

Carraro and colleagues (2008) tested and validated the questionnaire on an Italian-speaking population, thus contributing significantly to PACES' international usability and relevance in scientific measurement.

Chen and colleagues (2021) developed and validated a shortened version of the PACES. Their study investigated the questionnaire's psychometric properties to extend its usefulness to other contexts.

Jekauc and colleagues (2013) carried out a reliability and validity study of the German version of the PACES, confirming the scale's applicability to the German population and identifying several limitations of their German version of the questionnaire that may exist for several versions of the questionnaire (Weyland et al., 2024).

The international existence of the PACES is further strengthened by the existence of a validated version in Brazilian Portuguese, which can be attributed to Alves et al. (2018). Their study validated the Brazilian-Portuguese version of the questionnaire and presented the evolution of PACES as a measurement tool in its international practical application.

Based on the data and results presented in this descriptive article, there are still many opportunities for future research and development in PACES. To further develop the questionnaire, it would undoubtedly be worthwhile to explore the scale's applicability to additional cultural and social groups in further research, if only because sports culture has a fundamental impact on the sense of enjoyment derived from physical activity (Malina, 2009), and this impact varies from country to country. A possible and forward-looking direction for future development is to conduct various longitudinal studies using PACES, which could help to understand how physical activity enjoyment varies over time and what factors might influence this variation.

As seen from the seven validation studies I have presented, the PACES can be used to assess different physical activity programs and has been used for this purpose in some cases (Jekauc et al., 2013). However, applying the questionnaire (or a newer version developed for this purpose) to a broader range of age and ability groups may also be suitable for future use in evaluating specific physical activity programs and identifying key elements of successful programs. Of course, we cannot forget the impact of technology and digitalization today. Developing a digital version of PACES, which could, in particular, significantly speed up data capture and processing and its application in research, would provide an opportunity to better understand the impact of modern technologies (e.g., apps and smart devices) on physical activity and enjoyment.

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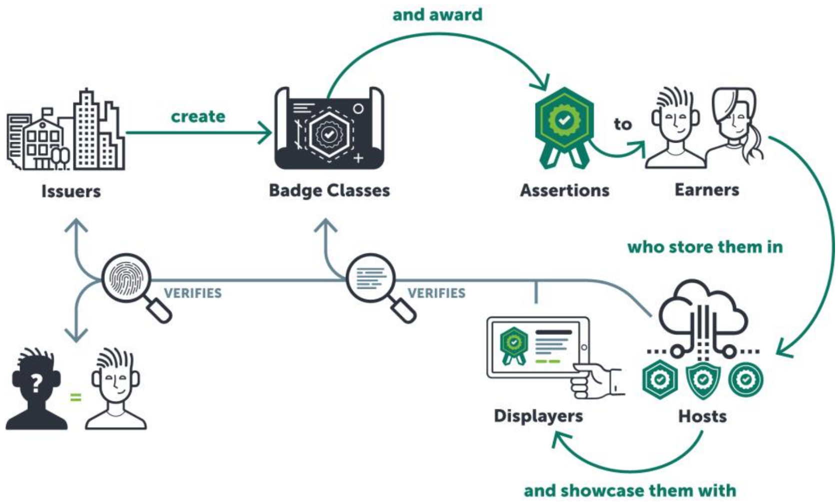
János Cz. HORVÁTH

Stackability planning in informal learning and soft skill acknowledgments

Introduction

Within the framework of the DISCO VET project (DISCO VET, 2023) with the participation of the Institute of Continuing Engineering Education in Budapest (BME MTI) of the Budapest University of Technology and Economics (BME), the goal was to develop a digital badge and certificate management system based on the Open Badge standard. The capabilities of the open-source Badge program were the basics, but they could be improved. The IMS Open Badges specification describes a method for packaging information about accomplishments and recognition, embedding it into portable image files as digital badges, and establishing resources for validation and verification (Arenas, 2021).

Figure 1. **The life cycle of an Open Badge based digital credential**



Source: https://openbadges.org/build

Our DCP system, which complies with the Open Badge 2.0 standard, works well in practice. We have issued many training programs at BME that are associated with digital certificates. The system supports the collection of earned badges of our users. They have accumulated a considerable number of badges during this time. The evidence of awarding the badges is included in the metadata. According to our surveys, this data content typically provides limited information about the recipient's competencies. For this reason, the question is: would it be possible to develop a supporting competency framework that could be included as supplementary data when awarding badges? Furthermore, if such metadata-enriched certificates appeared in portfolios, could they be grouped, bundled, or stacked?

Soft skills

Soft skills (Holik and Sanda, 2021) are often defined in terms of "those skills, abilities, and personal attributes that can be used within the wide range of working environments that graduates operate in throughout their lives" (Fraser (2010).

Numerous researchers have defined soft skills (Bennett et al. (1999), Gallivan et al. (2004), Beard et al. (2007), Schulz (2008), Chamorro-Premuzic et al. (2010)); without aiming for completeness, a few recent classifications have been collected.

Council recommendation (Council, 2018) on key competencies for lifelong learning has a correst list of them.

Other list was formed by (JobTease, 2021): adaptability, information management, collaboration, communication, leadership, critical thinking, problem solving, and creativity.

Eight soft skills were noted by (Technosolis, 2024): adaptability, emotional intelligence, communication, leadership, critical thinking, continuous learning, teamwork, and time management.

Next eight items from (Ultraproductive, 2024): deep focus, self-motivation, prioritization, proactive communication, adaptability, collaboration, continuous growth, and emotional intelligence.

The ELISA (European Engineering Learning Innovation and Science Alliance) (EELISA 2019, 2023) uses a unique soft skills framework to define the digital badges issued by the alliance. The set of Sustainable Development Goals (SDGs) (United Nations, 2015) defined by the United Nations (17 items) serve as a basis; educational objectives are elaborated in another document by UNESCO (UNESCO, 2017). However, the EELISA Office also applies impact levels (*discovery*, *knowledge*, *commitment*, *action*, *transformation*) (Waite, Álvarez, Navarro, 2023)(Waite, 2023) to these soft skills. These levels indicate the depth of soft skill acquisition. The dedication of the universities participating in the EELISA alliance is reflected in how they physically display the 17 SDGs to university community members. It is illustrated in the photo below, taken in the hall of Building E at BME.

Figure 2. **The physical representation of EELISA's SDGs at BME, Hungary**

Source: Own photo

From the above collection, it is clear that while there is some overlap in the content of soft skills, differences also emerge, and there is no final consensus regarding standardization.

General aspects of stackability

According to *The Britannica Dictionary* online knowledge base, stackability is "able to be arranged in a stack", referring to the ability to accumulate similar items. In the article (Reich, Ruipérez-Valiente, 2019), the authors argue – based on their surveys – that MOOC (Massive Open Online Courses) systems did not redeem the high expectations placed on them between 2012 and 2018. According to their findings, many registrants dropped out of online courses, and the completion efficiency of programs launched with the involvement of prestigious universities proved to be much higher in face-to-face formats. While it would be interesting to examine the effects of the COVID-19 pandemic in 2020, let us consider the response article listed under (DeVaney, Rascoff, 2019), written by James DeVaney and

Matthew Rascoff. They mention the concept of *stackability* as one of the significant opportunities in the MOOC world to strengthen engagement and add a sense of personalization to online education.

In contrast to the opinion expressed in the source (Reich, Ruipérez-Valiente, 2019), another researcher (Shah 2021) observes significant growth in the MOOC world, noting 220 million registered users, 950 participating universities, and 19,400 available courses as of 2021. Among major MOOC platforms, *edX* operates a stackable credential system named *MicroMasters*, while *Coursera* uses *MasterTrack*. These serve as marketing tools to strengthen learner engagement in open courses. They represent a learning strategy, as educational institutions can offer content that is better aligned in scope and format with the needs of participants.

These platforms provide shorter, smaller units of curriculum organized into a networked structure, allowing multiple entry points and pathways. The novel distribution of educational costs does not compromise the quality of education. Micro-credentials' structure is easy to follow, and learners' performance and progress can be effectively tracked. Instead of traditional entrance exams, students may be selected based on a stackable performance path.

Developing and operating a system of stackable credentials is primarily an institutional responsibility (Education Strategy Group, 2023). A shared agreement and ongoing coordinated effort among labor market actors, educational institutions, accrediting bodies, and governmental agencies responsible for quality assurance is essential.

Data Management Infrastructure and Alignment of Learning Content

The mapping and aligning learning content focuses on identifying possible learning pathways and defining connection points between them. It can be achieved through the following steps:

- Learning paths resulting from stackable certificates represent significant value from content and labor market perspectives.
- It is necessary to determine whether the specified learning paths or some combination cover the labor market's short – and long-term needs (it is worth involving the appropriate actors here).
- It is necessary to ensure the accreditation of training courses, and in some cases, professional certificates, and quality assurance based on appropriate sources.
- If student pathways consist of training offerings from multiple institutions, inter-institutional coordination, and corrections must also be carried out.
- Coordinating the conditions for completing training courses is worth it so that students can obtain the most certificates through a network of overlaps and by building on each other's strengths.

In the spirit of lifelong learning, no diploma should be considered the final. It is far more motivating for learners if they receive credentials along their educational journey acknowledging the successful completion of partial milestones – certificates recognizing each closed phase of progress. These certificates provide a solid baseline when shifting career paths or starting new learning journeys later in life - there are no more wasted efforts. It gives participants a greater sense of safety, as the time and energy invested in learning are not lost. Learners are more likely to engage in educational processes when they can see institutions' entire learning pathways.

Within the framework of valid educational policy, these groups should review curricula, map educational content, and organize the elements into coherent learning segments that can be positioned along various learning pathways. The second step is to develop a learning pathway network with the agreement and support of all relevant stakeholders, including teaching faculty, industry partners, chambers, and labor market actors. Further consultations are necessary to ensure employers recognize stackable credentials as valuable and accept them with corresponding employment opportunities and appropriate compensation.

Learner-Centered Support
The main objectives include the following:

- Provide a tool for monitoring student progress, which can help predict potential dropouts and prevent premature withdrawal from studies.
- Train and sensitize instructors to recognize, understand, and respond to students' emerging needs. In many cases – especially for students balancing work and study – faculty members may be the only accessible point of contact within the institution.

These objectives can be achieved through the institution's provision of adequate human and financial resources. The learner-centered support team develops and implements the necessary academic, advisory, and financial assistance services.

EU related stackability
The cited sources have primarily reflected the Anglo-American perspective on stackability. However, in its summary briefing (COUNCIL, 2021), the European Commission presents a highly structured and well-regulated approach to handling micro-credentials.

Among the mandatory metadata for each micro-credential, the following items are listed (highlighting elements that are essential for stackability):

- Identification of the learner
- Title of the micro-credential
- Country/Region of the issuer
- Awarding body
- Date of issuing
- *Learning outcomes*
- Notional workload needed to achieve the learning outcomes (in ECTS credits, wherever possible)
- *Level (and cycle, if applicable) of the learning experience leading to the micro-credential (EQF, QF-EHEA), if applicable*
- *Type of assessment*
- Form of participation in the learning activity
- Type of quality assurance used to underpin the micro-credential

Among the optional elements, we find the designation of the stackability item requirement (integration/stackability options: standalone, independent micro-credential / integrated, stackable towards another credential).

Key design considerations include Pathways, Recognition Learning, and Portability. Overall, the EU framework clearly understands the fundamental concepts and components of stackable credential systems.

The EU has issued a *recommendation* (Council Recommendation, 2018) in which the *definition* of micro-credentials explicitly allows for stackability. A highlighted excerpt reads:

"'Micro-credential' means the record of the learning outcomes that a learner has acquired following a small volume of learning. These learning outcomes have been assessed against transparent and clearly defined standards. Courses leading to micro-credentials are designed to provide the learner with specific knowledge, skills and competences that respond to societal, personal, cultural or labour market needs. *Micro-credentials are owned by the learner, can be shared and are portable.* They may be standalone or combined into larger credentials. They are underpinned by quality assurance following agreed standards in the relevant sector or area of activity."

Following this theoretical and legal foundation, we can now turn to an overview of technical implementation considerations.

How do you plan a stackable function based on soft skills into an Open Badge host?

Placing extra contents into an Open Badge certificate

In an Open Badge 2.0-compliant certificate, there are several locations where content can be embedded to support *stackability.*

The standard (1EdTech, 2018) distinguishes between two main components: *badge class* and *assertion*. The *badge class* can be seen as a master template describing the certification event's purpose and the conditions required to earn it. The *assertion*, in contrast, is a specific instance issued to an individual, documenting the actual completion process. A single *badge class* can serve as the basis for many *assertions*.

For the *badge class*, the standard defines the following text fields:

- name (required): The title of the achievement
- description (required): A summary of the achievement
- alignment (optional): A textual object that provides reference points to help contextualize the class about specific goals or other standards.

The *name* and *description* fields are primarily designed for human readability. The *alignment* field, however, offers more flexibility. It can include multiple entries that more precisely define the scope and context of the badge. These may include target name, URL, targetDescription, targetFramework, and targetCode.

For the *assertion*, the following fields are available:

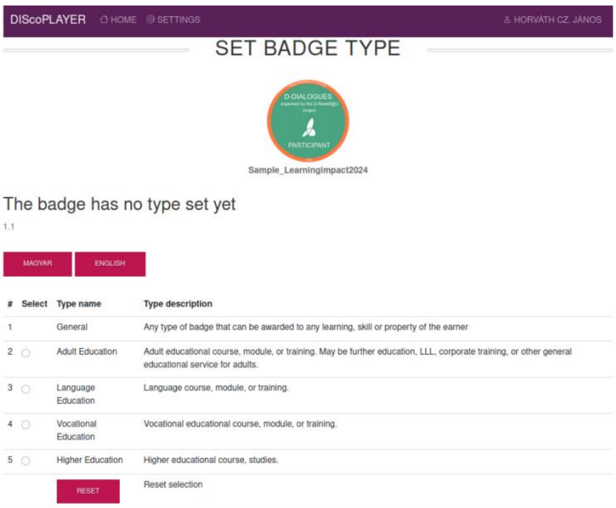
- evidence (optional)
- narrative (optional)

The *evidence* field, which may contain multiple entries, allows documentation of the circumstances surrounding an individual's achievement. Subfields include id, name, narrative, description, genre, and audience. The narrative field exists independently and as a subfield within evidence, which introduces some redundancy by design.

While the evidence field could technically store metadata, it is rarely utilized this way, especially considering how badge-displaying applications render content.

We have implemented metadata extensions in our digital badge management system (DisCoPlayer, DCP Host) (DISCO VET, 2023). We can attach supplementary data to badges issued via DCP using specially prepared forms. When recipients upload these badges back into the DCP system, this additional information becomes accessible – although it is not directly available on other badge displayer platforms.

Figure 3. **The control panel of extra metadata fields**



Source: Own screenshot from DCP portal

Figure 3 shows the current supplementary metadata form, which displays the available data fields. Specific information can already be recorded during the badge class's creation, while *personal data* is meaningful only within the assertion's context. Integrating soft skills is relatively straightforward when dealing with supplementary metadata.

Finding badges in patterns

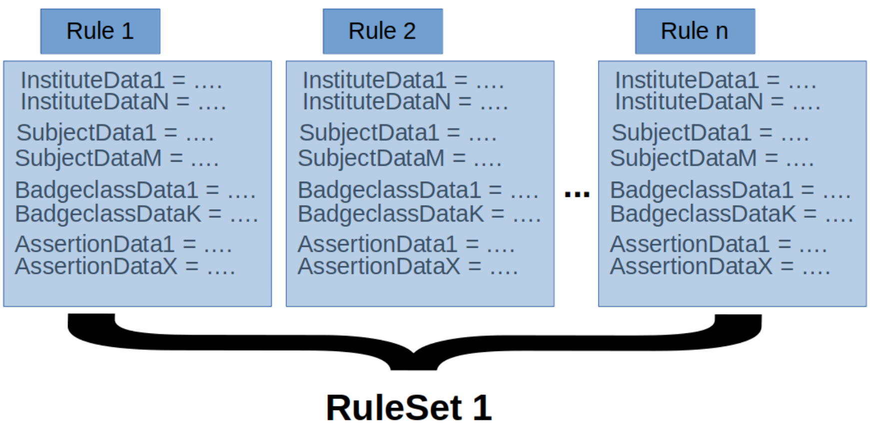
Enriching digital badges with additional metadata is only the first step. The system must identify badges uploaded by users and, upon meeting predefined conditions, trigger some follow-up events. For example, if a user collects badges that certify the skills defined in the source (Summa, 2022), the DCP system issues a summary meta-badge. In another case, if a user has earned badges covering at least half of the skills within three different soft skill categories, the DCP may offer a learning path to obtain the missing credentials. A pattern recognition engine, part of the digital badge host application, identifies combinations that match the defined rules. The most straightforward approach is to search for exact word matches in text fields intended for human readability. The match is considered valid if a given word or phrase appears with the correct spelling in selected fields. However, this method performs poorly when working with multilingual content or when badge creators use ambiguous terms.

Greater efficiency can be achieved if the pattern recognition engine works with predefined lists. In such cases, it searches for elements from those lists within the extra metadata fields of the class or the assertion.

The situation becomes more complex in the case of the stackable learning pathways discussed earlier. While it remains necessary to embed extra metadata in badges, additional layers of information must be created to support further operations. Defining learning pathways may rely on intra- and inter-institutional training programs. Therefore, the badge-hosting application must be capable of interpreting rules that include institution-related data among the conditions.

Likewise, educational program descriptions must be based on standardized rules, such as those in the course description files available on the BME TAD portal (BME GTK, 2025).

Figure 4. **Rules work as filtering by metadata of badges**

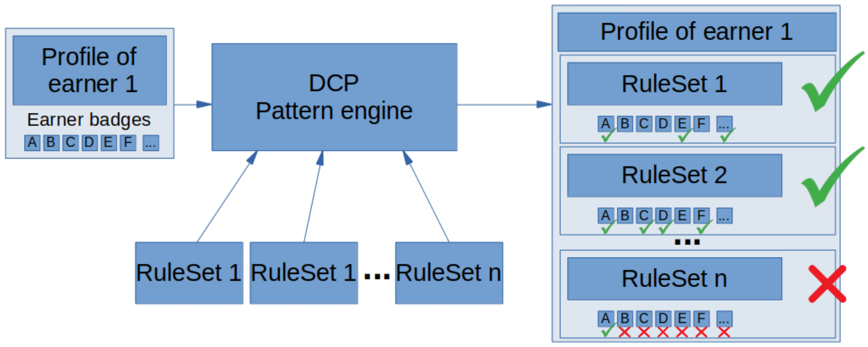


Source: Own edited figure

Figure 4 illustrates the details of a *Rule Set. A Rule Set* comprises multiple *Rules*, each scanning the textual content and metadata in digital badges. If a badge meets the condition of a rule – such as having a specific value in a particular data field (e.g., the *badgeclassID* matches a predefined value) – that badge is considered *selected* for that rule. Suppose at least one badge is found that matches each rule within the RuleSet (i.e., all individual rules are satisfied based on data pattern matches). In that case, the entire RuleSet is considered fulfilled.

In contrast, as shown in Figure 5, *RuleSet n* appears unfulfilled because at least one rule within the set did not find a matching badge. Using logical operators (such as AND, OR, etc.) between rules and within individual rules allows for further refinement in matching conditions and enhances the precision of pattern recognition.

Figure 5. ***RuleSets win or fail a set of badges from a portfolio of an earner***



Source: Own edited figure

The group responsible for aligning the curriculum content must define the exact data types in consultation with all relevant stakeholders, including labor market actors and chambers of commerce. A coordination platform is necessary to facilitate structured dialogue among educational institutions, labor market participants, chambers, and other organizations.

As a result of this collaborative and coordinated effort, clearly defined learning pathways, the names of intermediate stackable credentials, the associated metadata, and the possible value sets for each element form a complex information package. Ensuring the availability of this package to all stakeholders – especially newcomers – represents a separate logistical challenge. Such an information package must be maintained and accessible despite individual changes across institutions, faculty, employers, chambers, and other actors. Blockchain-based technology can guarantee the permanence and universal accessibility of stackability-related rules and data structures.

Blockchain

The global recognition of blockchain technology began in 2008, amid the financial crisis, with the emergence of the cryptocurrency Bitcoin (Bashir, 2023). While Bitcoin is the most well-known blockchain use case, it is only one among many possible applications. With the launch of Ethereum in 2015, the concept of smart contracts entered the public consciousness. In 2018, multichain architectures emerged, followed by the rise of decentralized finance (DeFi) and non-fungible tokens (NFTs) in 2023.

A blockchain is a decentralized network where common data knowledge is maintained despite communication errors or intentional data falsification. The successful combination of several previous technical processes is the basis for reliable operation. These include public key cryptography, hash functions, peer-to-peer networks, and secure time stamping.

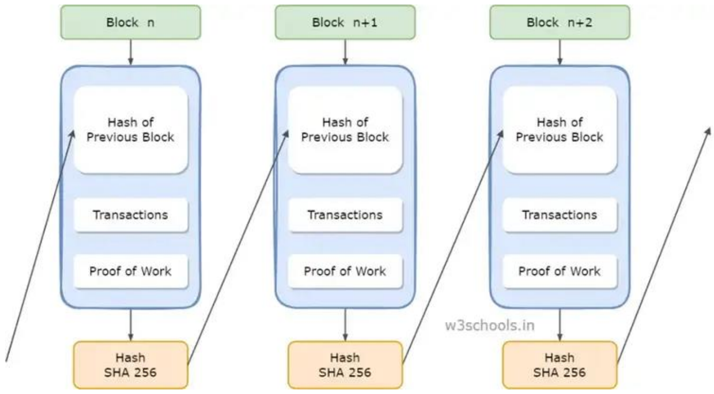
How does blockchain work

At its core, a blockchain is a chain of data blocks linked together in sequence. For the reliable infrastructure, fundamental principles must be upheld. These include:

- *Peer-to-peer architecture* (P2P): The network has no central communication hub – each participant (node) can directly communicate with any other, eliminating the need for intermediaries.
- *Distributed ledger*: A shared ledger (used for financial transactions or other types of records) that is fully accessible to all network participants, with continuous synchronization and distribution among them.

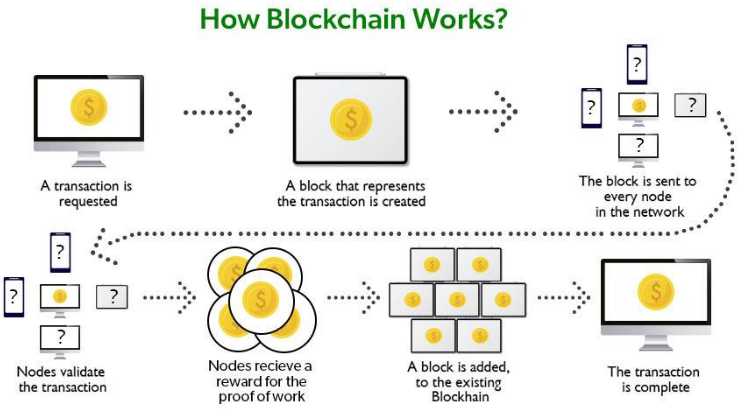
- *Cryptographically secure*: The integrity of ledger data is protected through cryptographic techniques that ensure data authenticity (proof of origin), integrity (no tampering), and non-repudiation (actions cannot be denied after the fact).
- *Append-only*: New data can only be added to the blockchain; previously added blocks are immutable and cannot be altered.
- *Updatable via consensus*: Any operation on the blockchain requires agreement among the majority of nodes based on strict consensus rules. This process guarantees decentralization and removes the need for any central authority.

Figure 6. **Blocks are linked to the chain by the hash code of the previous block**



Source: https://www.w3schools.in/blockchain/chaining-blocks

Figure 7. **A transaction (new information) is integrated into the blockchain via consensus**



Source: https://www.geeksforgeeks.org/how-does-the-blockchain-work

There are numerous advantages to using blockchain technology. Communication or transactions between the network nodes occur directly, without intermediaries, making the process faster and cheaper. So-called innovative properties can be linked to a blockchain transaction, meaning that once ownership is transferred, the asset cannot be resold without the new owner's consent.

The ledger provides transparency for all stakeholders – every action is traceable in terms of timestamp, participants, subject of the event, and other descriptive data, thereby increasing trust. The ledger's immutability further reinforces this trust. If an earlier data entry requires correction, the original data is not altered; a new, corrective block is added. It makes every change request traceable over time.

Blockchain becomes especially powerful when many participants collaborate within the system. The failure of a few nodes does not disrupt operations, as redundancy ensures high availability.

The strong cryptographic foundation of blockchain is key to enabling smart contracts. These contracts use advanced mathematical algorithms to allow parties to enter into agreements – potentially even anonymously – where the cryptographic protocols automatically verify whether each party has fulfilled its obligations, often using techniques such as zero-knowledge proofs.

Examples of blockchain applications

The initial use cases of European Blockchain Services Infrastructure (EBSI) include the following:

- *Notarization*: Leveraging the power of blockchain to create trustworthy digital audit trails, automate compliance checks in time-sensitive processes, and ensure data integrity.
- *Diplomas and Educational Credentials*: Returning control to citizens over managing their educational credentials, significantly reducing verification costs, and enhancing trust in authenticity.
- *European Digital Identity*: Implementing a universal digital identity capability allows users to create and verify their identities across borders without relying on central authorities while ensuring compliance with the eIDAS regulatory framework.
- *Trusted Data Sharing*: Applying blockchain technology for secure data sharing between EU authorities – starting with IOSS identifier numbers and supporting single-window systems for customs and tax authorities.

IPFS-based storage of stackable pathways

Information placed on the web is not eternal. According to some studies (Trivette, 2021), the average lifespan of a website page is estimated to be around three years. Furthermore, websites today are often hosted using cloud services, resulting in strong centralization of data storage. A technical failure in such services can lead to the inaccessibility of significant portions of web content. It is also important to note that verifying the authenticity of data sources on the web is often tricky, which may lead to data loss, corruption, or unauthorized access.

Given the extensive collaboration involved in creating the previously discussed stackable learning pathways and other related content, it is essential to adopt at least one technical solution that ensures:

- Shared accessibility of the content
- Controlled mutability, allowing modifications only through mutual agreement among stakeholders

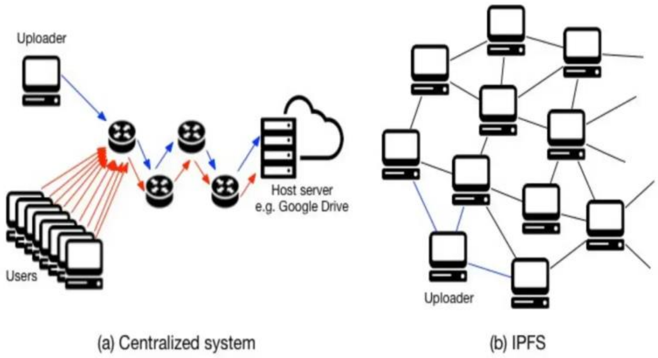
Source (Lemoie, 2024) examined several blockchain-based technologies for storing Open Badge-compliant credentials. Here, we propose using IPFS (InterPlanetary File System) as a solution.

IPFS is a peer-to-peer (P2P) file storage network based on a distributed network of computers. Files are accessible via unique identifiers (CIDs – Content Identifiers) and stored across IPFS nodes (Figure 8). A single file can exist on multiple machines across the network, making it more resilient to node failures than centralized systems.

When a file is uploaded, it is assigned a unique digital fingerprint (CID). The file can be downloaded using this CID. Due to the peer-to-peer architecture, files are transmitted through multiple machines, and intermediate nodes may temporarily cache copies of the file. As a result, subsequent download requests can be served by geographically closer nodes, thereby accelerating access.

When a new version of a file is uploaded, the old version is not deleted – a new CID is generated.

Figure 8. **Difference in data movement in a centralized system (a) and on an IPFS network (b)**



Source: https://symphony.is/about-us/blog/introduction-to-ipfs

The design and maintenance of stackable learning pathways is a large-scale task that can easily exceed the scope of a single institution. An IPFS-based, blockchain-powered peer-to-peer (P2P) file-sharing system is a suitable solution to enhance the efficiency of multi-stakeholder coordination and disseminate the results as widely as possible. Moreover, setting up a private IPFS network is relatively straightforward, making it a practical and scalable choice for such collaborative initiatives.

Conclusion and further steps

We have examined the stackability options based on soft skills within the DCP application, which complies with the Open Badge 2.0 standard. Associating soft skills with various certificates enhances the description of certified competencies, thereby improving employability in the labor market.

The capability and success of stackability depend on the coordinated efforts of multiple stakeholders. On the one hand, the shared agreement between institutions and labor market actors forms the framework within which stackable learning pathways - and the accompanying credentials - become interpretable, assessable, and collectible for learners. At the same time, it is necessary to establish a technical infrastructure that enables a digital badge management system to recognize stackable credentials and organize them according to defined rules by embedding metadata in the proper fields and enriching the content. These stackability rules must be reviewed, refined, and updated regularly. The system only works effectively and satisfies participants when these rules are updated. A blockchain-based P2P file-sharing network, such as IPFS, can facilitate the easy and fast accessibility of the required general and technical documentation. The DCP implements version 2.0 of the Open Badge standard. However, the upcoming *version 3.0* (1EdTech, 2024) significantly extends the scope of badges. The new version introduces a distributed performance definition database, which provides a shared foundation for recognizing a certified individual's competencies and skills across multiple certifying organizations.

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Using digital badges for recognition of soft skills

Introduction

Digital badges are electronic symbols used for several purposes, e.g., to document performance and achievement as micro-credentials (Stefaniak & Carey, 2019), which may link, in a meaningful way, the worlds of education, work, and community. Implementing digital badges allows for an open, transferable, and stackable technology framework (Gibson, Coleman, & Irving, 2016) and provides transparency for teaching, learning, and assessment through recognizable and comprehensive learning aspects for all stakeholders. It is achieved by embedding metadata inside the image that provides information on how the learner earned it and who the issuer is. In contrast, the technical standards allow sharing digital badges with others. The feature of digital badges to provide evidence in the form of digital credentials could be attractive for vocational education and training (VET) and higher education (HE) students, who are willing to demonstrate employers' specific skills that are not otherwise visible in the official university transcripts including soft skills such as communication, leadership, and teamwork, problem-solving, time management.

The flexibility of open badges allows them to be integrated into both formal and informal learning environments, thus broadening their applicability in recognizing a wide range of skills. This study explores best practices for using open digital badges to recognize soft skills. We aim to address the central question: *What constitutes good practice using digital badges to recognize soft skills?* To answer this question, we have conducted a theoretical analysis and examined a case study from a university where data regarding digital badge design and application for students was collected in the Moodle virtual platform.

Theoretical findings

Badges can catalyze the shift from traditional credentials that measure only the seat fact to the ones that measure competency achievement. Today, an interconnected and technology-rich world allows learning to happen everywhere, anytime, and any. These learning experiences need to be recognized, whether in a physical or online environment. At the same time, badges allow the learners to play an active role and gain learning recognition (Duncan, 2011). For example, Stefaniak and Carey (2019) discuss how three different higher education institutions using badges in various ways could widen the scope of experiences and increase the relevance of the results to other institutions. Authors suggest considering prevailing themes such as the value and purpose of the badge, design, and technical issues.

Attempts to find ways of recognizing soft skills can be seen in some EU projects. For example, the SoftSkills4EU project (2021), funded by Erasmus+, highlights using open badges to promote soft skills across Europe. This project aims to develop standardized systems for self-evaluation and validation of soft skills, making them more accessible and recognizable by employers and other stakeholders. The researchers (Perkins & Pryor, 2021) note that digital badges are a valuable tool for employers as they provide a more detailed description of employees' competencies than a diploma and can help to recognize soft skills such as communication, leadership, or teamwork. However, they are not yet well established in the labor market, and their recognition is still unexplored. This highlights the need to further explore good practice in using digital badges to assess soft skills in the education system and their recognition in the workplace. This is supported by the work of Davis and Singh (2015), who pointed out that badges can effectively inform potential employers about prospective employees' competencies, including soft skills.

Caron (2021) highlights the shift from traditional forms of recognition, such as awards and impact scores, to more inclusive and accessible forms of recognition through digital badges, emphasizing recognition of soft skills and learning achievements in connected learning environments. Research shows that open badges can effectively assess and motivate soft skills. Universities that use badges to document and monitor soft skills reinforce their importance alongside traditional assessment systems (Stefaniak & Carey, 2019). This dual recognition approach highlights the growing acceptance of soft skills within educational organizations. In discussing open badges, Motheeram et al. (2018) note the potential to reflect various skills and experiences, making them a versatile tool for recognizing soft skills in various educational settings. The design of open badges includes metadata that provides detailed information on the incompetencies to be recognized, which may include soft skills. This enhances the credibility and usefulness of the badges, as they convey the achievements, context, and criteria for their acquisition.

Integrating open badges in VET and HE further emphasizes their role in recognizing soft skills. Their use aligns with contemporary educational trends that emphasize lifelong learning and continuous professional development. This emphasis on lifelong learning, facilitated by digital badges, should inspire and motivate the audience to continue developing their skills and knowledge.

Digital badges in their contemporary form contain metadata that may be retrieved by clicking the image file to find out the requirements to earn the badge, the evidence or proofs of achievements for its award, the issuer of the badge, and other kinds of information related to the achievement of the digital badge. There is no central authority regulating the issue of badges; badges may be issued by anyone accessing the badge platform and may be shared when earned. The advantage of the digital badge is that it may be used to demonstrate professional development or even academic learning in terms of skills that the individual has developed, but they have not been captured in the traditional ways. This emphasis on recognizing soft skills through digital badges should reassure the audience about the relevance and value of their skills.

Degrees or credentials supported by a transcript of grades comprise one of the leading products of traditional VET and HE, yet recently, micro-credentials have begun to increasingly appear due to evolving practices involving digital badges (Gibson al., 2013).

Below is an example of one University's good practice in providing digital badges to recognize soft skills.

Good practice example – University case

The data was collected using Moodle's virtual learning environment at Vytautas Magnus University (VMU). At VMU, both students and teachers are awarded digital badges. Digital badges can only be seen by users (e.g., students, teachers, administrators, staff members) of the University's Moodle platform. Unless the Moodle platform user decides to transfer their earned digital badges to any of the open digital badge collection systems, outsiders cannot observe one's achievements listed through digital badges. As a result, a remark can be made that the Moodle system is closed here, and digital badge recognition is still within the institution. Besides, it is essential to stress that digital badges are only valid for a definite period.

Document analysis has been performed to analyze digital badges in the Moodle platform regarding their design and application for students. A content analysis of the metadata of digital badges was performed to find information on their type and purpose. This has allowed exploration of the main reasons why digital badges are being given to students and the establishment of a system of categories of types of digital badges. The sample of the document analysis has been determined with the assistance of a Moodle administrator. The administrator has provided information about the courses where digital badges have been activated and issued to students. The analysis is based on one-semester courses taught in social sciences and Humanities programs. 357 digital badges were issued in one semester, of which only 77 were for soft skills also, motivation, and encouragement.

An example of a digital badge issued to students for soft skill. The badge was issued by the subject lecturers.

Digital Innovation

Digital badge metadata

Name	Digital Innovation
Language	Lithuanian
Description	This badge indicates that the learner has successfully created a learning subject in the digital learning environment Moodle and has acquired the skills: - Develop a digital assessment strategy in a distance learning environment with a link to learning outcomes. - Define clear and measurable assessment criteria that reflect the learning outcome in relation to a planned reporting activity. - Design a digital badge. - Apply tools to monitor learners' learning progress. - Develop assignments for distance learning assessments. - Ensure that the digital assessment strategy and its implementation are ready through the application of the quality assessment criteria.
Created on	
Image	
Image author's name	Vytautas Magnus University
Image author's email	
Image author's URL	https://www.vdu.lt/en
Image caption	

Issuer details

Issuer name	Vytautas Magnus University
Badge expiry	This achievement has no set expiry date.
Criteria	The badge is issued upon completion of tasks: - An assessment strategy has been developed and transferred to a distance learning environment and linked to learning outcomes. - A digital badge inventory has been developed and transferred to the distance learning environment Moodle. - Preparation for the assessment of learning outcomes in the Moodle digital environment.

The analysis of metadata descriptions of digital badges has indicated that students can be awarded digital badges that acknowledge their soft skills, such as active involvement in innovations, communication, leadership, creativity in preparing presentations, collaboration, or teamwork. As previously discussed, Caron (2021) follows the same trend when discussing the introduction of digital badges to recognize soft skills and learning achievements, highlighting their role in motivating active learning and professional development.

The analysis of digital badges has indicated that course teachers give badges to students at VMU. Teachers are responsible for the establishment of digital badges. The content analysis has helped differentiate between three main categories of digital badges for students: assessment badges, badges for motivation/encouragement, and badges for soft skills. As the analysis has revealed, many digital badges delivered to students at VMU have been used for assessment purposes. Moreover, an analysis of digital badges has indicated that the course teachers give badges to students at VMU. Teachers are responsible for establishing digital badges, which may lead to the assumption that the reward process for students with those badges can be pretty subjective. Finally, the analysis has demonstrated that teachers lack some skills in creating digital badges because descriptions are relatively poor or the overall design is informal and unprofessional.

Conclusion

In summary, theoretical analysis and case study revealed the practice of using digital badges to recognize soft skills. Open badges are valuable for recognizing and promoting soft skills in education. Their ability to provide detailed information on competencies and to bridge the gap between education and employment underlines their importance in the evolving field of skills recognition and encourages HE and VET institutions to think about solutions in the context of competence development and recognition.

Research highlights the importance of soft skills in the learning process, as digital badges motivate learners to be more engaged and to develop the skills they need. It is also important for future research to find ways to integrate digital badges into recruitment practices, as their recognition in the job market remains underexplored.

The case study of the University demonstrates digital badges that serve as recognition to acknowledge students' soft skills, such as active involvement in innovations, communication, leadership, creativity in preparing presentations, collaboration, or teamwork. While showcasing individual good examples, it also shows that teachers lack some skills in creating digital badges or are unaware of their broader applicability because of the total number of digital badges issued, which is only a minority related to the recognition of soft skills.

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M. Begoña ARENAS - Dénes ZARKA

Good practices and recommendations to Enhancing Education with Gamified Open Badges

This article aims to explore how gamified open badges can enhance motivation and engagement in education through a qualitative desk research methodology. We explain the concept of gamification in the educational industry, highlight the difference between digital badges and micro-credentials, discuss motivational frameworks, present good practices for badge implementation, list some successful case studies, and identify essential micro-credential providers. Consequently, we provide valuable insights and practical guidance for trainers, VET teachers, teachers, and stakeholders on increasing the use of gamified open badges and improving the learning methodology experience.

Overview of Gamification in Vocational Training and Higher Education

According to Borrás Gené (2022), the scientific literature offers various definitions of gamification in vocational and higher education. Some authors highlight ideas related to the educational field, such as problem-solving (Schell, 2008) or the intention of quantifiable objectives associated with player-involved conflicts (Salen & Zimmerman, 2003). Marczewski (2015) entirely expresses the distinction between play and game: "Play is transformed into a game when explicit objectives are added, and a system based on rules is imposed."

Gamification in vocational and higher education means applying game design elements and principles in non-game contexts to enhance learning satisfaction and engage students. By incorporating methods such as "leveling up," challenges, and leaderboards, teachers try to create a more interactive and motivating environment for learners. The concept of gamification leverages the natural human inclination towards competition, achievement, and reward, making the learning process more enjoyable and engaging (Deterding et al., 2011).

"In educational settings, gamification can take various forms, including point systems, badges, and progress tracking. For instance, students might earn points for completing assignments, participating in class discussions, or achieving high scores on quizzes. These points can then contribute to levelling up, unlocking new challenges, or earning a spot on a class leader board. Such elements not only foster a sense of accomplishment but also encourage continuous participation and effort." (Kapp, 2012).

Differences Between Digital and Open Badges and Micro-credentials

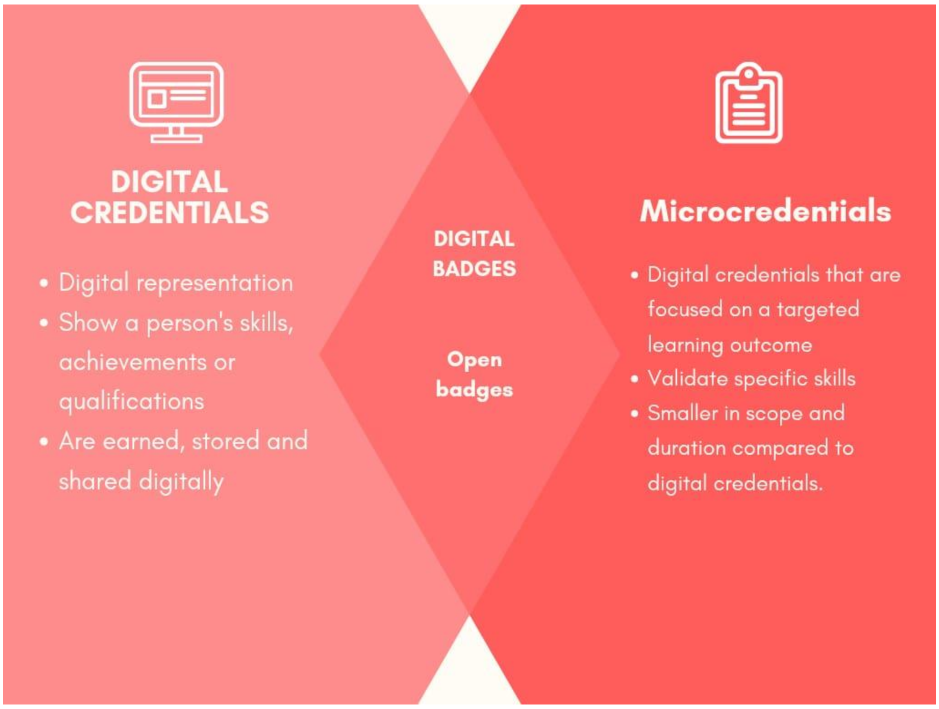
We experience that digital open badges and micro-credentials are often used as synonyms. While a digital badge often represents the achievement of a micro-credential, there are distinct differences. Digital and open badges have visual representations of achievements that can be shared and verified online. They often focus on employability by providing a granular view of the skills developed by the individual (Laya, 2023). They can recognize both formal and informal learning experiences and are not necessarily connected to a micro-credential.

Micro-credentials, on the other hand, are digital certifications that verify proficiency in a specific skill or set of skills. They are typically earned through a formal assessment process that may require the learner to demonstrate their skills in a real-world context (Tinsley et al., 2022). Micro-credentials can be standalone or stackable, allowing learners to build a more comprehensive skill set over time (Laya, 2023).

In this frame, digital badges are visual representations of achievements, skills, or competencies that learners can earn and display electronically. These digital badges act as digital credentialing, providing a verifiable record of accomplishments that can be shared across various platforms. As illustrated in

Figure 1, open badges,s: a specific type of digital badge, adhere to an open standard that ensures they are portable, interoperable, and packed with metadata about the achievement, the issuer, and the criteria met (Mozilla Foundation, 2012).

Fig. 1: **Digital and Open Badges in the Digital Credentials and Micro credentials Universe**. Adapted from Banco Interamericano de Desarrollo (2023)



Traditional grading systems typically focus on summative assessments, the final evaluation of student performance at the end of a course or term. In contrast, digital and open badges emphasize formative assessment, recognizing ongoing achievements and skills development. "This approach allows for a more personalized and continuous learning journey, where students can see their progress and areas for improvement in real-time." (Carey, 2012)

Digital (open) badges are helpful in digital credentialing because they provide a flexible and detailed means to recognize and validate learning. Unlike traditional grading systems, which often simplify student performance to a single score, digital (open) badges can express various skills and achievements. "They provide detailed information about what the learner has accomplished, including evidence of the work done to earn the badge." (Gibson et al., 2015)

Moreover, digital badges can be shared on social media, included in digital portfolios, and used to enhance resumes, making them a valuable tool for lifelong learning and career development. They offer a more comprehensive and transparent way to showcase one's abilities and accomplishments beyond the limitations of traditional grades (Abramovich et al., 2013).

Motivational Frameworks in Education

The underlying motivational framework is essential to understanding how gamified open badges can effectively engage learners. Self-determination theory (SDT) is a psychological framework that emphasizes the importance of intrinsic motivation in fostering personal growth and well-being. According to SDT, individuals have three basic psychological needs: autonomy, competence, and relatedness. When these needs are satisfied, individuals are more likely to be intrinsically motivated and engaged in their activities (Deci & Ryan, 1985).

In education, gamified open badges can fulfill these intrinsic motivations by giving students a sense of autonomy, competence, and relatedness. Autonomy is supported as students can choose which badges to pursue and how to achieve them. Competence is enhanced as students receive recognition for their skills and achievements through badges, which can boost their confidence and encourage further learning. Relatedness is fostered through the social aspects of badges, such as sharing achievements with peers and receiving feedback from educators (Ryan & Deci, 2000).

Borrás Gené (2022) discusses the importance of motivational frameworks in education, emphasizing the role of both intrinsic and extrinsic motivators. In this frame, gamified elements, such as open badges, can enhance student engagement by fulfilling psychological needs and providing tangible rewards. It also explores the balance between intrinsic and extrinsic motivation, suggesting that combining both can lead to more effective and sustained learning outcomes (Borrás Gené, 2022).

Role of Extrinsic Motivators

Extrinsic motivation refers to participating in an activity to gain external benefits or to avoid unfavorable outcomes. In educational settings, extrinsic motivators can play a significant role in encouraging sustained engagement. Digital badges, as an extrinsic motivator, act as a reward system that recognizes and validates students' efforts and achievements (WeAreTeachers, 2018). While extrinsic motivation may not lead to long-term engagement on its own, it effectively initiates participation and maintains interest in the short term. For example, students may be motivated to complete assignments or participate in class activities to earn badges, leading to a more profound, intrinsic interest in the subject matter over time (Harrington-Atkinson, 2024). Educators can create a more comprehensive and practical motivational framework by combining intrinsic and extrinsic motivators. Gamified open badges provide immediate rewards and support the development of intrinsic motivation, leading to sustained engagement and a more meaningful learning experience.

Main Providers of Micro-Credentials

According to the OECD (2021a), the main providers of micro-credentials include education and training providers, companies, non-governmental organizations (NGOs), and professional associations. Education and training providers, such as universities and colleges, offer micro-credentials to support lifelong learning and upskilling. Companies use micro-credentials to certify employee skills and competencies, enhancing workforce development. NGOs and professional associations provide micro-credentials to recognize specialized skills and knowledge within specific fields, contributing to professional development and career advancement." (OECD, 2021a).

Some member states have recently implemented EU recommendations to enhance national certification regulations with micro-credentials. Hungary is one such example. In Hungary, micro-credentials are important in offering sub-diploma official certifications in Higher Education (HE) and sub-professional official recognitions in vocational education and training (VET). The legislation focuses on "small scale" and "learning outcomes," but does not address stackability. Technically, the awarding process is tied to centrally developed and accredited Learning Management Systems, such as *Neptun* for HE and *FAR* for VET. This legislation provides a valuable opportunity for HE institutions and VET schools to offer flexible and trusted small certificates to the market. However, it also creates significant barriers for smaller or industrial players in the educational market to award micro-credentials. As a result, the role of digital badges is increasing in Hungary and other countries with similar legislation.

Case Studies and Examples of Effective Use of Badges in Education and Training

Using digital badges in educational and training settings has yielded positive outcomes in boosting student engagement and motivation. The following examples demonstrate how different institutions have effectively incorporated badges into their programs to acknowledge accomplishments and promote involvement.

At the Hellenic Open University in Greece, Open Badges were employed as credentials in pilot educational systems covering non-formal and informal learning environments. These badges motivated positive behavior and served as practical educational tools, significantly increasing student engagement and motivation. By acknowledging and rewarding students' efforts, the university created a more dynamic and interactive learning experience (Papadimitriou & Niari, 2019).

Murdoch University in Australia implemented a digital badge program for nursing students to support self-directed learning and competency achievements. The badges recognized students' skills and experiences, providing a structured pathway for their professional development. This initiative validated the students' competencies and encouraged them to take ownership of their learning journey, fostering a sense of accomplishment and confidence (Nilson & Dewiyanti, 2020).

During the COVID-19 lockdown, IBM leveraged digital badges to maintain student engagement in their training programs. The badges recognized various competencies and achievements, helping students stay motivated and continue their learning despite the challenges of remote education. This approach kept students engaged and committed to professional development during significant disruption (Daniels, 2020).

In the *United Kingdom, City & Guilds* used digital open badges to recognize students' efforts in vocational education and training programs. The open badges were shared on social media, enhancing the visibility of students' achievements and providing them with valuable credentials for further use in their careers. This public digital recognition boosted students' morale and increased their employability by presenting their skills to potential employers (City & Guilds, 2021).

The practices identified in implementing gamified open badges across various educational contexts highlight the importance of aligning badges with learning objectives, designing visually appealing badges, and providing clear criteria for earning them. These strategies ensure that badges are meaningful and impactful, fostering student engagement and motivation. The case studies from the following institutions: Hellenic Open University, Murdoch University, IBM, and City & Guilds show the flexibility and effectiveness of open badges in recognizing achievements and motivating participation. Having compared these practices, it became evident that successful open badge implementations share common parts: transparency, variety, peer recognition, and integration into LMS (learning management systems). These elements contribute to creating a supportive and motivating learning ecosystem, leading to the following recommendations to further enhance the use of gamified open badges in education.

Implementing badges in educational settings requires careful planning and consideration of different methods to ensure they are motivating, engaging, and meaningful for learners and students. Here are some key strategies, not in order of importance:

- ***Develop Badges with Learning Objectives***: "Ensure that each badge is tied to specific learning outcomes or competencies. This alignment helps students understand the purpose of the badges and how they relate to their overall educational goals." (Crewhu, 2023)
- ***Develop Clear Criteria for Earning Badges:*** "Clearly define the requirements for earning each badge. This transparency helps students know what is expected of them and motivates them to meet those criteria. Detailed criteria also ensure that badges are awarded fairly and consistently." (Crewhu, 2023).
- **Design Visually Attractive Badges**: "Create badges that are visually attractive and meaningful. Use colors, icons, and designs that resonate with students and reflect the achievements being recognized. Incorporating fun and engaging visuals can make badges more desirable." (Empuls, 2023).
- ***Offer Different Type Badges***: "Include different types of badges to recognize a range of achievements, from academic performance to soft skills and participation. This variety ensures

that all students have opportunities to earn badges and feel recognized for their diverse strengths." (Crewhu, 2023).

- ***Introduce Peer Recognition***: "Allow students to award badges to their peers for demonstrating positive behaviours or achievements. Peer recognition can foster a supportive learning environment and encourage collaboration." (WeAreTeachers, 2018)
- Introduce Institutional Recognition: Advocate at universities, VET schools, and Businesses to introduce Official recognition of Open Badges.
- ***Align Badges with Learning Management Systems (LMS):*** "Use an LMS to manage and display badges. This integration makes it easy for students to track their progress and see the badges they have earned. It also allows educators to monitor student achievements and provide timely feedback." (Crewhu, 2023)
- ***Acknowledge Badge Achievements***: "Publicly acknowledge and celebrate when students earn badges. This recognition can be done through announcements, ceremonies, or digital displays. Celebrating achievements reinforces the value of badges and motivates other students to strive for similar recognition." (Empuls, 2023).

Conclusion

Adding gamification and digital badges to education is an effective way to increase student motivation and participation. Educators can develop engaging learning environments that address intrinsic and extrinsic motivational factors by utilizing game mechanics and digital credentials. Self-determination theory (SDT) highlights the significance of autonomy, competence, and relatedness in promoting intrinsic motivation. At the same time, digital open badges play an effective role in extrinsic incentives that acknowledge and reward learner and student achievements.

Best practices for open badge implementation include introducing learning objectives and providing clear achievement criteria, increasing their "meaning" and impact. Case studies from institutions like the *Hellenic Open University, Murdoch University, IBM, and City & Guilds* demonstrate the variety and effectiveness of open badges in various educational and training contexts. These examples illustrate how digital open badges may enhance student engagement, motivation, and professional development.

As the educational and training sector evolves, using gamified digital (open) badges presents a promising pathway to create more engaging, motivating, and rewarding learning experiences. By recognizing and celebrating student achievements, trainers and teachers may inspire a lifelong "love of learning" on the pathway and enhance the development of upcoming essential skills for the future.

Note: This article is part of the Erasmus Plus DISCO SMS project: Digitally Signed Credentials – Smart Motivation with Stackability (2024-1-HU01-KA220-VET-000247638).

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István SIMONICS

ICL2025 Conference in Budapest

The 28th International Conference on Interactive Collaborative Learning, and the 54th IGIP International Conference on Engineering Pedagogy 'Innovation via Collaborative Learning in Engineering Education' will be organized on 01–03 October 2025, in Budapest, Hungary https://icl-conference.org/current/.

History of IGIP and ICL

IGIP – International Society for Engineering Pedagogy

Professor Dr. Adolf Melezinek, who founded the Department of Educational Technology at Klagenfurt University and began his research there in 1971 on the methodology of teaching technology and of engineering. In his doctoral thesis 'The theory and teaching methods of communication engineering', he wrote about the newly developed area of engineering education theory, and a pathway of how the education and training of prospective engineering educators could be revolutionised was shown.

In 1972, the development of the Klagenfurt School of Engineering Pedagogy and the evolution of engineering pedagogy as a branch of professional pedagogy resulted in the creation of IGIP – 'Internationale Gesellschaft für Ingenieurpädagogik'. At the 'First International Symposium on Engineering Pedagogy', which took place in Klagenfurt between 8th and 10th of May 1972, Adolf Melezinek established the "International Society for Engineering Pedagogy" – IGIP – which celebrated its 50th anniversary in 2022. The goal of the association was stated as the promotion of scientific methods of teaching technical disciplines, particularly about pedagogy and methodology.

IGIP is accredited by UNESCO (United Nations Educational, Scientific and Cultural Organization), its Mission is as follows:

- Improving teaching methods in technical subjects
- Developing practice-oriented curricula that correspond to the needs of students and employers
- Encouraging the use of media in technical teaching
- Integrating languages and humanities in engineering education
- Fostering management training for engineers
- Promoting environmental awareness
- Supporting the development of engineering education in developing countries

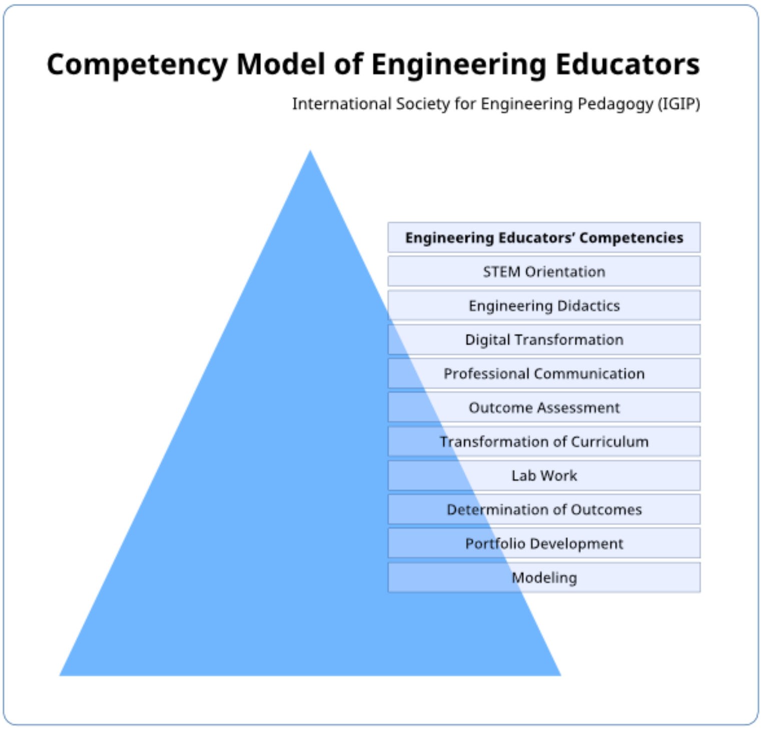
The official website of IGIP: https://igip.org/.

IGIP maintains a *list of accredited international engineering educators* who were awarded the title *ING.PAED.IGIP*. The title ING.PAED.IGIP certifies a certain educational level for a teacher, trainer or instructor, which is given by the IGIP curriculum. The ING.PAED.IGIP is for all technical teachers who are

- Engineers according to IGIP principles and
- have studied according to the IGIP curriculum at accredited institutes or can present certificates on the individual modules of the curriculum, plus
- have at least one year of teaching experience.

IGIP Prototype Curriculum provides a modular pedagogy-based approach to methodological, didactical, and pedagogical excellence in the field of engineering education *Figure 1*. The acquisition of the title "IGIP International Engineering Educator – ING.PAED.IGIP" represents an advanced form of personal and professional development, which gives each graduate access to the network and experience of the global engineering education community.

Figure 1. **IGIP Competency model**



Source: https://igip.org/ing-paed-IGIP.php

IGIP also accredits training centres for "International Engineering Educator" Programs. These centres must be re-accredited every five years. IGIP operates independent, peer-reviewed online journals[1], which all deal with engineering pedagogy and appear as follows: International Journal of Engineering Pedagogy (iJEP) https://online-journals.org/index.php/i-jep, Online and Biomedical Engineering (iJOE) https://online-journals.org/index.php/i-joe, International Journal of Emerging Technologies in Learning (iJET) https://online-journals.org/index.php/i-jet, International Journal of Interactive Mobile Technologies (iJIM) https://online-journals.org/index.php/i-jim. The mission of online journals is to contribute to the advancement of science by providing an efficient and cost-effective way for making qualitative scientific results easily accessible to the largest possible audience. Online readers do not have to pay any fee. They serve as an international forum related to engineering education. Teachers, educators and researchers as well as schools and institutions are invited to discuss their research, experiences, ideas and perspectives in the field of engineering pedagogy at a worldwide level.

IGIP has established awards. The highest one, *Nicola Tesla Chain is awarded for international outstanding achievements in the field of Engineering Pedagogy*. It consists of a golden chain with medal, certificate, and an invitation as Keynote Speaker to the IGIP Conference. *In 2017, the Awardee was Andras Benedek* from Hungary *Figure 2*.

[1] Online-Journals.org is a platform provided by the non-profit International Association of Online Engineering (IAOE). Its mission is to contribute to the advancement of science by providing an efficient and cost-effective way for making qualitative scientific results easily accessible to the largest possible audience.

Fig. 2. **IGIP Nicola Tesla Chain Awardee Andras Benedek, 2017 Budapest, Hungary**

Source: 50th Anniversary Brochure

International Conferences

For more than 50 years, IGIP has been organizing conferences on issues regarding engineering education and engineering studies, research and development. Since the beginning, these have been international conferences organized in different places, mostly at technical universities and universities of applied sciences in several countries. Every year, a lot of materials are published in the '*Conference Proceedings*'. More than 60 volumes have been published over the past years and have helped to present and discuss significant topics of engineering education, like the connection between theoretical and practical experience gained in different countries, the implementation of new technologies, the correlation of innovative approaches or the traditional values of engineering education, to name only few. For several years, Springer has been the publisher of 'Conference Proceedings' in print and electronic format, which has meant an enormous leap in quality for all publishing colleagues.

In the beginning, the yearly conferences were held in Austria, then the first one abroad was in Turin, Italy, in 1977. *In 1985,* IGIP opened to the East of Europe with *the first conference held in Budapest, Hungary*, a city behind the Iron Curtain at that time. Every conference has a title summarizing the idea of presentations *Figure 3*.

Fig. 3. Engineering Pedagogy – solution alternatives in the international context
IGIP Conference 1985, Budapest, Hungary

Source: 50th Anniversary Brochure

In 1990, immediately after the fall of the Berlin Wall and the end of the Cold War, the *first shared conference 'Engineering Education 2000'* was held for two days in Vienna and afterwards *two days in Budapest* with ASEE[2] and IEEE[3] as joint organisers. At that time, IGIP set an example of a reunified Europe.

In 1996, Austria and Hungary organized the *second joint conference* 'Education through Communication' *in Vienna and Budapest*. The *Budapest Technical University (BME) organized* these three conferences.

In 2007, there was a *joint IGIP and SEFI[4] conference* 'Joining Forces in Engineering Education towards Excellence' in Miskolc, Hungary, organized by *Technical University Miskolc*.

Since 2012, when the 15th International Conference on Interactive Collaborative Learning – ICL – and the 41st IGIP conference were held together in Villach, Austria, IGIP has *joint conferences with ICL*.

In 2017, the *Óbuda University organized* the *20th International Conference on Interactive Collaborative Learning and the 46th IGIP International Conference on Engineering Pedagogy* 'Teaching and Learning in a Digital World' *in Budapest, Hungary again Figure 4*. *The author of this article was the Conference Chair*.

Fig. 4. Teaching and Learning in a Digital World
ICL–IGIP Conference 2017, Budapest, Hungary

Source: ICL Clearing House

Hungary is an active IGIP member, we have had the opportunity to organize five conferences so far. Many European countries have hosted the conference, but also other continents were explored. Russia has been the host of the conference several times besides Dubai, UAE, and Thailand in Asia, Brazil in South America.

Budapest will be the host again

In 2025, Budapest University of Technology and Economics (*BME*) *is the organizer* of the 28th International Conference on Interactive Collaborative Learning (ICL2025) and the 54th IGIP International Conference on Engineering Pedagogy '*Innovation via Collaborative Learning in Engineering Education*' in Budapest, Hungary on 01–03 October 2025 http://www.icl-

2 American Society for Engineering Education is a nonprofit organization of individuals and institutions committed to furthering education in engineering and engineering technology https://www.asee.org/.

3 IEEE stands for the Institute of Electrical and Electronics Engineers. IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity https://www.ieee.org/.

4 The European Society for Engineering Education is an international association: Higher engineering institutions, professional societies, student associations, students, academic staff, engineers and companies within Europe and worldwide https://www.sefi.be/#.

conference.org/icl2025. *The Conference Chair of ICL2025 is Péter Tóth Head of Department of Technical Education, Faculty of Economic and Social Sciences.* The conference will take place in *Building K,* which is close to Gellért square.

This interdisciplinary conference aims to focus on the exchange of relevant trends and research results as well as the presentation of practical experiences in Interactive Collaborative Learning and Engineering Pedagogy. The *Call for Papers* can be downloaded from the website just like all the other important information. The *Topics of Interest* are rich, the list contains 33 areas. The applicant can submit not only conference papers, but there are also other ways to participate. Posters/workshops/tutorials, interactive demonstrations and exhibitions can also be proposed. Prospective organizers of other ICL2025 events are encouraged to contact the conference chair. There is the possibility to organize a special session to which – if it is accepted – other authors may later submit research papers. Special Sessions, held in parallel with the general conference, are an integral part of the conference. They provide researchers in focused areas the opportunity to meet and present their work, and to offer a forum for interaction among the broader community of technology-enhanced learning, and online engineering worldwide. Special sessions' papers are required to meet the same standards as papers in the general conference and are published in the same conference proceedings.

Topics of interest are in all areas of

- Technology Enhanced Learning
- Collaborative Learning
- Engineering Pedagogy
- And others like main conference topics.

For authors, there is a separate page with the information. Proposals must be submitted to the ConfTool® Submission Server, and meet the *Important Dates*. Key dates, including submission deadlines, registration periods, and program announcements, are shown in a table. Nevertheless, it is essential to keep an eye on conference organizers' communications to ensure you do not miss any critical information about the conference. The submission process *starts* on **19 April 2025** with submission of: (i) structured abstracts (for full and short papers) for the conference, and (ii) Special Session proposals. It *is closed* on **12 July 2025** with Camera-ready due & Author registration.

We would like to welcome the Opus and Educatio readers on ICL2025 Conference in Budapest, Hungary.

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Nóra HEGYI-HALMOS & Zsuzsa KOVÁCS & Szilvia LAKNER & Anna Orsolya PONGOR-JUHÁSZ & Tünde TÓTH-TÉGLÁS

The Role of Human Resource Consultants in Digital Transformation – A Report on the Conference Co-Organized by the ELTE PPK Institute for Adult Education Research and Knowledge Management and EPALE Hungary

On 27 February 2025, the VI Knowledge, Learning, and Innovation Conference convened, with a primary focus on the multifaceted challenges confronting human resource management (HRM) and adult learning professionals amidst the ongoing digital transformation.

The digital transformation presents a dual mandate for HRM and adult learning professionals. On one hand, rapidly advancing technological solutions – akin to developments in other domains – offer unprecedented opportunities to automate and enhance the efficiency of workforce management and human development processes. On the other hand, HR consultants play a critical role in facilitating digital transformation initiatives, ensuring that organizations maintain their competitive edge. Simultaneously, the managers and HR professionals who lead and shape these transitions are themselves navigating a paradigm shift, tasked with managing and orchestrating complex processes that are often challenging to comprehend and laden with both potential benefits and inherent risks.

In her opening address, ***Dr. habil. Helga Dorner***, Director of the Institute for Adult Education Research and Knowledge Management (FTI), which organized the conference, underscored the importance of fostering a professional dialogue between academic theorists and industry practitioners. She emphasized that "as a leader, I consider it a vital objective to create a platform for collaboration that bridges theoretical insights and practical expertise." To this end, the conference program was meticulously designed to integrate insights from market and academic research, adopt a multidisciplinary perspective, and ground discussions in real-world experiences to critically examine the implications of digitalization for HRM and adult learning.

The conference featured a diverse array of speakers and participants, including HR professionals, consultants, training experts, academics, alumni of the EET master's program, and current students. This inclusive approach aimed to promote knowledge exchange and mutual learning through the sharing of varied perspectives and experiences. Special thanks were extended to the invited speakers, whose contributions and research played an instrumental role in initiating a meaningful dialogue on these pressing issues.

This report provides a synthesis of the key ideas presented during the conference sessions and offers insights from the roundtable discussions, capturing the collective expertise and emerging themes that surfaced throughout the event.

Plenary Sessions

How Digital Will the Future of HR Functions Be?

Martin Csépai, Head of Deloitte's HR Consulting Business in Hungary, opened the conference with an insightful presentation on the latest trends in digital transformation within organizations and human resource (HR) management, drawing on both international and domestic research conducted by Deloitte.

In his presentation, *Csépai* emphasized the shift from traditional, standalone HR solutions to integrated, cloud-based applications. He highlighted how emerging cognitive technologies, including robotics, artificial intelligence (AI), and machine learning, have the potential to elevate HR digitalization to a new level. These innovations pave the way for a transition to "Work-Tech," a future-oriented concept where technology is seamlessly embedded in everyday work processes, enhancing efficiency and workflow integration.

Martin Csépai identified three critical areas where the HR profession must develop radically new solutions and digital applications as the digital world continues to evolve:

- ***Transformation of Work Processes*****:** The nature of work will undergo significant change due to rapidly advancing technological solutions, with the degree of transformation depending on the extent to which various tasks and subtasks can be automated.
- ***Broadening the Workforce Spectrum*****:** Organizations will need to utilize a wider array of employment models, extending beyond traditional full-time roles to include atypical employment arrangements, freelancers, and external service providers.
- ***Flexibility in Work Arrangements*****:** Modern workplaces are increasingly adopting flexible approaches to when and where work is performed, promoting efficient hybrid solutions and adaptable work environments.

The speaker stressed the critical link between digital transformation and the enhancement of employees' digital skills, stating, "*It is difficult to digitize without people's digital skills evolving in line with it.*" He highlighted the importance of building HR systems that are not only efficient but also user-friendly and widely accepted by both managers and employees. *Csépai* outlined the strategic components that will define the next generation of digital HR strategy, focusing on the integration of innovative solutions into core cloud-based HR systems:

- ***Unified Employee Experience:*** Future digital solutions must cater to employee engagement and problem-solving needs, creating a centralized platform where employees can easily find answers and navigate various applications. This shift is driven by employee dissatisfaction with fragmented systems and the increasing prevalence of teleworking, as indicated by Deloitte's survey data.
- ***Automation and Artificial Intelligence in HR Functions*****:** AI and automation hold vast potential within HR, particularly in reducing the time employees spend searching for information. Current systems often fall short, with many employees expressing dissatisfaction with information retrieval processes. Tools such as organizational chatbots can alleviate the workload on HR staff by managing routine queries and providing quicker, more efficient responses to employees.
- ***People Analytics and Data Management Tools*****:** Deloitte's research indicates that the use of people analytics in HR is still in its early stages. Although organizations collect extensive data on work processes and employee behaviors, they often fail to fully exploit this resource. Advanced analytics models can process large volumes of complex data to support informed organizational decisions. For example, predictive analytics can identify employees at risk of leaving the organization due to low engagement, enabling the development of targeted retention strategies.
- ***HR as a Cross-Functional Ecosystem:*** The vision for a digital HR portfolio involves creating a personalized employee experience, embedding HR activities directly into work processes, and simultaneously supporting both performance management and organizational engagement.

Csépai also discussed the state of digital transformation in Hungary, noting that domestic companies often adopt a more conservative approach to innovation. The focus tends to be on enhancing operational efficiency rather than experimenting with pioneering digital initiatives. Deloitte's survey data suggests that while investments in digital HR are on the rise, they are primarily directed toward implementing basic functions and solutions. There is less emphasis on developing advanced, integrated "Work-Tech" systems compared to more innovative markets.

Overall, the presentation highlighted the transformative potential of digital technologies in HR management and underscored the need for strategic, forward-thinking approaches to fully harness the benefits of digitalization.

Current Issues at the Intersection of HR and Data Science

Dr. Sándor Soós, habilitated associate professor at the ELTE PPK Institute for Adult Education Research and Knowledge Management (FTI), delivered a presentation exploring the intersection of human resource management (HRM) and data science, with a particular focus on the opportunities and challenges associated with the application of artificial intelligence (AI) in HR practices.

In his presentation, *Dr. Soós* emphasized the significance of machine learning from a knowledge management perspective, noting its potential to capture and institutionalize expert tacit knowledge within organizational memory. Machine learning seeks to identify and analyze data relationships through supervised learning processes. One of its primary features, as highlighted by *Soós*, is its *predictive capability*, which can optimize recruitment processes by leveraging data analytics to forecast prospective employees' performance and retention. However, he posed a critical question: do AI-driven systems genuinely select the most suitable candidates? *He underscored the pivotal role of HR professionals in ensuring the proper training of AI systems, the accurate definition of input features, and the rigorous validation of predictive models*.

The majority of AI-based HR systems employ supervised learning models that not only recognize patterns grounded in human expertise but also support decision-making processes. The overarching aim is to develop AI systems capable of drawing inferences and making decisions that are on par with, or even exceed, those made by human experts. However, enhancing predictive performance often involves a trade-off: while increasing model complexity may improve predictions, it simultaneously diminishes interpretability and explainability. HR professionals implementing these systems must *navigate this balance between predictive accuracy and process transparency*, a dilemma that not only raises ethical concerns but also bears legal implications.

Dr. Soós pointed out that although very different at the surface, Machine Learning models in Decision Support and in popular generative (LLM-based) solutions fundamentally operate the same way. He compared two prototypical cases:

- ***Classification AI Systems***: These systems operate on structured data and make decisions based on learned function, essentially replicating prior expert classifications. Commonly used in recruitment and selection, these tools mostly rely on classical statistical and computational models, such as regression analysis and decision trees. These models are linear and highly interpretable, offering a clear explanation of the relationship between input data and outcomes.
- ***Generative AI Solutions (text generation)***: In contrast, generative AI models process unstructured data, primarily textual inputs. Their objective is to predict the next word in a sequence based on large language models used in text generation. Current applications in HR include streamlining communication and enhancing onboarding processes. These deep learning and neural network-based solutions, however, introduce complexity by producing outputs that are not directly traceable to specific input data.

Based on systematic literature reviews and a bibliometric analysis, *Dr. Soós* identified a persistent gap in academic discourse: limited interaction exists between management studies, including HR, and computer science. While management fields demonstrate increasing scholarly interest in the technological potential of AI, research on practical business applications remains largely at the domain of applied computer science. *His review revealed that within many HR functions, classical, well-interpretable models continue to dominate*. In recruitment, specifically, linear and explainable models prevail, although a gradual shift towards more complex, less transparent methods – such as deep learning and neural networks—is emerging, particularly for strategic HR decision-making.

Poster Session

As part of the conference, a poster session provided an opportunity for students and researchers to present their scientific work related to the conference theme. The displayed posters showcased the results of our students' scientific research projects, including their thesis and

academic competition papers. We would like to express our gratitude to the HVG Állásbörze for supporting the realization of the poster session.

Investigation of Workplace Informal Learning in the Recruitment Division of a Headhunting Company

Bálint Gergely Kassai, BA Student in Community Organization, ELTE PPK
Supervisor: *Dr. Emese Schiller*

Informal learning in the workplace plays a fundamental role in the functioning of organizations, particularly in a rapidly changing economic environment where continuous employee development is crucial. The research presented on the poster examined the informal learning processes within three recruitment divisions—Technical, IT, and Corporate-SSC – of a Budapest-based headhunting company.

Data collection was conducted through semi-structured focus group interviews, analyzed using ATLAS.ti software, enabling an in-depth exploration of both deductive and inductive themes.

The findings highlighted the significant importance of proactive learning, the use of digital resources, and self-development across all three divisions. Employees regularly utilized online platforms and professional materials to acquire new knowledge. However, differences were observed in informal learning practices and the supportive nature of the work environment. While project-based learning as a form of cooperation effectively facilitated professional development, collaboration between divisions proved limited, indicating a need for deliberate improvement in the future.

Special attention was given to the role of artificial intelligence (AI), which opens new dimensions in workplace learning. AI-based technologies, such as generative AI, significantly contributed to informal learning processes, particularly in automating routine tasks, supporting data-driven decision-making, and providing real-time feedback. AI not only facilitates faster information acquisition but also enhances independent learning skills and the sharing of professional knowledge, thereby improving employees' flexibility and adaptability.

The Limitations of Artificial Intelligence

Éva Markó, Masters Student in Human Resource Counselling, ELTE PPK
Supervisor: *Anna Orsolya Pongor-Juhász*

In the continuously evolving labor market, employees must keep pace with digital transformation. Technological advancements, particularly the rise of artificial intelligence (AI), have a profound impact on organizations, necessitating preparedness at both individual and organizational levels. Digitalization has become an integral part of everyday life and the world of work, with both strategy and technology influencing the pace of transformation. Among the greatest challenges are continuous learning, adaptability, and enhancing the employee experience, which can boost engagement and productivity.

The field of human resources (HR) has undergone significant changes due to digital transformation. Beyond traditional functions, new roles have emerged, becoming integral to corporate strategy. The use of AI requires employees to engage in critical thinking, as creativity and openness to innovation alone are no longer sufficient. While AI offers substantial benefits, it is also essential to consider its limitations. Data security and privacy are critical concerns, as AI systems often handle sensitive information. There is a risk of discrimination, as algorithms can sometimes reinforce biases, posing a threat to fairness and equality in decision-making. Additionally, transparency and explainability remain challenging, as it is often difficult to understand the underlying logic of AI-driven decisions, complicating accountability. The implementation of AI can also be costly, and technical failures may expose organizations to vulnerabilities. Furthermore, the reduction of human interaction may diminish empathy and emotional support within the workplace.

Overall, the application of artificial intelligence holds significant potential but requires a deliberate and responsible approach. Introducing AI is not merely a technological endeavor but also raises ethical and strategic considerations that organizations must address to ensure balanced and sustainable integration.

Opportunities for Gamification in the Field of HR
Nikoletta Kovács, Masters Student in Human Resource Counselling, ELTE PPK
Supervisor: Dr. Zsuzsa Kovács

In recent years, organizations have faced numerous challenges, including the labor market impacts of the COVID-19 pandemic, the emergence of a new generation of employees, and the rapid development of Industry 4.0. These changes present new tasks for HR professionals, as attracting, motivating, and retaining talent has become increasingly difficult. Gamification, a method that incorporates game-like elements into non-game contexts, has emerged as an increasingly popular approach offering innovative solutions to address these challenges.

The primary goal of gamification is to enhance employee motivation, engagement, and performance, while also improving the efficiency of training, talent management, and knowledge management processes. Research indicates that gamification is most commonly applied in the areas of training and development, performance management, and career management, although it can be utilized across nearly all HR functions, including recruitment, onboarding, recognition, and reward systems.

While gamification has the potential to be an effective tool, its implementation may encounter several obstacles. According to a survey, 79% of HR professionals do not use gamification elements, citing barriers such as lack of management support, financial constraints, and resistance from employees. Additionally, gamification may not yield the desired outcomes if the game elements are overly simplistic, if external motivation is prioritized over internal motivation, or if there is an excessive reliance on points and leaderboards.

Despite these challenges, with appropriate planning and implementation, gamification can become a powerful tool for modern HR practices. The evolving labor market and the emergence of young employees who are receptive to digitalization underscore the potential benefits of broader adoption of gamification within organizations.

Sustainable Development Through the Acquisition of Digital Skills in the Workplace
Boglárka Schmél, Bachelor's Student in International Business (English Program), ELTE GTK

In a rapidly changing and evolving digital environment, organizations face increasing pressure to adapt to technological innovations while maintaining a long-term focus on sustainability. This poster presents the results of a secondary research study examining how human resource management (HRM) can effectively support the development of digital skills, thereby promoting sustainable economic development. Digital competencies have become indispensable for organizational survival and competitiveness, making it critical to explore the relationship between HR management, digital skills development, and sustainable economic growth, as well as the mutual influence of these elements.

The literature review focuses on the interplay between HR leadership, digital skill enhancement, and sustainable development, highlighting how these factors impact each other. The research aims to demonstrate the role of HR management in overcoming the challenges posed by digitalization and in creating a skilled, adaptable workforce that prioritizes sustainability. The findings contribute to a deeper understanding of how strategic HR practices can cultivate a resilient workforce capable of driving long-term organizational success in a sustainable manner.

Sessions

The Organizational and Human Dimensions of Digital Transformation in Practice (Session 1.)
During the session, Emőke Erdélyi, HR Director, and György Gaszmann, Digitalisation and Transformation Director of CETIN Hungary Zrt., shared insights into the company’s digital transformation journey, which commenced two years ago. The session was moderated by Dr. Szilvia Lakner, adjunct professor at the ELTE PPK Institute for Adult Education Research and Knowledge Management (FTI).

CETIN Hungary operates as an independent integrated service provider, delivering advanced mobile network and data services to a broad spectrum of telecommunications operators and business clients. As a driving force behind digital transformation, CETIN is committed to offering state-of-the-art communications infrastructure, supported by a workforce of over 200 employees. The overarching objective of the digital transformation initiative is to facilitate a transition to service-oriented operations, enhance operational efficiency, and ensure a balanced workload for employees. The company's ethos is deeply rooted in innovation and development, with a strategic focus on leveraging the latest technologies and creating an innovative, people- and customer-centric organizational culture by engaging Generation Z.

Transformation Strategy and Process
The transformation strategy at CETIN is structured into three main phases: preparation, implementation, and continuous improvement. The transformation effort encompasses several critical domains, including process automation, the integration of artificial intelligence (AI), the widespread application of data analytics, and the adoption of agile methodologies where applicable. Throughout all phases and across all domains, particular emphasis is placed on organizational development and change management. Although digital transformation is often perceived as a technological endeavor, CETIN approaches it primarily as an organizational development challenge rather than a mere technology project.

From the inception of the project, employees were actively involved in the development of each area, ensuring a blend of grassroots insights with managerial ideas and expectations. The transformation process prioritizes the individual employee, not only during the implementation phase but also in the subsequent stages. A fundamental aspect of the change process involves ensuring that employees understand how the transformation benefits them personally, fostering a sense of value and alignment with organizational goals.

Key Elements of the Transformation Approach
The transformation at CETIN is supported by a range of coordinated initiatives designed to facilitate and sustain change. Training programs are offered at both management and staff levels, covering agile methodologies, AI fundamentals, and the use of tools such as Copilot. An AI ambassador program emerged from this training, further embedding digital competencies within the organizational culture.

The AI user forum serves as a platform for information exchange and peer learning, enhancing credibility and knowledge sharing among experts. The talent program focuses on developing digital, cultural, and strategic thinking skills, with participants contributing to pilot projects centered on process automation and AI development. Agile coaching is provided to support adaptive thinking and a flexible approach to new processes. Digitalization is integrated into goal setting and performance evaluations, aligning individual objectives with the broader transformation strategy. The company also incentivizes innovation by rewarding creative ideas biannually, ensuring that successful proposals receive the necessary resources and support for implementation.

Leadership meetings are held to assist middle management in developing a holistic understanding of digitalization. Decision-making processes reflect digitalization priorities, embedding these expectations into approval workflows. Generational workshops are conducted to bridge the gap between older and younger employees, promoting generational understanding and collaboration.

HR Directorate's Digital Initiatives
In addition to company-wide programs, the HR directorate at CETIN integrates digitalization and AI into several key areas. These include enhancing personal effectiveness and learning development, automating and digitizing HR processes, and supporting the creation of communication materials and policies. These initiatives contribute to a more efficient and adaptive organizational environment.

Ongoing Challenges and Future Steps
According to the CETIN model, the digital transformation process is well underway and progressing in alignment with strategic objectives. However, continuous attention is required to maintain systematic and

transparent communication, actively gather and analyze feedback, and adjust future steps accordingly. Next steps include expanding the AI ambassador role to expert levels, shifting from awareness to establishing clear expectations at the management level, increasing engagement with Generation Z, and maintaining a balanced approach between bottom-up initiatives and strategic directives.

Overall, CETIN's experience underscores the critical role of thoughtful organizational development and human-centric approaches in achieving successful and sustainable digital transformation. The integration of technology with robust change management practices serves as a model for other organizations navigating similar transformations.

Challenges of Professionalization in Adult Educators in the Context of Digital Transformation (Session 2.)

The conference section dedicated to the professionalization of adult educators focused on the challenges posed by digital transformation and the opportunities for adaptation within the field of adult education. Participants engaged in discussions around critical topics such as methodological innovation, the optimal balance between technological advancements and in-person interactions, and the role of professional communities in supporting the continuous development of adult educators.

In the opening of the session, *Dr. Zsuzsa Kovács*, assistant professor at ELTE PPK FTI and moderator of the session, alongside *Ágnes Tóthné Vámosi*, a student in the Andragogy MA program, introduced the objectives, activities, and achievements of the ÆduSphere Andragogical Research Group. This research initiative, developed by university lecturers and andragogy students, aims to promote the professionalization of adult educators through two primary strategies: establishing a comprehensive knowledge base and conducting empirical research.

A significant outcome of the workshop was the creation of a database with the involvement of first-year master's students. This resource compiles data on adult educators' professional competencies, roles, national and international methodological materials, and relevant regulatory frameworks. Additionally, as part of her thesis research, *Emese Miklós*, a student specializing in adult education research, conducted interviews to explore the professional development needs and challenges faced by adult educators. The research findings highlight the key factors contributing to the professional growth and professionalization of adult educators.

Key Research Findings

The study revealed a strong demand among adult educators for continuous learning and self-development, including the enhancement of self-reflection skills. The development of digital competencies and openness to new teaching methods and technologies emerged as essential prerequisites for effective participation in modern educational environments. The findings also highlighted an increasing need for the establishment and application of professional quality standards that could standardize and uphold the high-quality practice of adult education.

Methodological knowledge and competencies require continuous expansion to facilitate the development of more effective teaching and learning processes. Strengthening professional communities is equally important, as educators seek collaborative opportunities based on knowledge sharing and a more robust system of professional support. Furthermore, expanding access to training opportunities is a critical need, as providing relevant and accessible training is key to promoting educators' professional development and enhancing their adaptability to educational challenges.

The Role of Digital Competencies in Adult Education

Tamás Sulyok, assistant professor at Milton Friedman University, emphasized the interplay between adult education roles and the digital environment in his presentation. He stressed the importance of adult education professionals possessing strong pedagogical/andragogical and methodological knowledge and fostering critical future-oriented competencies among their learners. He highlighted the "4Cs" competency model—communication, critical thinking, cooperation, and creativity—as well as the necessity of developing digital competencies in adult education. *Sulyok* also noted that the rapid advancement of digital technology is reshaping learning environments, creating new expectations for adult educators. Future professionals in adult education must be prepared to enhance individual knowledge and apply the most appropriate methodological and digital tools effectively in their work.

Practical Insights from INSEDO Ltd.

Miklós Horváth, CEO of INSEDO Ltd., presented the company's profile, including its strategic collaborations in training projects and its involvement in organizing training for companies and small and medium-sized enterprises. INSEDO Ltd. focuses on integrating educational and adult education programs into digital modules and offers consultancy and methodological development for e-learning courses. *Horváth* provided insights into the company's pricing strategy and demonstrated the Learning Management System (LMS) framework they use, including the structure, interactive elements, and functionalities of their digital learning materials and e-learning programs. He also explained that, due to Hungary's state monopoly on vocational education in dual training systems, INSEDO Ltd. can only offer training outside the state KRÉTA framework through internal and external training formats for their partners. *Horváth* emphasized that future adult educators and students must possess adequate knowledge of digital training processes, including e-learning, LMS systems, and the development of digital learning materials.

Key Challenges Identified in the Closing Discussion

The session concluded with a professional discourse involving participants, during which several critical challenges in adult education were identified. The discussion revealed a significant gap in the availability of practical andragogical and methodological strategies, which presents considerable difficulties in practice. Moreover, the absence of standardized quality assurance measures hinders the establishment of unified professional guidelines. These gaps not only affect the effectiveness of educational processes but also limit support for the professional development of adult education specialists.

Another prominent challenge discussed was the limited availability of professional communities and knowledge-sharing platforms. The lack of these resources constrains the structured exchange of experiences and the promotion of professional collaboration. Additionally, participants noted that adult educators often struggle with self-reflection, particularly in recognizing and managing their professional development needs, which can impede effective self-improvement processes.

Conclusion

Overall, the session highlighted the complex and evolving nature of professionalization in adult education, particularly in the context of digital transformation. It emphasized the need for continuous professional development, the creation of robust support systems, and the strategic alignment of digital tools with educational objectives to enhance both teaching efficacy and learner outcomes.

Roundtable Discussion

Changing the mindset of the human resources consultant / A Paradigm Shift in Human Resource Consulting

During the roundtable discussion in the fourth session of the conference, the panel featured *Gyöngyvér Martin,* business consultant and interim HR manager; *Dr. Adrienn Ujhelyi*, habilitated associate professor at the Department of Social Psychology, ELTE PPK; *Dr. Csaba Otti*, CEO of Login Autonom and associate professor at Metropolitan University; and *Dr. Péter Schrankó*, business development expert at Ringier Partner. The discussion focused on the complex dilemmas of digital transformation impacting human resource management processes, exploring the perspectives and attitudes of HR professionals, managers, and employees alike.

In the opening segment of the roundtable discussion, invited experts were asked to share their perspectives on digitalization, including their hopes and concerns regarding the increasing prevalence of digital solutions across diverse domains. *Dr. Adrienn Ujhelyi*, approaching the topic from a social psychology perspective, expressed concerns about the profound impact of artificial intelligence (AI) on private relationships and individual identity, as well as the emerging digital divides between different groups in society. She emphasized that the expanding role of AI in everyday life could reshape social dynamics and deepen inequalities.

Drawing on extensive senior management experience, *Gyöngyvér Martin* highlighted the multifaceted role of HR managers in the context of technological change. She argued that HR professionals must not only monitor emerging trends and align new market opportunities with organizational needs but also play an active role in the design and implementation of technology strategies. *Martin* underscored the importance of achieving a balance between human and technological elements within organizations. This involves fostering a supportive corporate culture, cultivating a management approach that aligns with employees' needs, and maintaining clear and effective communication throughout the transformation process.

Dr. Péter Schrankó introduced the concept of navigating both digital and analogue environments simultaneously, noting that the business world's challenge lies in managing the "revolving door" between these two spaces. He suggested that the more seamlessly organizations manage these transitions, the less disruptive they become. *Schrankó* also reflected on the collective trauma experienced in the labor market, where initially white-collar workers feared job losses due to automation, followed by blue-collar workers grappling with the implications of Industry 4.0. Despite the initial uncertainty, he observed a gradual stabilization and emphasized the importance of appreciating the "offline" aspects of daily life amid digital advancements.

Dr. Csaba Otti shared a forward-looking yet cautionary perspective, suggesting that the rapid pace of technological innovation often resembles a scenario from a science fiction narrative. He pointed out the potential for a future where human workers might find themselves in competition with humanoid robots. *Otti* stressed that while engineers are tasked with delivering technological solutions, the human impact of digital transformation must not be overlooked. He highlighted a critical issue where those responsible for implementing digital solutions have, paradoxically, lost their jobs post-development, hindering acceptance of the changes. To avoid such pitfalls, *Otti* advocated for a strategic approach to digital implementation, emphasizing the necessity of aligning initiatives with long-term organizational goals and involving experienced professionals throughout the process.

Overall, the discussion illuminated the complex and multifaceted challenges of digital transformation, underscoring the need for strategic foresight, balanced integration of technology, and a deep awareness of the human and social dimensions involved.

According to the roundtable participants, human resource (HR) professionals play a critical role in the introduction and implementation of digital solutions within organizations. *Gyöngyvér Martin* emphasized that HR managers must approach technological innovations with openness and proactivity. He noted that HR managers and professionals often exhibit ambivalent attitudes towards technological transformations. However, in his experience, the process is significantly smoother in organizations where HR operates within a business-led framework. In such environments, HR is already integrated into strategic planning, enabling HR professionals to understand the rationale behind technological changes, the intended goals, and the specific roles employees are expected to play. This strategic involvement allows HR teams to align with development objectives and support transformation processes more effectively.

Dr. Péter Schrankó highlighted that many managers remain unconvinced about the universal necessity and benefits of digitalization and technological transformation. He pointed out that managers face multifaceted responsibilities and must carefully weigh the risks associated with change. Firstly, they must ensure sustained profitability, which can lead to hesitancy regarding the digital transition, particularly when immediate returns on investment are unclear. Secondly, in a rapidly changing business environment, day-to-day operations demand constant focus and energy, leaving little room for the uncertainties associated with digital initiatives. Thirdly, past negative experiences with digitalization – often linked to misguided technological investments and a lack of strategic vision – have made many leaders cautious. *Schrankó* cited examples from the past 50 years where IT professionals provided poor advice, leading to unjustified investments such as in data warehouses that did not deliver tangible benefits. He emphasized that while data itself holds potential, it requires processing and further investment, particularly in human resources, to become a valuable asset.

Schrankó also raised a critical question about the nature of digitalization, asking whether the technological transformation and the evolving "transhuman age" should be viewed as an end, a means, or simply the environment in which organizations operate. He acknowledged that caution from company leaders is understandable but stressed that HR professionals are uniquely positioned to act as credible advocates for new processes, helping bridge the gap between technology and workforce acceptance.

Dr. Csaba Otti echoed similar sentiments regarding managerial attitudes toward digital transformations. He observed that when a business is performing well, it is particularly challenging to persuade decision-makers to embrace change, as transformation inherently involves risk. Significant technological investments, such as purchasing new production lines, represent not only financial burdens but also potential resistance from employees. *Otti* noted that while executive-level adoption of digital solutions can proceed rapidly when business continuity is at stake, such changes are often met with reluctance during stable periods. Before the COVID-19 pandemic, digital solutions were considered "nice to have," primarily aimed at addressing workforce shortages and enhancing the employee experience. He contrasted this with the 2008 financial crisis and the COVID-19 pandemic when digitalization became a necessity to maintain operations – whether through automation to replace a downsized workforce or enabling remote work overnight. In these critical moments, the ability to adapt quickly and implement digital solutions was essential.

Otti also emphasized the importance of leadership during times of transformation. While engineers are adept at implementing digital tools, HR professionals play a crucial role in preparing employees for change, managing their fears, and fostering internal motivation. Without a sense of intrinsic motivation, it becomes difficult for employees to embrace digital tools and adopt new technologies effectively.

Dr. Adrienn Ujhelyi supported these insights by referencing McKinsey's report[1] on the use of artificial intelligence (AI) in HR, which aligns with the panel's observations. According to the report, the age group most receptive to AI tools is between 30 and 45 years old, with this demographic also reporting the highest levels of confidence in their AI expertise. Interestingly, the report revealed a significant discrepancy between managers' perceptions and actual employee practices regarding AI usage. Managers tended to underestimate how frequently their subordinates utilized AI in their daily work, with three times as many employees reporting regular use of AI than managers expected. This gap in understanding also suggests that many employees may not disclose their reliance on AI, leading to an overestimation of their productivity. While short-term uncertainty about AI adoption remains high – only 1% of managers believe AI is mature enough for full-scale implementation – long-term attitudes are generally more optimistic, with most managers acknowledging the eventual necessity of AI integration.

Schrankó concluded by underscoring the importance of identifying leaders who possess a growth mindset, are open to learning, and can inspire continuous improvement among their peers. He argued that these qualities are vital for driving successful digital transformations and ensuring that organizations remain agile and forward-thinking in an increasingly digitalized world.

During our roundtable discussion, we explored the responsible use of artificial intelligence (AI) and the associated ethical considerations. According to *Dr. Péter Schrankó*, the ethical issues surrounding AI are often more accurately characterized as professional challenges. The critical question is the extent to which AI can produce high-quality, credible professional content. For example, can AI generate a robust business plan? *Schrankó* referenced the digital transformation discussed earlier in the session, highlighting that AI has already fostered the development of subcultures and ecosystems – more closed systems where the professional quality of AI-generated content is better assured.

[1] https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/superagency-in-the-workplace-empowering-people-to-unlock-ais-full-potential-at-work

Dr. Csaba Otti emphasized that AI represents a qualitative leap compared to traditional digital transformation initiatives in the workplace. Unlike complex integration software that often requires large-scale implementation, AI tools are more accessible, even for individual employees. However, *Otti* often encounters scenarios where companies are captivated by the potential of an algorithm without possessing the necessary data infrastructure to support its functionality. Many organizations aim to digitize their paper-based processes but become entangled in the minutiae of operational details, diverting attention from strategic priorities. This issue is compounded by the fact that many HR professionals struggle with process modeling, which creates significant obstacles to digital transformation.

Gyöngyvér Martin observed a substantial lag among Hungarian companies in adopting digitalization processes. He identified the primary challenge as the lack of up-to-date data, which is crucial for supporting data-driven decision-making, predictive analytics, and the effective deployment of AI tools. Despite this gap, *Martin* noted a growing openness and interest among HR professionals towards AI, particularly as a means to streamline administrative and operational tasks. By leveraging AI, HR professionals could allocate more time to strategic functions, such as organizational development, culture building, leadership development, and talent management. *Martin* also stressed the pivotal role of HR in bridging the gap between technology and employees. HR professionals can mitigate fears and biases towards AI and foster a positive organizational mindset. To achieve this, effective leadership, a supportive organizational culture, and transparent communication are essential. He pointed out that while there is interest among HR managers to participate in strategic planning, their involvement is often limited by the lack of strategic expectations from business owners, who may primarily view HR as a service provider rather than a strategic partner.

According to *Otti*, a frequent issue is that HR professionals focus narrowly on optimizing HR processes without fully understanding broader business objectives. This myopic approach hinders their ability to contribute meaningfully to the organization's digital transformation. *Otti* argued that HR's impact could be significantly enhanced if professionals developed a more holistic understanding of business strategies, enabling them to align HR initiatives with organizational goals and drive digitalization more effectively.

Overall, the discussion highlighted the nuanced role of HR in digital transformation, balancing operational efficiency with strategic alignment. It underscored the importance of equipping HR professionals with not only digital tools but also the strategic acumen necessary to integrate technology into broader organizational objectives responsibly and effectively.

In the concluding segment of the roundtable discussion, *Dr. Adrienn Ujhelyi* underscored the centrality of people in the context of digital transformation, emphasizing that technology fundamentally exists to serve human needs. She cautioned against framing productivity and people as opposing forces and advocated for approaching artificial intelligence (AI) through the lens of its practical benefits. Specifically, AI should be evaluated based on how it can enhance work processes, taking over routine tasks and thereby allowing employees to focus on more creative and intellectually stimulating activities. *Ujhelyi* noted that much of the fear surrounding AI stems from uncertainty—not knowing precisely what or whom to fear. To mitigate this, she highlighted the importance of maintaining openness to new information and continuous learning, which can help individuals recognize the specific situations and processes where AI is genuinely beneficial.

Dr. Péter Schrankó added that it is crucial to distinguish between how individuals present themselves digitally and their actual behaviors, as digital transformation often creates a competitive environment. Understanding this discrepancy can provide valuable insights into the real impact of digitalization on organizational culture and employee engagement.

Gyöngyvér Martin presented three key insights for effective digital transformation. First, he stressed that organizations should always have a clear technology strategy and a well-defined development plan. Second, he emphasized the necessity of building bridges between technology and people, facilitating understanding and helping to overcome resistance. Third, *Martin* advocated for involving end-users at the earliest possible stage of the implementation process. Early engagement fosters a sense of ownership and openness towards new technologies, significantly enhancing the likelihood of successful adoption.

Concluding the discussion, *Dr. Csaba Otti* reinforced the notion that digitalization is inherently a human-centered process. He argued that stakeholders should be integrated into digital transformation initiatives as early as possible to cultivate commitment and engagement with the project. *Otti* also pointed out that HR professionals must adopt a business-oriented mindset to effectively support digital transformations. At the same time, they need to demonstrate tangible business value quickly, aligning technological advancements with organizational goals and delivering measurable outcomes.

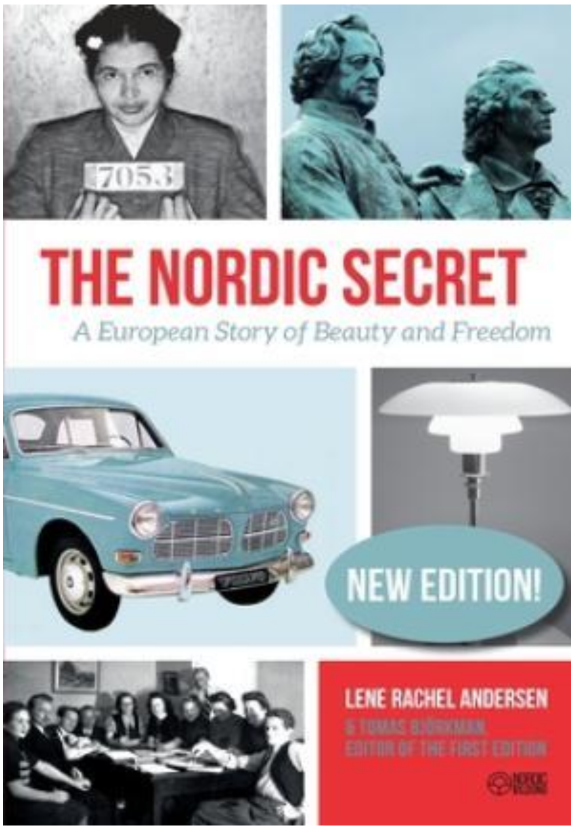
Overall, the discussion highlighted the critical role of human factors in digital transformation. It emphasized that while technology offers powerful tools for enhancing productivity and efficiency, its success ultimately depends on thoughtful integration with human needs, strategic planning, and effective change management.

We believe that an engaging and meaningful professional dialogue developed within the various sessions of the conference. We hope that participants left the event with new perspectives and fresh ideas. We warmly welcome new attendees to the next event in our conference series, where we will continue to explore current issues in the field of HR.

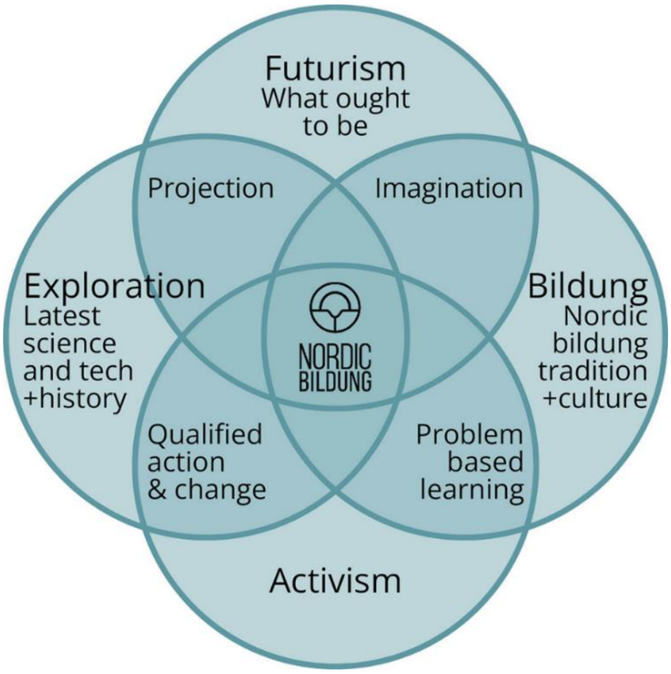
If you would like to receive notifications about our upcoming events, please register at the following email address: hr.kutatasok@ppk.elte.hu.

Lilla PETŐ

Book review: The Nordic Secret



The Nordic Secret: A European Story of Beauty and Freedom, authored by Lene Rachel Andersen and Tomas Björkman, examines the cultural and educational strategies that transformed the Nordic countries during the 19th and early 20th centuries. It highlights how these nations harnessed the power of Bildung (a German concept encompassing personal and cultural development) to create thriving, democratic societies. The book situates itself within the ongoing discourse on societal evolution and educational reform, offering a historical perspective on challenges that resonate today, such as social polarization and the need for inclusive progress. Their collaboration draws on their combined expertise to provide a deeply researched and compelling narrative. Andersen and Björkman argue that this approach was instrumental in building egalitarian, resilient, and democratic societies, making the Nordic countries a model of modern success. This book stands as part of their broader efforts to explore societal transformation through cultural and personal growth.



The book revolves around Bildung—a German term for education, cultivation, personal formation, and character development, encompassing emotional and moral growth. (Definitions abound, and we may never fully capture its depth.) The authors position Bildung as a central pillar for societal evolution, emphasizing that it is more than education in the conventional sense. Instead, it is a holistic process of individual and collective growth, deeply tied to cultural identity, morality, and critical thinking. They explore how this concept was applied to tackle pressing issues of the 19th century, such as economic disparity, lack of education, and social fragmentation.

Structure of the Book

The book is divided into several cohesive chapters, each addressing a critical aspect of the Nordic transformation:

Historical foundations
The opening chapters paint a vivid picture of the challenges faced by Nordic countries in the 19th century. The agrarian economies were struggling with modernization, rural poverty, and illiteracy, necessitating systemic change. The origins of Bildung trace back to the German Enlightenment, where thinkers such as Johann Gottfried Herder and Wilhelm von Humboldt emphasized the importance of personal and communal development. This concept was later implemented through institutions like the folk high schools (folk high schools), envisioned by the Danish thinker N.F.S. Grundtvig. These schools provided rural populations with opportunities for education, fostering not only professional but also cultural and moral development.

Philosophical underpinnings
Central to this change were thinkers like N.F.S. Grundtvig, whose ideas about folk education and the importance of cultural heritage shaped the Nordic ethos. Grundtvig believed in creating institutions that would not only teach practical skills but also nurture a sense of community, critical reasoning, and self-awareness.

Folk high schools
The book dedicates significant attention to the establishment of folk high schools. These institutions were innovative in their approach, offering non-formal education to rural populations, focusing on lifelong learning, and integrating local culture with global awareness. The authors emphasize that folk high schools were not merely educational institutions but also community centers where people could discuss social and political issues. This was particularly important for strengthening democracy and social cohesion. The Danish and Norwegian governments actively supported these institutions to ensure that individuals from lower social classes could access opportunities for development. These schools played a pivotal role in transforming Nordic societies by empowering individuals to become active participants in democracy and societal progress.

Cultural evolution and democracy
Later chapters draw connections between Bildung and democratic development. The authors argue that by prioritizing self-cultivation and collective responsibility, the Nordic countries fostered an environment of trust, collaboration, and resilience, which became the foundation of their thriving democracies.

Modern relevance
The final chapters examine how these lessons can be applied today. The authors explore contemporary issues such as environmental degradation, inequality, and polarization, proposing Bildung-inspired strategies to address these challenges.

Evaluation

The book provides a detailed account of how intentional cultural and educational strategies can lead to large-scale societal transformation. Andersen and Björkman bridge the gap between theory and practice, showing how Bildung principles can be adapted to contemporary issues. Although focused on Nordic countries, the book's message is universal, advocating for a balance between individual freedom and collective responsibility. The narrative is both scholarly and accessible. Andersen and

Björkman use a mix of historical analysis, philosophical reflection, and real-world examples to keep the reader engaged. The incorporation of case studies, such as the role of folk high schools, adds depth and relatability. The authors highlight how the principles of Bildung addressed key issues of their time-poverty, inequality, and lack of education—and argue that similar approaches could resolve modern challenges. For instance, fostering critical thinking and community engagement could counteract the rise of populism and polarization.

Conclusion

The Nordic Secret is not merely a historical analysis but an inspiring read for those who believe that education and culture have the power to change the world. I recommend it to educators, policymakers, and anyone who seeks to understand how a successful and sustainable society can be built. This book is valuable for anyone interested in history, education, or social innovation. The principles of Bildung remain relevant today and can serve as an example for other parts of the world.