Welcome

Our first English-language issue of 2024 will seem ordinary to the reader. For us, in the opinion of the editorial staff, it also reflects the journey that we started together ten years ago, at the end of 2014. Opus et Educatio was typically born by the principle of open access in the spirit of the new aspirations of Open Science in the 21st century. This number is our 41st in a row, which number also shows that after the minor and significant storms of the past years - overcoming the difficulties of building the IT infrastructure, surviving a severe hacker attack in 2017, and then the dramatic effects of COVID-19 in the online world, a significant overcoming a challenge - Opus was able to stay on its feet and develop continuously. Thanks for this to Anildo Vedovatti and János Horváth Cz., who have been enthusiastically involved in the work of the editorial office since its inception and who, as administrators of the Open Journal System (OJS), made every effort to publish the paper. The real success is that not only has the number of our readers increased in the last decade, but also a background of authors has been formed, who, from time to time, come to our paper to publish their publications and new research results. All of this means not only the stabilization of the number of submitted manuscripts but also the fact that, in recent years, an expanding number of proofreaders has developed, which is of strategic importance in terms of the quality of the newspaper.

From the beginning, the letter Opus assumed that it was a multidisciplinary magazine that deals with an increasingly complex topic in our modern world: work and education. Since, in addition to theory, a relatively modest number of internationally noted publication forums are available to researchers on topics directly related to practice, we considered it our mission to help researchers take their first publication steps. Thus, in addition to the publications in Hungarian, we undertook to provide one or two issues a year in English from the beginning. It was intended to encourage communication and expand the possibility of joining international scientific communication. In addition to the Studies section, we undertook from the beginning to create the possibility of publishing for beginning researchers and doctoral students. Our awareness section has always been open to supporting the publication intentions of young researchers, which, of course, means a severe learning process for the authors and our editors. The past period has been successful; this issue's theme, genre proportions, and structure reflect our efforts so far. The authors of the papers appearing in the Studies section have already appeared in the columns of our newspaper in recent years, and we are pleased that their new results have also been published within the framework of Opus. It is also symbolic that half a dozen papers appear in the recognition section, where the joint publications of doctoral students and their supervisors, who already have significant scientific references, can be read. Authors from eight countries are represented in this issue, indicating that we are also making serious efforts in internationalization. The freshness of the thematics and the diversity of the topics, from theoretical research to concrete practical developments, presumably shows that applying the open access principle in its new technological framework makes it possible and necessary to meet modern scientific publication requirements these days. In the spirit of these thoughts, wishing dear readers, our current and future authors, a pleasant reading, and the rest of the summer months are filled with new thoughts!

Budapest, June (2024)

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Building careers through an interdisciplinary approach

Introduction

The central issue of career counselling and guidance is supporting decision-making and projecting a series of decisions onto a career. Gati Kulcsár (2021) dedicated a detailed article to this issue in career guidance. Lent and Brown (2020) suggest a content-process-context framework for career choice assessment and intervention, moving away from Parsons's traditional three-step model (1909).

On the other hand, there are several disciplinary approaches to decision theory outside the domain of career counseling as well. There are different approaches in economics, mathematics, sociology, social psychology, law, political science, public policy analysis, and philosophy. In addition to psychology, sociology, labor economics, management science, law, and many other disciplines have shaped career guidance's theoretical and practical knowledge. Career counselors and individuals, families, and communities building careers use the practical results of all these disciplines, often unconsciously. This theoretical article aims to review the views of each discipline on careers, career management, and decision-making to reflect more consciously on these challenges in the training and practice of career professionals. However, different disciplines emphasize the link between career and decisions from different perspectives. Economics, in general, is interested in maximizing benefits and minimizing losses from decisions. The economics of work and Education focuses on the accumulation and use of human capital over the career, sociology on social mobility and lifestyles, and psychology on the psychological components of decision-making, career maturity (Super, 1957), and career adaptability (Super & Knasel, 1981; Savickas, 1997). Although career decisions are reversible in modern social divisions of labor (Castel, 1996), an infinite number of decisions cannot be made in a career. In his famous rainbow model of careers in the 1970s (Super, 1980), Super still advocated linear career development. Towards his death in the early 1990s, he could go beyond this linearity with the triumphal archway model. Super's second synthesizing model, the archway of career determinants (1992), also known as the archway model, was created to clarify these environmental and intrapersonal determinants of career, which were suggested by the developmental tasks of the career rainbow model. In this model, linearity no longer prevails, as the rainbow model implies. However, the latter model also illustrates how the number of resources and energy available varies between efficiency and flexibility and between path reinforcement and path correction. The main message of the Club of Rome's repeated report (Meadows, 2020) is that "efficiency gains come at the expense of flexibility, and this is felt in all sectors of society." So, for all career decisions, the question is: do we lose efficiency by further improving career flexibility (cf. How many times can one retrain without losing the skills accumulated over a career?) and, conversely, does worker efficiency always increase with seniority? To use a natural science analogy, the principle of energy conservation is true if we consider a closed system. Modern boundless careers, however, are not a closed system with a particular work organization or occupation (Hall & Moss, 1998), nor are they infinitely variable. Another key issue is what supportive resources are available by the environment (state, community, family) to make a career more flexible. The decision Information (as well as disinformation) is infinite in the digital age, but as decision-makers, none of us have infinite resources or time to gather and analyze information. This is particularly true in the modern world, which has become super-complex (Barnett, 2020), where the task of discovering and processing information, separating the content of directed marketing from data collected along self-interest and values, is complex. The new digital tribal separation of subjective reality perception is a new challenge for modern digital societies. We call this phenomenon the echo chamber (Cinelli & De Francisci Morales, Galeazzi & Starini, 2021). In news

media and social media, an echo chamber is an environment or ecosystem in which participants encounter beliefs that reinforce or strengthen their existing beliefs. In the context of careers and career paths, from school choice to employment, career planners and guidance counselors encounter this phenomenon on countless occasions, which can close the reflection leading to decision-making. There are two basic concepts behind decision theory thinking: utility and probability. When people make decisions in familiar situations, these decisions are typically quick and automatic. They base what works and what does not on previous experience. However, decisions are far from automatic or quick in unfamiliar situations, as they need to consider the pros and cons, the expected risks, and possible gains. Furthermore, the implementation of any decision involves the use of resources, and the question to be examined, as in any counseling process, is whether the person making the decision a) has a realistic knowledge of his or her resources? b) has the resources to implement the decision? (This latter question is intensively examined in the System Theory Framework (STF) Patton & McMahon, 2006) or constructivist counseling (Bassot, 2012). In doing so, it anticipates the future course of the implementation of the decision and the probability of each eventuality (scenario) occurring. Practitioners rightly note that their clients often face more complex and difficult problems. Given that people live in a highly complex social environment, many of the most important decisions a person makes are made in the context of inextricably linked social interactions. Moreover, the decisions people make throughout their lives depend on the concurrent decisions of others (Charpentier et al., 2016, cited in McCue, 2020). Information is central to all decisions. Its total absence leads to completely uncertain situations with little room for reflection. Conversely, in high certainty, routine, safe situations, decision-making is unnecessary. Therefore, no psychological tension is associated with decision preparation and decision-making (the counselor cannot work with the client).

TABLE 1: The certainty-uncertainty continuum

Degree of uncertainty	characteristics	examples
No uncertainty (certainty, certain circumstances)	Outcomes and results can be accurately predicted.	The laws of physics and mathematics, some of the natural sciences
Level 1 (objectively measurable risk)	Outcomes can be identified and the probability of their occurrence is calculable, known	Gambling: lottery, cards, dice, simpler technical and economic systems
Level 2 (subjective probability risk)	Outcomes can be identified and the probability of their occurrence can be estimated.	Natural science research, weather, investment, business, development projects CAREERS in the short term (own addendum)
Level 3 (uncertainty)	Outcomes can be identified, but the probability of their occurrence is unknown.	Fire outbreaks, accidents, long-term investment developments in the economic situation CAREERS/ LIFETIME PLANS in the long term (own addition)
Level 4 (complete uncertainty)	The outcomes cannot be fully identified, nor is their occurrence known.	Space exploration, discoveries, stochastic projects.

source: Williams et al., (1995), Székely Cs. (2020), modified by the author

The certainty-uncertainty continuum (see attachment) source: Williams et al., (1995), Székely Cs. (2020), modified by the authors. If we did not filter information and discard opportunities throughout our lives, we would suffer from a paralysis of constant reflection and be unable to make any decisions in the face of the complexity and ambiguity of the real world. However, this filtering comes at a price and introduces significant biases into our decisions. One is overconfidence, where we tend to be unduly optimistic and filter out many sources of uncertainty from our consciousness. The other problem is that we tend to be influenced by how a problem is framed (McCue, 2020). We know there

is no such thing as a 100% rational decision, yet we still know little about how feelings translate into concrete decisions. A schematic diagram (Restát, 2012) illustrates the effects of the decision on in- and outsiders over time, based on the security that typically exists in modern societies. By security, here we mean security of life and property in the broadest possible sense, starting with the list. In the case of the precariat (Standing, 2012), job- and existence-less strata known from the modern career counseling and sociology literature, the security (often even life and property security) associated with the decision situation can be highly questionable. Thus, the resources needed to implement the decision are lacking. According to Blustein (2006), who has devoted much of his career to the study of career opportunities for the American underclass, there are three aspects of work: a) it allows us to survive, b) it provides us with social connections - work a place where we can feel connected. c) work allows us to define our future and lives autonomously - it gives us meaning, a sense of achievement, and identity. Career decisions, the decisions to study and work (or both simultaneously and in combination) throughout a person's life, are typically decisions in which we can make big mistakes and face several negative consequences. Although most career decisions in modern societies are reversible, they always come at a cost that the decision-maker cannot always afford. The more closed the structure of a society is and the higher the costs of correcting career decisions (in terms of time, money, and time of supporters, the more the decision-maker is burdened by the weight of the decision. Sociologically, there are lifestyle issues behind career decisions. It is what gives the psychological weight to career decisions. Lifestyle is a system of activities undertaken to meet needs. As a topic of relevance to this article, it includes work and other factors such as culture, social life, and consumption. The central sociological concepts of the differentiation of society are lifestyle, Education, and social and occupational prestige, in addition to lifestyle. In general, we make decisions about all these when making career choices. All these sociological variables must be understood by the person making the career decision and the career counselor. Interpreting and thus shedding light on the content of the normal anxiety behind career decisions. As the stakes of career decisions increase, the pressure to perform increases, and early selection intensifies, modern concepts such as educational anxiety emerge, referring to the different forms and degrees of anxiety experienced by educational participants in educational activities. Educational participants can be divided into parents, teachers, and students. Educational anxiety refers to the nervousness, restlessness, anxiety, worry, panic, and other emotions experienced by parents in the process of educating their children and the uncertainty caused by educational outcomes, which parents experience in the academic performance of their children, employment, and life prospects, as well as excessive panic about their children's test scores, learning attitudes and learning progress, (Chen & Oubibi & Liang & Zhou, 2022). During a career transition, the same pressures can persist and even be! An *extreme case* is the performance pressure known in Japan as karoshi, or sudden death from work. The choice between security vs. uncertainty can be a different kind of pressure. For example, someone considering a career change in their forties often struggles with the idea of a fresh start, as opposed to remaining dissatisfied with their job for the sake of financial security. The decision framework has also been prominent in the theoretical literature on career guidance. We call these schools decision theorists. Tiedeman (1984) saw life decisions and career decisions as integrally related. A *career decision* is an interconnected process consisting of two phases: anticipation or choice of occupation and implementation or adjustment (career correction) (Szilágyi, 2005). Tiedman emphasized the importance of the decision structure. He further decomposed the pre-selection phase as follows: a) Exploration stage: the person primarily collects ideas and considers several alternative options; b) crystallization stage: after taking stock of the options, the person evaluates them and establishes a preference order; c) Choice stage: based on the stabilized order, he/she selects the alternative that seems appropriate; d) Specification stage: once committed to the chosen alternative, it uses more and more information to confirm to itself that its choice is the right one and takes action. Gati (1986) defines occupational and career choice as a special case of decision-making under uncertainty, aiming to achieve an optimal choice between alternatives, i.e., solving a multi-criterion decision-making problem (MCDM). Decision uncertainty can be

considered as the lack of clear preferences or knowledge due to the lack of mental clarity of the decision maker, which may result in uncertainty of future outcomes. Thus, he identifies four main decision-making challenges (this is the basis of his later developed self-assessment questionnaire, the CDDQ: Career Decision Making Difficulties Questionnaire, Gati, Krausz, & Osipow, 1996) • Lack of knowledge of a preference model that can be used by the career decision maker • Lack of resources (e.g., time and money) to gather the necessary information. • Limitations of the decision-maker in processing information. • Lack of a framework for making the right decision. Disciplines and career decisions In addition to the literature on counseling, other disciplines are constantly influenced by it and are also constantly concerned with the role of decision. Indeed, counseling itself, and within its career counseling, can be seen as an interdisciplinary field that, in developing its theories and practical frameworks, has absorbed and continues to absorb the problem formulations of other fields, including dilemmas and solutions to decision-making. The table below (No. 2) shows how decision dilemmas are perceived by each discipline, from philosophy to counseling and then to career counseling.

TABLE 2: Areas of expertise: Role and purpose of the decision

Disciplines	Decision dilemma and outcome
Philosophy	unquantifiable dilemma / "good life", "good decision"
Economics	human values can be quantified /utility, value utility, optimum, risk, probability
Psychology	individual perception and motivation help to navigate the dilemma by resolving the emotional and sometimes existential elements that prevent the client from making a decision (McCue,2020)
Sociology	lifestyle, social mobility, closed vs. open society issues
Mathematics	economic (e.g. profit/loss calculation) non-economic (e.g. attitude-based) / set of possible alternatives, taking into account that each choice has consequences
Law	law in the most general sense is a rule of conduct, a norm in the system of relations between state and citizen, citizen and citizen, a dispositive provision that provides a choice
Organization and Management Science	supporting management decision-making within an organisational framework. Management science distinguishes between strategy/management/operational decision levels
Counselling	capacity building leading to a decision process facilitation aims to increase the learning capacity of the advice seeker as a system so that they can solve their problems (Schein 1999)
Career Guidance	positive future (career) vision, career choice, career adaptation, career correction support decision making, the ability to change, coping with problems, and competent, independent career or life development are the goals of counselling (Kissné Viszket &Mogyórosy, 2019)

data availability statement

The author confirms that the data supporting the findings of this study are available within the article.

Areas of expertise: Role and purpose of the decision (see attachment) Labour economics is interested in individuals' and firms' choices when looking for work in an imperfect market. "Economic job search theory assumes that individuals have imperfect information about jobs and wages. Finding an acceptable job takes time, and individuals must make decisions about their job search behavior." (van den Berg et al., 2014). Who adapts, and at what cost? In technical terms, where is the reservation wage of the worker/jobseeker? "The reservation wage establishes the link between unemployment and wages. The reservation wage represents the wage level at which the benefits of accepting or rejecting a job offer are equal. The higher the unemployment rate, the longer it takes to find the next job offer,

other factors being equal." (Köllő & Kertesi, 1998). Sociological literature emphasizes the dominance of socially structured paths, while policymaking assumes of individual freedom of choice. In the 1990s, British sociologists developed a three-factor model of career choice based on Bourdieu's model of inequalities in the British education system. These factors are a) pragmatically rational decision making, which is in the habitus of the person making the decision; b) interactions with others in the (youth training) field, which are related to the unequal resources held by the different 'actors'; and c) the location of decisions in the partly unpredictable pattern of turning points and routines that make up the life course (Hodkinson & Sparkes, 1997). In sociological terms, therefore, career choice covers the choice between socially bound time (work) and leisure. In addition to individual preferences, the choice of learning paths leading to occupations depends mainly on the permeability of structural and institutional frameworks and the accessibility of social mobility paths. The sociological and legal worlds are also linked by Durkheim's theory of the social division of labor (2001), where changes in the division of labor give rise to new organic solidarity. "Diffuse social functions" have come to the fore, contractual relations have spread, and with them, the law of "cooperation" is developing to the detriment of penal sanctions. The result is a new type of integration, organic solidarity." (Somlai, 2009). However, the development of individual autonomy, i.e., freedom of choice, is contradictory. The development of the world of (wage) labor is essentially associated with strengthening contractual obligations. In sociological terms, socially bound time is increasing. Therefore, From our subject's point of view, there are no decision alternatives for the individual. The theory of law assumes that law can only fulfill its mediating function if it has socially legitimate, historically fixed decision-making patterns. Varga put it this way; "to fulfill its mediating function, it must be embodied in an objectified form, unfolding its particularities, i.e., the representation of law in written norm structures, its formulation as predetermined decision patterns, requires both equality of rights, legal certainty, predictability of the outcome of conflict resolution, and so on." (Varga 1999, p. 93).

Conclusion

Counselors, like the average career counselor and career planner, cannot and should not be trained in multiple disciplines. However, it is essential to ask how much awareness we have of the professional knowledge other disciplines offer to career counseling when dealing with a counseling case or making our own career decisions. It is also clear that it is not possible, nor should it be, to keep the training and daily practice of career counselors within any of the disciplines mentioned above, thereby accumulating perceived losses in support of (career) decisions that neither the professional nor the individual involved in the career decision can later account for. For the counselor, but also the person making the career decision, it is worthwhile to understand the concept of socially bound time, the functioning of social systems that regulate its possibilities from the outside, to which Super already strongly alludes in his rainbow model, but which is made dominant by systems and constructivist theories of career counseling. It may be a worthwhile counseling exercise to think through one's career, not only in terms of their temporal components but also in terms of the individual disciplines, to think through with the counselor.

References

- Barnett, R. (2000). University Knowledge in an Age of Supercomplexity. *Higher Education*,
- Bassot, B. (2012). Career Learning and Development: A Social Constructivist Model for the Twenty-First Century. *International Journal of Educational and Vocational Guidance*, 12(1) 31–42.
- Berg, van Den & Gerard J., & Arne Uhlendorff, (2014). Economic Job Search and Decision-Making Models, in Ute-Christine Klehe, and Edwin van Hooft (Eds), The Oxford Handbook of Job Loss and Job Search, *Oxford Library of Psychology* (2018; Online Edn, Oxford Academic, URL: Https://Doi.Org/10.1093/Oxfordhb/9780199764921.013.021.
- Blustein, D. L. (2006). *The Psychology of Working: A New Perspective for Career Development, Counseling, and Public Policy*. Lawrence Erlbaum Associates Publishers.

- Business Bliss Consultants FZE. (2018). *The consultant's Responsibility Is to Facilitate Client Decisions*. URL: Https://Nursinganswers.Net/Essays/the-Consultants-Responsibility-to-Facilitate-Client-Decisions-Nursing-Essay.Php?Vref=1.
- Castel, Robert (1996). A bérmunka társadalma. (The wagework Society) in *A szociális kérdés alakváltozásai.* Max Weber Alapítvány, Budapest URL: Http://Www.Esely.Org/Kiadvanyok/1996_3/Abermunkatarsadalma.pdf.
- Cinelli, M. & De Francisci Morales, G. & Galeazzi, A & Starini, M. (2021). The Echo Chamber Effect on Social Media. *PNAS* Vol. 118. No. 9. Pp. 1-8 Https://Doi.Org/10.1073/Pnas.2023301118.
- Charpentier, C. J. & De Neve, J. & Li, X. & Rosier, J. P. & Sharot, T. (2016). Models of affective decision making: How do feelings predict choice? *Psychological Science*, 27(6), 763-775. https://journals.sagepub.com/doi/10.1177/0956797616634654
- Chen G. & Oubibi M. & Liang A. & Zhou Y. (2022). Parents' Educational Anxiety Under the "Double Reduction" Policy Based on the Family and Students' Factors. *Psychology Research and Behavior Management*. 2022 Aug 10; 15: 2067-2082. https://doi.org/10.2147/PRBM.S370339. PMID: 35983019; PMCID: PMC9379115
- Durheim, E (2001). *A társadalmi munkamegosztásról*. (The Division of Labour in Society) Osiris. Budapest.
- Gati, I. (1986). Making career decisions: A sequential elimination approach. *Journal of Counseling Psychology*, 33(4), 408.
- Gati I. & Krausz, M. & Osipow, S. H. (1996). A taxonomy of difficulties in career decision-making. *Journal of Counseling Psychology*, 43, 510-526. doi:10.1037//0022-0167.43.4.51 https://psycnet.apa.org/buy/1996-00490-018
- Gati, I. & Kulcsár, V. (2021). Making better career decisions: From challenges to opportunities, *Journal of Vocational Behavior*, Volume 126, 2021, 103545, ISSN 0001-8791, https://doi.org/10.1016/j.jvb.2021.103545
- Farkas Zoltán (2006). A racionális cselekvés, a társadalmi cselekvés és kölcsönhatása. (Rational action, social action, and its interaction) *Társadalomelméletek 5*. Miskolci Egyetem. URL: https://mek.oszk.hu/03900/03944/html
- Kissné Viszket Mónika & Mogyorósy Zsuzsanna (2019). A pszichológiai tanácsadás szakmai alapprotokollja 2017–2018. (Basic Protocol for Psychological Counselling 2017-2018) ELTE Eötvös Kiadó. Budapest URL: https://www.eltereader.hu/media/2019/06/Kissne_Viszket_Pszich_tanacsadas_WEB.pdf
- Knechte, Colleen (2020). Leveraging an interdisciplinary approach to succeed in a shifting job market. Canadian Education and Research Institute for Counselling (CERIC) URL: https://ceric.ca/2020/10/leveraging-an-interdisciplinary-approach-to-succeed-in-a-shifting-job-market/
- Kovács Judit (2014). *Döntéspszichológiai laborgyakorlatok*. (Decision psychology laboratory exercises) Didakt. Debrecen ISBN: 978-615-5212-21-5 URL: https://psycho.unideb.hu/munkatarsak/kovacs_judit/kiadvany/dontespszichologiai_laborgyakorlatok.pdf
- Kertesi Gábor & Köllő János (1998). Regionális munkanélküliség és bérek az átmenet éveiben. (Regional unemployment and wages in the transition years.) *Közgazdasági Szemle* XLV. évf., 1998. július–augusztus (621–652. o.) URL: https://www.epa.hu/00000/00017/00040/pdf/kertesikollo.pdf
- Lent, R. W. & Brown, S. D. (2020). Career decision making, fast and slow: Toward an integrative model of intervention for sustainable career choice, *Journal of Vocational Behavior*, Volume 120, 2020, 103448, ISSN 0001-8791, https://doi.org/10.1016/j.jvb.2020.103448
- Restás Ágoston (2012). *A tűzoltásvezetők kényszerhelyzeti döntéshozatala*. (Emergency decision making by fire chiefs.) Corvinus Egyetem PhD. Értekezés URL: http://phd.lib.uni-corvinus.hu/677/1/Restas_Agoston_dhu.pdf

- McCue, J. (2020). Decisions, decisions: Psychologists helping with life's choices. *InPsych* Vol.42. Issue 4. Australian Psychological Association URL: https://psychology.org.au/for-members/publications/inpsych/2020/aug-sept-issue-4/decisions,-decisions
- Deming (2021). *The Growing importance of decision-making on the job*. National Bureau of Economic Research Cambridge URL: https://www.nber.org/system/files/working_papers/w28733/w28733.pdf
- Hall, D. T. & Moss, J. E. (1998). The new protean career contract: Helping organizations and employees to adapt. *Organizational Dynamics*. 26, 22-37. https://doi.org/10.1016/S0090-2616(98)90012-2
- Hodkinson, Phil & Andrew C. Sparkes (1997). Careership. A Sociological Theory of Career Decision Making. *British Journal of Sociology of Education*, vol. 18, no. 1, pp. 29–44. JSTOR, URL: https://www.jstor.org/stable/1393076
- Köllő János (2011). *Munkagazdaságtan* (Labour Economics) ELTE TÁTK & ELTE Közgazdaságtani TSz. & MTA KTI & Balassi Kiadó URL: https://docplayer.hu/116499112-Munkagazdasagtan-keszitette-kollo-janos-szakmai-felelos-kollo-janos-januar.html
- Kekki, M. (2022). Student-Initiated Discussion Topics in Career Counselling of Adult Immigrants. *Nordic Journal of Migration Research*, 12(2), 206–222. DOI: DOI: 10.33134/njmr.413
- Meadows, D & Randers, J. & Meadows, D (2013). *The Limits to Growth.* The 30-years update. Chelsea Green Publishing Co.
- Johnson, R. O. (1968). The development of an interdisciplinary approach to vocational guidance. New York University, Ed.D., *Education, guidance and counseling* URL: https://www.proquest.com/openview/4357c278033b6423a8f63f0c226f8db8/1?pq-origsite=gscholar&cbl=18750&diss=y
- Parsons, F. (1909). *Choosing a vocation*. Houghton, Mifflin and Company.
- Patton, W. & McMahon, M. (2006). The Systems Theory Framework Of Career Development And Counseling: Connecting Theory And Practice. *International Journal for the Advancement of Counselling* 28(2): 153–166. URL: https://eprints.qut.edu.au/2621/1/2621_1.pdf
- Savickas M.L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. Career Dev. Q. 1997; 45: 247–259. https://doi.org/10.1002/j.2161-0045.1997.tb00469.x
- Somlai P. & Surányi B. & Tardos R. & Vásárhelyi M. (szerk.) (2009). *„Látás-viszonyok. Tanulmányok Angelusz Róbert 70. születésnapjára*". (Visual restraints. Studies for the 70th birthday of Róbert Angelusz".) Budapest, 2009, Pallas Kiadó. 99 - 116. URL: https://www.fszek.hu/szociologia/somlai/somlai_peter_tarsadalmi_integraciotol.pdf
- Standing, G. (2012). Prekariátus: Lakosokból állampolgárok. (Precariat: from residents to citizens) *Fordulat*, 19. szám, 2012/3.
- Super, D. (1957). *Psychology of Careers*. New York: Harper & Row
- Super D.E. & Knasel, E.G. (1981). Career development in adulthood: Some theoretical problems and a possible solution. Br. J. Guid. Couns. 9:194–201. https://doi.org/10.1080/03069888108258214 .
- Szilágyi Klára (2005). *A fiatalok és felnőttek pályaorientációs és karrierépítési készségeinek szintje, fejlesztésének lehetőségei* (The level of career guidance and career development skills of young people and adults and how to develop them). Nemzeti Felnőttképzési Intézet. Budapest URL: https://konyvtar.nive.hu/files/12szilagyi.pdf
- Székely Csaba (2020). A döntéshozatal új megközelítései (New approaches to decision-making) in Lencsés-Pataki (szerk.) *Menedzsment válaszok a XXI. század gazdasági és társadalmi kihívásaira*. Inform Kiadó. Budapest 11-25 old. URL: https://www.google.com/search?client=firefox-b-d&q=http%3A%2F%2Freal.mtak.hu%2F127951%2F1%2Fmenedzsment_valaszok_fejezet-1-1.pdf DOI https://doi.org/10.18515/dBEM.M2020.n01.ch01
- Schultheiss, Donna E. Palladino & Pennington, Deneen (2009). Problems with and Needs for Interdisciplinary Interactions in Vocational Guidance. *Career Development Quarterly*, v57 n4 p319-326 Jun 2009

- Schein, E.H. (1999). *Process Consultation Revisited: Building the Helping Relationship*. Addison-Wesley, Reading, MA.
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, 16(3), 282–298.
- Super, D. E. (1992). Toward a comprehensive theory of career development. In D. H. Montross & S. J. Shinkman (Eds.), *Career development: Theory and practice. Springfield*, IL: Charles C Thomas.
- Tiedeman, D. V. & Miller-Tiedeman, A. L. (1984). Career decision making: An individualistic perspective. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development: Applying contemporary theories to practice* (pp. 281-310). San Francisco: Jossey-Bass.
- Varga Csaba (1999). *A jog társadalomelmélete felé*. (Towards a social theory of law) Pázmány Péter Katolikus Egyetem. Budapest URL: https://mek.oszk.hu/15300/15303/15303.pdf.

Dóra CZIRFUSZ & Sándor LÉNÁRD

Students' perception of labor market success in vocational education and training[1]

The purpose of the study

Throughout Europe, a defining goal when organizing vocational education and training is to support a successful transition to the labor market (Cedefop, 2020). However, there needs to be a unified position to interpret and evaluate success. A review of the scientific literature reveals a multitude of frameworks for defining success. In a philosophical approach, scientific assessments of success can differentiate between accomplishments attributable to underlying talent and those solely attributable to luck (Greco, 2009). A social science approach examines a person's success from the community's point of view, based on which success is interpreted as a multidimensional phenomenon embedded in culture, the judgment of which can only be determined about other community members (Romney et al., 1979). According to the definition of success proposed by Seligman (2002), a pioneer in positive psychology, success manifests itself in positive emotions and attitudes, which means our satisfaction with our current situation and our abilities. In this study, we take the latter approach primarily as a basis when discussing the nature of success. The interpretation of success depends on the context, which refers to the circumstances of achieving success and the fact that success can have multiple manifestations (Uusiautti, 2013). Our research deals with a smaller slice of success, the perception of professional success. Veroszta (2010) stated in his study examining the labor market career of graduates that there can be many interpretations of success, so the factors influencing success interpreted in different approaches will also be different. This study uses the terms labor market success and professional success as synonyms. The main question of our research is how students in vocational education and training think about professional success and how it relates to their work experience and parental background. The research clarifies how vocational students define professional success. It reveals a surprising disconnect between objective factors (e.g., salary) and subjective factors (e.g., enjoyment) in their perception of success.

Research examining the perception of students' labor market success is paramount, particularly considering the pervasive skill mismatch issue highlighted by Cedefop's introduction of the concept of skill mismatch (Cedefop, 2015). This substantial skills gap is evident in the fact that 45% of European workers are currently employed in positions that do not align with their skills (Cedefop, 2015). VET programs have the potential to play a pivotal role in bridging this skills gap by equipping students with the specific skills required for the labor market. Investigating students' perceptions of success is crucial to understanding their expectations in the labor market and, therefore, addressing this mismatch. The research's relevance is further underscored by the finding that parental social status concerns can deter their children from pursuing vocational education (Abrassart & Wolter, 2020). Examining student perceptions can offer valuable insights into potential biases, thereby enhancing strategies to effectively promote the role of VET in achieving successful careers. In conclusion, studying students' perception of labor market success in VET is a timely topic with significant implications for education policy, workforce development, and social mobility.

Theoretical frameworks for researching success in the labor market

The assessment of success in the labor market is an interdisciplinary field of research. Based on the literature, social psychology can find its questions in just as much as economics, sociology, or even education. The approach to the concept of work itself has been and continues to be shaped by social

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and economic changes (Pahl, 1980). In line with this, individuals' work-related values and attitudes also show a shift.

Success in the labor market is generally defined as an individual's hierarchical advancement in his occupation (Bass, 1981, cited in Gattiker & Larwood, 1986). Previous research typically examined the phenomenon using objective and subjective approaches. While in the case of objective success, clearly definable factors such as salary or promotion usually appear, subjective success includes the employee's experience, attitudes, and feelings (Heslin, 2005). When examining work-related attitudes and success, it is essential to point out that these concepts – especially when judging subjective success – may differ from society to society and culture. Based on Ipsos' 2020 global research, the importance of work in people's lives varies (Ipsos, 2020): according to the results, in most countries, the proportion of those who consider work necessary in their lives is over 90%, while in Germany (79%) and the Netherlands (81%), the proportion of those who agree with this is lower. The standards of working conditions also differ from country to country; in Turkey and Chile, 50-60% of employees work more than 48 hours a week, while in EU member states, only 15% are involved (Eurofound & ILO, 2019). Someone for whom overtime is part of everyday life will experience job satisfaction differently than someone with different work expectations. Accordingly, success experienced in work may also differ in individual countries.

Heslin (2005) prepared a comprehensive literature summary on the topic of success in the labor market and found that in the research history, easily measurable outcome indicators were mainly used to describe success (e.g., salary and promotion), while subjective factors with a smaller amount of research history have only appeared in surveys in recent decades, which can best be captured in the degree of satisfaction with work and career. One of the limitations of objective indicators is that they are influenced by factors independent of the individual, so they are less suitable for capturing the essential dimension of success (Campbell et al., 1970, cited by Heslin, 2005). These indicators are influenced by external factors such as the structure of the given society, the tax system, or even the status and prestige of certain occupations (Hollenbeck et al., 2003, cited by Heslin, 2005). In the history of research aimed at the relationship between career and success, the combined examination of objective and subjective factors dominated over time. When measuring subjective success, Heslin (2005) highlights that the level of job satisfaction alone is insufficient to describe the dimension of success. Knowing the perception of success is also crucial to show the degree of an individual's prosperity and relationship to his work.

Regarding the relationship between objective and subjective success, the results show that while 20-40% of the respondents proved to be highly successful based on the various objective indicators, half of the sample felt that they were successful in their career based on the subjective, self-reported scale (Friedman & Greenhaus, 2000). Heslin (2005) reached the same conclusion in his study: objective and subjective success do not necessarily go together. It is advisable to examine the two approaches together to reduce distortions arising from social conditions and individual (subjective) judgment.

Research Background on the Study of Labor Market Success

The concept of success in the labor market appeared in scientific works in the early 1900s. Hoyt (1965) refers to a 1917 result, which examined the success of young people who graduated from college, where a pre-selected jury of alumni members determined who was considered successful among the graduates. Although Hoyt did not consider this study to be reliable from a methodological point of view, it may still be the first scientific work that dealt with the concept of work and success in some way. In the 1930s, several studies were conducted on the topic of successful employment, which primarily used the level of salary as a measure of success in an objective approach (Heslin, 2005). Hughes (1937) refers to Karl Mannheim's 1930 paper, according to which a successful career can only be achieved by filling official positions, or by advancing through the ranks. A few years later, Dewey (1941) already writes that an integral part of the general satisfaction with life is the enjoyment of the work we do, which represents a clear shift from the concept previously examined with the most objective standards, and he also emphasizes the importance of abilities and interests in connection

with success on the labor market. Dewey found that in addition to school performance and test scores, interest, motivation, and reliability can predict a successful career. He also wrote about the importance of choosing a career, choosing a profession that matches your abilities and interests to achieve later success. He found that the measure of income alone cannot describe the concept of success and drew attention to the different natures of different occupations. In his literature review, Hoyt (1965) objected to the same about previous research, indicating that regional and scientific differences make it difficult to judge success by income.

Among the research antecedents, we find studies that interpret labor market success as a complex phenomenon. Thorndike (1963) used both objective and subjective indicators to measure success, and he also considered the nature of different occupations, which he tried to capture with expert coding. In addition to income, the indicators of success included self-reported success, job satisfaction, and horizontal and vertical mobility. A 1964 study (Price et al., 1964) measured medical excellence by nearly 200 different factors, including scientific excellence, time spent with patients, and amount of professional training. However, this study looked at a very different aspect of success and focused primarily on performance-based excellence. Hoyt's (1965) conclusion, based on the antecedents he processed, is that school results only moderately determine success in adulthood and that there is a great need to clarify and conceptualize concepts in this area. Gattiker and Larwood (1986) attempted to describe the concept of success with five factors. Factors such as a network of relationships, income, position in the organization, type of work and general satisfaction were considered. Another measurement tool used by many is the scale developed by Greenhaus et al. (1990), in which they try to grasp the concept of success about the goals set and the successes achieved. According to his research, successful careers can be achieved by those who are committed to their work, work hard, have authority in their workplace, perform tasks that help them develop the skills they need for their work, and pay a lot of attention to building relationships both inside and outside the workplace.

Research Methodology

The central question of our research is how students in vocational education and training think about professional success and how it relates to their work experience and family background. This study utilizes a secondary analysis of the National Office for Vocational Education and Training and Adult Learning (NSZFH) 's 2022/23 Graduate Tracking Survey. The survey was designed to understand why students choose vocational education, their satisfaction with the training, and their aspirations after graduation. Data collection occurred online through a self-administered questionnaire distributed via the central educational system between April and May 2023. This Analysis focuses on the responses of 10,097 final-year vocational students. The Vocational Education Information System provided the sampling frame. We employed a convenience sample with a high coverage rate to reach as many final-year students as possible. While the questionnaire was available to all students, completion relied on individual willingness to respond, resulting in a 16% response rate. It may introduce some limitations in the generalizability of the findings to the entire population. We compared the sample demographics (gender, age, school type, training type, and sector) to national data on vocational students and found them representative.[2]

Three hypotheses were formulated in line with the research question:

- H1: Objective factors are more important than subjective factors in determining vocational education students' perceptions of professional success.

This hypothesis is based on the assumption that objective factors, particularly financial security (high salary), play a more prominent role in students' perceptions of success compared to subjective factors like work satisfaction. It aligns with previous research identifying financial

[2] The methodological description was guided by the "Methodology" chapter of the National Report on Graduate Tracking Report prepared by the National Office for Vocational Education and Training (NSZFH, 2023). https://www.nive.hu/Downloads/palyakovetes/DL.php?f=Orszagos_riport_a_szakkepzesben_tanulok_palyakoveteserol.pdf (Downloaded: 2024.04.12.)

factors as a critical determinant of overall job and life satisfaction (Kiss, 2011; Hajdu & Hajdu, 2014; Virág, 2023).

- H2: Students with prior work experience through dual training programs will emphasize subjective success factors more than those without such experience.

This hypothesis stems from the notion that practical work experience might heighten students' value for enjoying their work and witnessing its impact. Exposure to the realities of the workplace could shift their focus from solely objective factors to subjective aspects of work satisfaction (Mortimer & Lorenzo, 1979; Hofmnan et al., 2021).

- H3: Students with at least one parent holding a higher education degree will attribute greater importance to subjective success factors, while objective factors are more important for students with lower parental education.

This hypothesis is based on the potential influence of parental education on students' perceptions of success, as former studies reported a significant effect of social background on student's perception of employment (Sallay, 2003; Czirfusz & Lénárd, 2023). It suggests that students from families with higher education backgrounds might emphasize intrinsic factors like work satisfaction and personal fulfillment more than those from families without such exposure.

Considering the findings of Hesling's (2005) previous studies, a five-point Likert scale was constructed to measure both objective and subjective success factors among respondents. The main question was formulated: What makes you feel successful at work?

- Applying what I learned in school. This factor emphasizes the importance of work relevance to one's education.
- Making much money. This factor highlights the significance of financial compensation.
- Seeing the impact of my work. This factor focuses on the tangible outcomes of one's work.
- Receiving recognition and praise at work. This factor underscores the value of external validation and appreciation.
- Having a flexible schedule. This factor emphasizes autonomy and control over one's work hours.
- Enjoying what I do. This factor focuses on the satisfaction and fulfillment derived from work.
- Being better at my job than my coworkers. This factor highlights competitiveness and the desire to excel.
- Having time for friends and leisure outside of work. This factor emphasizes work-life balance and personal well-being as an objective dimension.
- Knowing that I can advance to a better position in the future. This factor focuses on career aspirations and growth potential.

Subjective and objective factors were identified by confirmatory factor analysis, followed by hypothesis testing. Due to the large sample size, the effect sizes associated with them were also calculated.

Results

This section delves into how vocational education students conceptualize professional success and how it relates to their work experience and social background.

The nature of objective and subjective factors

Employing confirmatory factor analysis[3] , the study revealed a clear distinction between objective and subjective interpretations of success based on student responses. In this sample, RMSEA=0.07 indicates an acceptable fit (Fabrigar et.al., 1999), while CFI=0.98 and TLI=0.96 indices a good fit (Bentler, 1990). This suggests that students perceive success through two distinct lenses.

[3] Analysis was conducted using the JASP Lavaan package with an ML estimator.

Employing fit indices, the following three items were eliminated from the initial nine-item survey:

- Applying what I learned in school.
- Having a flexible schedule.
- Being better at my job than my coworkers.

The removal of these items was guided by statistical Analysis, which indicated their misfit within the established conceptual framework of success perception among vocational education students.

Table 1. Descriptive statistics and factor loadings for items of 'What makes you feel successful at work?' (N=10097)

	Minimum	Maximum	Mean	Std. Deviation	Factor Loadings*
Applying what I learned in school.	1	5	3.12	1.314	*na***
Making a lot of money.	1	5	4.08	1.060	.667
Seeing the impact of my work.	1	5	4.40	.900	.339
Receiving recognition and praise at work.	1	5	4.27	.984	.430
Having a flexible schedule.	1	5	4.07	1.014	*na***
Enjoying what I do.	1	5	4.55	.834	.389
Being better at my job than my coworkers.	1	5	3.55	1.217	*na***
Having time for friends and leisure outside of work	1	5	4.31	.967	.530
Knowing that I can advance to a better position in the future	1	5	4.12	1.043	.469

* All factor loadings shown are significant (p<.001).
**Items were excluded from CFA.

Students placed the greatest importance on factors related to enjoying what they do (M = 4.55), followed closely by financial security (M = 4.08) and having a job with a good work-life balance (M = 4.07).

The objective dimension of success encompasses factors students prioritize, reflected in an average factor score of 2.31 (SD = 0.45). These factors include:

- Making a lot of money.
- Having time for friends and leisure outside of work.
- Knowing that I can advance to a better position in the future.

These three objective success items were analyzed with Cronbach's alpha, yielding a coefficient of α=0.70. This value indicates an acceptable level of internal consistency among the items.

The subjective dimension of success, with an average factor score of 1.69 (SD = 0.30), highlights factors students value intrinsically. These include:

- Seeing the impact of my work.
- Receiving recognition and praise at work.
- Enjoying what I do.

Like the objective success items, the remaining three subjective success items were also analyzed with Cronbach's alpha. This analysis yielded a coefficient of α=0.82, which indicates a high level of internal consistency among the items.

The analysis of these six items revealed the multifaceted nature of professional success for vocational education students, highlighting the interplay of objective and subjective factors. The results of reliability analysis also suggest that they measure two separate underlying constructs (objective and subjective success) effectively.

Prioritization of objective success

Based on the comparison of the two types of success indicators, the role of statements related to objective success (M=2.31, SD=0.45) is statistically more significant compared to subjective elements

(M=1.69, SD =0.30), (t(10096)=178.90, p<0.001). The effect size, as measured by Cohen's d, was d=1.78, 95% CI [1.75, 1.81], indicating a large effect according to Cohen's (1988) benchmarks. This implies that financial security, career advancement, and work-life balance are more important considerations for students than subjective factors like work satisfaction. Based on the t-test, the first hypothesis was supported.

Work experience and professional success

Interestingly, the study found no significant difference in how students perceive objective success based on participation in dual training programs (work-integrated learning) compared to traditional programs. The analysis of objective success did not reveal a statistically significant difference between students with and without prior work experience in dual education (t(10095) = 0.09, p=0.272). This suggests that prior work experience may not have a significant impact on students' perceptions of objective success factors like financial security, career advancement, and work-life balance. The calculated effect size, Cohen's d, was d=0.02.

T-test revealed a statistically significant difference between the means of subjective success scores for students with and without prior work experience (t(10095) = -3.77, p<0.001). However, the calculated effect size (d=0.08, CI 95% [0.04, 0.12]), suggests a very small difference between the two groups according to Cohen's (1988) benchmarks. While there's a statistically significant difference, the magnitude of the effect is minimal. It's important to consider the practical implications of this finding. Despite the statistically significant result, the small effect size suggests that there's a minimal practical difference in subjective success scores between students with and without prior work experience. Based on the results, the second hypothesis was supported, although there's a minimal difference between the two groups.

Parental background and success perception

Students with at least one parent holding a higher education degree attributed greater importance to subjective success factors (t(10095)=-2.59, p=0.005). This finding suggests a potential link between parental education and the emphasis placed on intrinsic work satisfaction. However, the effect size, Cohen's d (d = 0.064, CI 95% [0.02, 0.11]), is considered a small effect. This suggests that while a link exists, the magnitude of the difference in emphasis on subjective success factors between the two groups is relatively weak.

Notably, no significant difference was found in the way these students perceive objective success factors (t(10095)=-1.88, p=0.059, d=0.05).

The hypothesis predicted differences in subjective factors, and the results showed a statistically significant association (although weak) with parental education. The lack of a significant difference prevents us from confirming or rejecting the hypothesis about objective factors.

In conclusion, these findings highlight the multifaceted nature of professional success for students in vocational education. While objective factors like financial security and advancement are prioritized, this study also suggests potential nuances in subjective perceptions based on work experience and parental background.

Summary

This study investigated how vocational education students perceive professional success and how it relates to their work experience and social background.

Key findings of the study reveal that students distinguish between objective and subjective success factors. Objective factors (financial security, career advancement, work-life balance) are considered more important than subjective factors (work satisfaction, recognition). Students with prior work experience through dual training programs value subjective success factors more. Furthermore, students with at least one parent holding a higher education degree attribute greater importance to subjective success factors. Although significant results were obtained, the effect was small in terms of prior work experience and parental background.

The findings underscore the multifaceted nature of success in vocational education, emphasizing the need to prepare students for a holistic understanding of professional achievement. While financial security and career advancement remain paramount, vocational programs can be further enriched by emphasizing work satisfaction and intrinsic motivation.

Bridging the gap between research and practice

These research findings go beyond theoretical understanding and offer practical curriculum development and career counseling guidance. Vocational programs can equip students with the necessary knowledge and tools by translating research into actionable strategies. This empowers them to navigate the complexities of a successful career, which encompasses financial security and personal fulfillment.

A key strategy is cultivating vocational self-awareness among students. It can be achieved through integrating financial literacy and career planning modules into the curriculum. Resources and workshops on financial management and budgeting can also help students internalize their vision of a successful work transition.

Furthermore, it is crucial to emphasize employee well-being during school classes, dual training, and career counseling programs. It promotes a healthy work-life balance across different career paths, ultimately supporting students in achieving objective success factors.

Teachers and career counselors play a vital role by guiding students in exploring their suitability for various professions. By considering their interests, skills, and values, educators empower individuals to pursue fulfilling and meaningful career trajectories leading to job market success.

Promoting mental health and stress management resources for students transitioning to work fosters a conscious start with a deeper understanding of career success. It is essential to highlight that a perfect work-life balance is only sometimes achievable. There will be times when work demands more attention. However, helping students learn to manage priorities, set boundaries, and seek support when needed will ultimately lead to greater self-awareness for career success.

Limitations and further research opportunities

While valuable for its insights into student perceptions through quantitative data, the present study has limitations. The structured nature of this data may miss the subtleties and complexities of how students define success. Additionally, the research is specific to the Hungarian social and cultural landscape. Romney et al. (1979) highlight the cultural context of success, suggesting that these findings may not translate directly to other countries.

Future research can address these limitations by using mixed-methods approaches. As qualitative data sources, in-depth interviews or focus groups can provide a richer understanding of student perceptions. This can reveal how these perceptions translate into job choices and career satisfaction.

A comprehensive understanding of success is crucial to effectively examining the school-to-work transition. As research suggests, success has multiple interpretations. Therefore, when exploring success rates in this transition, future studies should consider and address this multifaceted nature.

References

- Abrassart, A. & Wolter, S. C. (2020). Investigating the image deficit of vocational education and training: Occupational prestige ranking depending on the educational requirements and the skill content of occupations. *Journal of European Social Policy*, 30(2), 225-240. https://doi.org/10.1177/0958928719855298
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238–246. https://doi.org/10.1037/0033-2909.107.2.238
- Cedefop. (2015). *Skills, qualifications, and jobs in the EU: Making a perfect match? Evidence from Cedefop's European skills and jobs survey.* Luxembourg: Publications Office. Cedefop reference series; No 103. http://dx.doi.org/10.2801/606129

- Cedefop. (2020). *Vocational education and training in Europe, 1995-2035: Scenarios for European vocational education and training in the 21st century.* Luxembourg: Publications Office. Cedefop reference series.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Czirfusz, D. & Lénárd, S. (2023). A szakképzésben tanulók képzés utáni jövőképe. *Opus et Educatio*, 10(1).
- Dewey, S. B. (1941) The Prediction of Vocational Success, *Proceedings of the Iowa Academy of Science*, 48(1), 399-405.
- Eurofound and International Labor Organization. (2019). *Working conditions in a global perspective.* Publications Office of the European Union, Luxembourg, and International Labor Organization, Geneva.
- Fabrigar, L. R. & Wegener, D. T. & MacCallum, R. C. & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272–299. https://doi.org/10.1037/1082-989X.4.3.272
- Friedman, S. D. & Greenhaus, J. H. (2000). *Work and family--allies or enemies? What happens when business professionals confront life choices?* Oxford University Press, USA.
- Gattiker, U. E. & Larwood, L. (1986). Subjective career success: A study of managers and support personnel. *Journal of business and psychology*, 78-94.
- Greco, J. (2009). Knowledge and success from ability. *Philosophical Studies*, 142, 17-26.
- Greenhaus, J. H. & Parasuraman, S. & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, 33(1), 64-86.
- Hajdu, G. & Hajdu T. (2014). Szubjektív munkajellemzők és munkával való elégedettség Európában. Socio.Hu *Társadalomtudományi Szemle*, 4(4), 87–119.
- Heslin, P. A. (2005). Conceptualizing and evaluating career success. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 26(2), 113-136.
- Hofmann, C. & Häfeli, K. & Müller, X. & Krauss, A. (2021). Transition from low-threshold vocational education and training to work in Switzerland: Factors influencing objective and subjective career success. *International Journal for vocational education and training research,* 8(2), 136-159.
- Hoyt, D. P. (1965). The Relationship between College Grades and Adult Achievement. *A Review of the Literature.*
- Hughes, E. C. (1937). Institutional office and the person. *American Journal of Sociology*, 43, 404–413.
- Ipsos. (2020). *Global attitudes toward work and employment* [Publication]. https://www.ipsos.com/sites/default/files/ct/publication/documents/2020-04/global_attitudes_toward_work_and_employment_-_rapport_complet.pdf (Downloaded: 2024. 04. 11.)
- Kiss, P. (2011). Pályakezdők munkával való elégedettségének meghatározói. Garai Orsolya és Veroszta Zsuzsanna (szerk.), *Frissdiplomások*, 265-286.
- Mortimer, J. T., & Lorence, J. (1979). Work experience and occupational value socialization: A longitudinal study. *American Journal of Sociology*, 84(6), 1361-1385.
- Pahl, R. E. (1980). Employment, work, and the domestic division of labor. *International Journal of Urban and Regional Research*, 4, 1-20. https://doi.org/10.1111/j.1468-2427.1980.tb00349.x
- Price, P. B. & Taylor, C. W. & Richards Jr, J. M. & Jacobsen, T. L. (1964). Measurement of physician performance. *Academic Medicine*, 39(2), 203-211.
- Romney, A. K. & Smith, T. & Freeman, H. E. & Kagan, J. & Klein, R. E. (1979). Concepts of success and failure. *Social Science Research*, 8(4), 302-326.
- Sallay, H. (2003). A szülői nevelés hatása serdülők jövő-orientációjának alakulásának. *Magyar Pedagógia*, 103(3), 389-404.

- Seligman M.E.P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York: Free Press.
- Thorndike, R. L. (1963). The prediction of vocational success. *Vocational Guidance Quarterly*, 11(3), 179–187. https://doi.org/10.1002/j.2164-585X.1963.tb00007.x
- Uusiautti, S. (2013) 'On the positive connection between success and happiness.' *International Journal of Research Studies in Psychology*, 3(1), pp. 1–11
- Veroszta, Zs. (2010). A munkaerőpiaci sikeresség dimenziói friss diplomások körében. In O. Garai, T. Horváth, L. Kiss, L. Szép, & Zs. Veroszta (Eds.), Diplomás pályakövetés IV. – *Frissdiplomások* 2010 (pp. 9-36). Budapest: Educatio Társadalmi Szolgáltató Nonprofit Kft.
- Virág, I. (2023). A bér szerepe a megtartásban. *Új Munkaügyi Szemle*, 4(1), 2-22.

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How can adult learning support digitalization?

Introduction

Adult learning tools are very diverse and can support digitization in various methodologies. In many people, adult learning is associated exclusively with courses where adults sit in groups and expand their knowledge and skills. Over the last few decades, adult learning methodologies have evolved and changed significantly. Digital techniques and technologies, methodological innovations, and changes in the needs of the corporate sector have added a large number of practical elements to adult education (Barizsné Hadházi & Polónyi, 2003; Kriszt, 2017; Szelei & Malatyinszki, 2020; Kovács, 2023). Digital transformation has become inevitable at both the retail and corporate levels. In the field of corporate governance, with the introduction of digital process tracking and control systems, remote access, and online interfaces, managers - if they want to remain managers and not followers - must be at the forefront of technological developments (Bencsik, 2021; Dióssy et al., 2023; Gyimesi &Fejes, (2023). On the population side, it is helpful to examine which digital competencies are necessary for employees to be able and capable of performing their work efficiently and to carry out their daily administration and activities without wasting time, information, and money (Szűcs et al., 2023; Szőke-Milinte, 2023; Juhász et al., 2021).

I will start my research with a mainly secondary source analysis, investigating the interfaces between digitization, digitalization, robotization, adult learning, and business processes. In my primary research, I will synthesize the tools and opportunities for digitization from the corporate and then the retail sides, including the cooperation and synergies between the two areas.

Conceptual background and environment

Digitalization is an elusive concept for many. It understands that phones and computers are constantly changing, and they accept that they now have to manage a process through software, but it is not easy to explain why this is happening. Digital transformation is 'building on the capabilities of breakthrough, readily available technologies to develop unique and integrated organizational capabilities that make an organization receptive to continuous environmental change' (Ross et al., 2017). Digitalization means the digitization of content, processes, and objects that were previously physical or analog concepts. Digital transformation is at a higher level, as it is a commitment to transform how an organization works fundamentally. Transformation is not about a company investing in a new technology or developing and incorporating it. Digital transformation transforms value creation (Csedő et al., 2019).

If a company wants to digitize its processes, it can target several levels. The first level is to move away from paper documents and capture them digitally, with the advantage of searchability and more secure storage (digitization). The second level is the digital mapping and tracking of processes, which allows for process optimization, an example of which is the Order-to-Cash process. The third level can come after the first two levels have been achieved - this is the automation or robotization of processes. At this level, the human factor is replaced by algorithms to process structured data sets. Robotic Process Automation (RPA) can now perform more complex tasks with uncertain outcomes. In the next step, software robots can work in the usual user interface of IT applications, mimicking workers. It is possible, for example, that a software robot processes invoices after full automation (sorting, processing, accounting). The fifth level is the application of learning systems. These systems already use artificial intelligence and have the potential for continuous improvement and the ability to prepare decisions and make forecasts (Marcziniak et al., 2020).

Changing market needs and the spread of new generations of consumers and online channels also require new customer experiences. The change in the processes of organizations (digitization, digitalization, and digital switchover) naturally brings a change in organizational culture. Only some people are enthusiastic that a previously analog process (e.g., moving a paper-based satisfaction survey to an online space) is being done and provoking resistance from many employees, even if we look at municipalities, negatively affecting the customer experience (KPMG 2020). Identifying stakeholders and assessing needs is a critical element of digital strategy making, and it is also advisable to 'evolve' the organizational culture along with digital development. Resistance is often based on fear of the unknown and lack of knowledge. In 2019, it was predicted that by 2022, around 75 million jobs will be lost worldwide due to digitalization. Digitalization will not only eliminate jobs but also create jobs; it will create jobs and could create 130 million jobs in those three years. The simpler an occupation, the easier it is to define, and the more likely it is that it can be automated and robotized. According to Magyar Telekom's deputy CEO for human resources, "If you can say in one sentence what you do at work, in two or three years, your job will be taken over by a robot." (Wiederman, 2019) Looking at the flip side, many of us would not be sad to see the automatisms and manual parts of our jobs taken over by robots because it would give us time to create, be creative, and think constructively.

The importance and impact of corporate digitalization

The importance of enterprise digitalization means a fundamental transformation of the business environment through the widespread adoption and integration of digital technologies. This process has become a key factor for companies' competitiveness and sustainable development. Some important aspects to highlight about the importance of enterprise digitalization are:

- Increasing efficiency: The introduction and use of digital technologies enable companies to operate more efficiently, reduce administrative burdens, and optimize processes. For example, automation and robotization enable monotonous tasks to be automated, allowing employees to spend more time on strategic and creative activities.
- Fostering innovation: Digital technologies create opportunities to develop new products and services and innovate business models. Extensive data analysis and data mining can help companies understand their customer's needs and behavior in detail so they can create innovative solutions that better meet customer expectations.
- Increase competitiveness: Enterprise digitalization enables companies to respond faster to change and adapt more flexibly to changes in the business environment. Companies that adapt quickly and efficiently to digital technologies and new business models can gain a competitive advantage in markets.
- Improving the customer experience. Through online platforms, intelligent tools, and data analytics, companies can understand their customers' needs and behaviors in detail and offer them personalized offers and content.
- Sustainable development: Business digitalization is an opportunity for companies to adopt more sustainable and greener business practices. Through smart devices and IoT, companies can monitor and manage energy consumption and other resources more efficiently, reducing their ecological footprint and positively impacting the environment.

These are just a few examples of why digitalization in the enterprise is essential and beneficial. Companies must understand and recognize digitalization's opportunities and proactively take steps toward digital transformation. Enterprise digitalization is not only a temporary trend but a permanent change to which companies must respond continuously to remain competitive in global markets.

Developing the digital skills of businesses

Understanding and implementing the basic steps in the journey toward enterprise digitalization is important. The first step is for the company's management to recognize digitalization's importance and benefits and commit to digital transformation. Next, the company needs to develop a comprehensive digital strategy, including selecting and implementing digital technologies and tools and developing digital skills for employees. The next step is to implement digital technologies and tools. Enterprise digitalization involves using various digital technologies and tools to help companies operate more efficiently and effectively. These include data analytics and big data, artificial intelligence and machine learning, automation and robotization, smart devices and the Internet of Things (IoT), and cloud services and online platforms.

In the following, the authors will explain some of the elements of online learning platforms that companies can (also) use to develop the digital skills of their employees:

- Coursera: Coursera is an online learning platform that offers various courses on different subjects, including digital skills. Academics and industry professionals teach courses here, often including practical exercises and project-based learning opportunities.
- Udemy: Udemy is another popular online learning platform offering various digital skills development courses. Udemy courses are constantly updated and expanded and often include practical project-based assignments.
- LinkedIn Learning. The courses here often include interactive videos, practical exercises, and learning communities.
- edX: edX is a non-profit online learning platform created by leading universities and companies. Courses available on edX are high-quality and wide-ranging and often include opportunities to collaborate with tutors and peers.

In addition to online courses and training, virtual reality (VR) and augmented reality (AR) applications can be tools. VR and AR applications enable interactive and lifelike learning, such as through VR simulations of vehicle repair. It allows employees to practice in a realistic environment without real risks. Online interactive tools and platforms allow for live or asynchronous communication and collaboration, such as video conferencing, document sharing, and cloud-based collaboration tools. Online simulations and games allow employees to learn new skills and knowledge interactively. For example, a financial simulation game can help employees understand the basics of financial planning and analysis. Adaptive learning systems can adapt to the needs and pace of individual learners, for example, through personalized guidance and learning pathways. It allows for a more efficient learning process and better results.

Some examples of adaptive learning platforms:

Duolingo: Duolingo is a language learning application that adaptively adjusts learning content and exercises to each user's level and achievements. The system takes into account users' strengths and weaknesses and provides them with personalized advice to improve.

Smart Sparrow. The app analyses student responses and behaviors and then dynamically adjusts content and assignments to suit learners' needs and levels.

ALEKS (Assessment and Learning in Knowledge Spaces). The application analyses students' knowledge and skills and then offers them personalized learning pathways based on their strengths and weaknesses.

Cerego: Cerego uses interactive flashcards and repetition algorithms to facilitate optimal learning. The app considers student responses and memory performance and then dynamically adjusts learning content and exercises to suit each student's needs and skills.

The importance of employee digitalization

The digital skills and needs of the population, both as users and employees, significantly impact the development of digitalization. The ability to be receptive, the need for acceptance, and the ability to learn to determine the level and extent to which digitalization can spread. It affects the development and quality of jobs. Think of how cashiers' jobs have been transformed by people's acceptance of automated tills in retail or how the introduction of debit cards, phone payment systems, and apps has transformed banking. In the Hungarian National Bank, 661 employees were made redundant in 2023 following the successful introduction of an investment app (Papp, 2023).

Digitalization is constantly becoming part of people's lives. Some cases of atypical employment can help to adapt work activities to workers' lifestyles and living conditions. Part-time work is suitable for working alongside people with disabilities and young children and is also a good way of gradually returning to work. The possibility of teleworking reduces the time and cost of transport and creates cost-effective employment for the employer. Self-employment also offers opportunities to pursue work activities that fit with private life. The above flexible working arrangements can be implemented within an appropriate legal framework and with the employer's support. Non-working activities can occur in the employee's home, off-site, or even in a community office (coworking). Off-site locations can provide privacy and privacy from co-workers. The most common jobs in teleworking are software development and testing, IT networking, data-related jobs, engineering, creative professions (animation, graphics, photography), writing, translation, data entry, management and assistant jobs, customer service, sales, marketing, accounting, bookkeeping and HR (CodeBerry, 2020). However, working from home cannot be done without the conscious use of time and resources. Rarely is a separate soundproof room with the right digital equipment for each family member. Our previous research on teachers' lives forced to work online also showed that the following shortcomings were experienced in the home office: technical equipment (50.2%), methodological preparedness (54.7%), and time management (49.5%). In this specific case, employees acquired the majority of the tools. For many workers working from home, it is not easy to reconcile with family life. Of the nearly 300 respondents to this survey, 37.3% said it is difficult to teach from home, 46.8% can teach well but have challenges, and only 15.9% were satisfied (Malatyinszki, 2020). Working from home also requires a high level of awareness. Given the proper awareness, scheduling, location, and technical conditions, working from home can make work more homelike and be a cost-cutting option for employers. It should not be neglected, however, that excessive home working is detrimental to family life and work if the personality and habitus are not right. In addition to harmful amounts of computer games and internet use, it can reduce family cohesion and quality time together and make life one-sided. Let us not forget that work, as well as being a means of value creation, self-fulfillment, and income generation, is also a means of living family life in a quality way.

Digitalization is a significant factor in the lives of the general population in terms of their finances. Considerable research has been conducted on financial awareness (Yamauchi & Templer, 1982; Zsótér et al., 2015; Németh et al., 2016; Kálmán et al., 2021; Tóth, 2022) and confirmed that the educational environment of children, parental role models, parents' saving, buying, and spending habits have a significant impact on the awareness of the growing generation. The tools, adult education methods, training, and awareness-raising programs all help to reduce future borrowing mistakes and support a solid financial foundation. Adult education and intergenerational cooperation are of paramount importance in the process of rapid digitalization. Each age group has specific financial processes that tools can help with. These include online cheque payments, transfers, borrowing, investing, card transactions, shopping, and registering for events. For the generations living together (intergenerational), it is helpful to identify the financial operations that determine their lives and where they get stuck. At the same time, plan when and how the other party can help. It may be that a grandmother can help a grandchild with less knowledge of borrowing or the real estate market process to report and pay meters for public service. By collaborating and planning together, family communities can work more quickly and efficiently online and reduce vulnerability. It is also possible to teach specific processes related to a particular tool or software to our parents or grandparents, who

will then engage themselves - considering themselves useful - in the joyful digitalization processes. With centralized education and no external constraints, working together can help to reduce costs and learn to make cashless, fast financial transactions.

Workers and employers work together to encourage digitalization

Digitalization can only be achieved with the evolution and transformation of organizational culture. Conscious employer decisions can significantly shape and change this organizational culture (Orosz, 2012). To support digitalization, employees need skills, abilities, and skills that they can rely on and that can be used to acquire new tools and implement new production and service processes. Today, employers can only do with the introduction of home working, especially in intellectual jobs. Not only is there the threat of a virus crisis, but employees expect to be at work only when they need to be, even during working hours, to deal with professional, methodological, and other matters. Thus, maintaining work-life balance requires managers to develop and learn motivational, delegation, and control leadership competencies that support the individual's need for self-fulfillment while simultaneously achieving corporate goals. The transformation of work can only be achieved by developing the digital environment of companies. The development of CRM and ERP systems and secure access to data on corporate servers or cloud storage has become essential.

The supplier and logistics systems that can make production efficient are now based on company-to-company data flows, where manual activity is not necessary (in a good way). The same applies to accounting systems, bookkeeping, invoicing, and cooperation with government offices. Isolated operational systems and printing and sending data to any authority are a thing of the past. The question is how far a person who did not have a prominent role in IT during their training can develop in this area. Can they absorb the knowledge that IPAR 4.0 has produced or that Generation Z has absorbed from the classroom or networking? The leadership role is still unquestioned. Can you put together teams that learn from each other? Can you engage adult learning companies that deliver hardware, software, training, and organizational development together? Does management even recognize the need for this? These questions are fundamental to market-based operations in the 21st century.

Summary

The cooperation between man and machine is about more than just serving machines. The entrepreneurial sector, the learning of managers and employees, must undergo a qualitative evolution where AI can bring real qualitative improvement. It can solve problems that can save hundreds or thousands of person-hours per month and make production processes and value chains more efficient. It is critical to recognize what task we give it and whether we allow it to make processes more valuable or faster. Are we brave enough to ask our colleagues questions about your processes and give suggestions on what work to replace? What activities do you not like to do? Tell us which jobs you would like to do! Working in an atmosphere of honest trust helps to bring problems to the surface, and the promotion of knowledge (whether organizational or outsourced) is a new quality brought about by the achievements of digitalization. It is no coincidence that the Kaizen principle in Japanese organizational culture constantly questions the efficiency of processes and the perfection of methods.

It requires an entirely different management perspective. Questioning the superiority of people and even managers and the need for a continuous relationship and cooperation between machines, software, and workers. As technology in different sectors in different countries becomes more and more efficient monthly, monitoring, adapting, and incorporating good practices, changes, and innovations have become inevitable. Suppose the digital environment and its achievements are not reflected in the production or service sectors. In that case, businesses in the Far East with a different working culture and attitude - which have so far only made copies - will overtake their European competitors. They will show up in product and service development, raw material use, inefficient

production, and logistics, They will come to us, and we will copy their processes, which AI may already develop. Suppose we want to be at the forefront of change. In that case, we need to support market-driven change every minute, foster an innovation environment, develop individual, production, and service levels in our businesses, and provide an organizational environment where change and development are financial, moral, and individual career opportunities. If this utopia becomes a reality, we will at least have the tools to enable humans, machines, and AI to 'work' together towards a happier future of sustainable development.

Bibliography

- Balázsné Hadházi, E. & Polónyi, I. (2003). A hazai felnőttképzés jellemzői. *Competition 2(1):* 36-55. 10.21845/comp/2003/1/4
- Bencsik, A. (2021). Vezetői felkészültség felmérése a digitális kor kihívásaira. Nemzetközi összehasonlítás. *Vezetéstudomány/Budapest Management Review 52(4)*: 93-108, 10.14267/VEZTUD.2021.04.08
- CodeBerry (2020). A 15 leggyakoribb otthonról végezhető munka 2020-ban, https://codeberryschool.com/blog/hu/15-otthonrol-vegezheto-munka/ (Last download: 14/01/2022).
- Csedő, Z. & Zavarkó, M. & Sára, Z. (2019): Innováció-e a digitalizáció? A digitalis transzformáció és az innovációmenedzsment tanulságai egy pénzügyi szolgáltatónál, *Vezetéstudomány, I. évf. 7-8.*, DOI:10.14267/veztud. https://unipub.lib.uni-corvinus.hu/4141/ 2019.07.08
- Dióssy, K. & Losonci, D. & Demeter, K. (2023). Vezetési stílusok hatása a digitális transzformációra. *Vezetéstudomány/Budapest Management Review, 54(10):*2-14, 10.14267/VEZTUD.2023.10.01
- Gyimesi Á. & Fejes B. (2023). A digitális transzformáció vállalati adaptációját irányító tényezők hatásmechanizmusának koncepciója a hazai KKV-k percepciói alapján. *Marketing & Menedzsment 57(3):*36-46, 10.15170/MM.2023.57.03.04
- Juhász, T.; Horváth, A. ; Kálmán, B.; Tóth, A. (2021). Digital Competence in the Visegrád Countries. In: Langhamrová, Jitka (eds.) *Reproduction of Human Capital – Mutual Links and Connections* (RELIK 2021): Conference Proceedings of the 14th International Scientific Conference RELIK, Praha, Prága, Czech Republic: Vysoká škola ekonomická v Praze (2021) 934 p. pp. 308-320.
- Kálmán, Botond; Bárczi, Judit; Zéman, Zoltán. The Impact of the First Wave of Covid-19 on the Financial Security of Economics Students in Higher Education, *Pénzügyi Szemle/Public Finance Quarterly (1963-) 2021*: 3pp. 1-22., 22p. (2021)
- Kovács, M. (2023). A felnőttképzés stratégiai megújításáról. *Világpolitika és Közgazdaságtan 2(2):* 86-88, 10.14267/VILPOL2023.02.14
- *KPMG: Digitalizáció* – https://home.kpmg/hu/hu/home/industries/fogyasztoi-piacok/digital-transformation.html, (Last download: 04/01/2022)
- Kriszt, S. E. (2017). A felnőttképzés szerepe és megvalósulása hazánkban, különösen a gazdaságtudományi képzési területen. *Felsőoktatás, Életen át tartó tanulás és az ENSZ Fenntartható Fejlesztési Célok megvalósítása - Higher Education, Lifelong Learning and Implementation of UN Sustainable Development Goals,* BudapestVolume
- Malatyinszki, Sz. (2020): *Experiencing Digital Education*, EasyChair Preprint, https://easychair.org/publications/preprint_download/GtvW, (Last download: 14/ 01/2022)
- Marcziniak R. & Móricz P. & Baksa M. (2020): Lépések a kognitív automatizáció felé – digitalis átalakulás egy magyarországi üzleti szolgáltatóközpontban, *Vezetéstudomány, LI. 6.*, https://doi.org/10.14267/VEZTUD.2020.06.05
- Németh, E. & Béres D. & Huzdik, K. & Zsótér, B. (2016): Financial personality types in Hungary – research methods and results. *Financial and Economic Review, Vol. 15, No. 2,* 153–172. http://real.mtak.hu/37887/1/erzsebet_nemeth_daniel_beres_katalin_huzdik_boglarka_zsoter_en_u.pdf (Last download: 2/07/2021)

- Orosz, L. (2012). *A szervezeti kultúra fejlesztése és alakítása,* Közigazgatási Vezetői Akadémia, https://tudasportal.uni-nke.hu/xmlui/bitstream/handle/20.500.12944/100195/49.pdf?sequence=1&isAllowed=y, (Last download: 20/04/2024)
- Papp, Zs. (2023). Saját ígéretét cáfolja az Orbán-kormány, több mint 2600 fős létszámleépítést rendelt el a közigazgatásban, Refuting its own promise, the Orbán government has ordered more than 2,600 redundancies in the public administration, *Népszava,* 2023. 06. 09. https://nepszava.hu/3197734_kozigazgatas-tomeges-elbocsatas-allashelyek (Last download: 09/06/2023)
- Sebastian, I. M. & Ross, J. W. & Beath, C. & Mocker, M. & Moloney, K. G. & Fonstad, N. O. (2017). How Big Old Companies Navigate Digital Transformation. *MIS Quarterly Executive, 16(3),* 197–214
- Szelei, A. & Malatyinszki, Sz. (2020). A felnőttképzés értékei napjainkban. In: Malatyinszki, Sz. (2021). *Térségfejlesztés és emberi erőforrás – A neveléstudomány társadalmi metszetei.* Gondolat. 76-88.
- Szőke-Milinte, E. (2023). A digitális énhatékonyság. *Mester és Tanítvány 1(1)*:53-71, 10.61178/MT. (Last download: 13/01/2023)
- Szűcs, Z. & Lengyelné Molnár, T. & Racsko, R. (2023). A társadalmi szakadék csökkentését szolgáló digitális kompetencia stratégiai körképe, *Civil Szemle, 6:*67-77
- Tóth, A. & Juhász, T. & Kálmán, B. (2022). Determining factors of Motivational Dimensions (Childhood et al. Competition Attitudes) *ACTA POLYTECHNICA HUNGARICA 19: 4*,. 229-250.
- Wiedemann, T. (2019). A digitalizáció miatt teljesen átalakul a munkaerőpiac, de már most sem mindegy, hogy mit írsz az önéletrajzodba, Digitalisation is transforming the job market, but it already matters what you put on your CV, G7, https://g7.hu/fizetett-hirdetes/20190322/a-digitalizacio-miatt-teljesen-atalakul-a-munkaeropiac-de-mar-most-sem-mindegy-hogy-mit-irsz-az-oneletrajzodba, (Last download: 04/01/2022)
- Yamauchi, K. T. & Templer, D. J. (1982): The Development of a Money Attitude Scale. *Journal of Personality Assessment, Vol. 46, No. 5,* 522–528. https://doi.org/10.1207/s15327752jpa4605_14
- Zsőtér, B. & Béres, D. & Németh, E. (2015): Magyar fiatalok jellemzése pénzügyi attitűdjeik és magatartásuk mentén. *Vezetéstudomány, Vol. 46, No. 6*,. 70–80. http://unipub.lib.uni-corvinus.hu/1981/1/vt2015.

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Professional debates within the international History Didactics

Introduction

In the time span of mid-2020 to late 2023, the author of the present study was personally present at four major conferences devoted entirely or partially to history didactics. Namely it was: the Graz Conference in November 2020; the Budapest Conference in April 2021; the Luzern Conference in September 2021; and the Luzern Conference is September 2023. (See the author's reports in Vajda, 2023a and Vajda, 2023b.) Thus the author is in an unique position to summarize approximately 180 professional scientific lectures, presentations, and workshops, which all had very wide international character through active participants from five continents.

Material and Methods

Present study analyses the content of the most recent major scientific conferences in history didactics. It analyses conference presentations and key speeches given by prominent scholars who represent renowned academic centres in the international field of history didactics, like K. Benziger, A. Chapman, Á. F. Dárdai, S. Doussot, A. Eckert, N. Fink, M. Furrer, P. Gautschi, A. Gyertyánfy, S. Lévesque, J. Kaposi, L. Kojanitz, A. Körber, K. van Nieuwhuyse, S. Popp, J. Rüsen, J. Wojdon, and others. The study evaluates the content of these presentations, especially as far as their strategic aim was set; as well as it analyses the oral and written debate during and after the presentations, including live chats, comments, and formal Question and Answer sessions.

- As to the methods, the summary and evaluation of the content of these recent major scientific conferences is supported by recent scholarly literature on history didactics. And thirdly, the analysis of the above mentioned sources takes place in this study in accordance with the following three leading aspects:
- What kind of scientific and educational trends have influenced history didactics in the recent years (2020 – 2023)?
- Which are the most important issues and problems concerning international history didactics?
- What kind of trends can be predicted in the accounts of the participants regarding teaching and researching history didactics?

Result

We will sum up the results of the evaluation of the content of recent major scientific conferences in history didactics in three paragraphs.

Debates over general problems

A signficant number of lectures during the examined time period dealt with general problems. These are such professional issues that history teachers have been constantly and persistently facing with in the last decades. These general problems include:

- the structural place and time frame devoted to history as a school subject within national curriculums (see more on this at Furrer et al., 2020 and Fink et. al., 2023);
- so called "most recent challenges", including the impact of the social media on historical culture and education as well as "environmental issues";
- the possible ways of state indoctrination through history teaching, including the fear from the over-reaching state domination over history teaching (see Á.F. Dárdai & Kaposi, 2021).

We can see a certain trend here, i.e. there is an anusual number of very serious issues ahead of us that make school history teaching very challenging nowadays. Conference participants at Graz, Budapest, and Luzern seemed to have some kind of consensus, even if not full agreement, on several issues. For instance, nobody questioned the need that history teaching should have or is expected to have some relevance that is related to life outside the school. Many lecturers shared the view that dealing with "burning issues" in classrooms during history lessons, such as autocratic ways of government or forms of dictatorship, is very important. History didacticians also agree that "debates over political systems never take place in an ideological vacuum", i. e. European societies have become rather complex in the last decades. The social context of history teaching has changed dramatically in comparision with the situation 30-40 years ago. This kind of "social impact on society" was expressed from various aspects in a series of lectures, among others by Sabrina Moisan (Université de Sherbrooke) and Paul Zanazanian in their presentation on *Teaching history at university: oscillations between social, critical, professional or civic functions*, or by Paul Zanazanian (McGill University, Canada) who spoke about *Historical Consciousness and Self-Reflexivity: Some Thoughts Regarding "Why History Education?"* Some lectures concluded that history didactics as a science knows very little on the social impact of school history teaching. One of the specific forms how history is having an impact on society can be seen on the social media platforms where history, or individual opinions and feelings that are related to history, are reflected, mirrored, or exaggerated almost without any control. Carefully prepared historical edutainment videos circulate along with massively shared false historical beliefs on the social media platforms. Joanna Wojdon (University of Wroclaw, Poland) focused her attention on *Teachers' beliefs on history education seen through the lenses of social media*; Susanne Popp (University of Augsburg) and Dennis Röder (Stade, Germany) explored popular *Youtube videos on school history topics*; and Helyom Viana Telles (Instituto Federal Baiano, Brazil) had a lecture on *Ludification of culture, playable pasts and historical education - notes on the cultural relevance of video games for learning history*. No question therefore that history didactics as a science should care about the social impact of school history teaching, and should initiate much more research on this field.

An other general problem that several lectures focused on was the threats that history teaching has been facing for the last decades. From these threats, experts consider specificly one very dangerous, and that is the massive decrease in time-frames devoted to history in European national curriculums. The issue of the "integration" of history into larger groups of school subjects was specified as a dangerous process.

> *This decrease of time devoted to history in European national curriculums is regarded by some as a life-threatening process that may potentially lead to liquidation of history as a school subject. Yet, the process has already started and led to significant reduction in numbers of history lessons per week throughout Europe.*

This seemingly unstoppable process was the main theme of Elisabeth Erdmann's lecture (Universität Erlangen-Nürnberg, Germany) *History as an independent subject or in a subject network?*; also of Urte Kocka's lecture (Freie Universität Berlin, Germany) *Historical Consciousness and Change*, and also of Andrea Brait's lecture (University of Innsbruck, Austria) on *Teaching History in Subject Combinations – The Example of Austria*. We have been witnessing the process in countries like France, where history is taught along with geography, or in Slovakia where history has long been integrated into a group of school subjects called "People and society" along with geography and civic education. On the contrary, Hungary is an exemption in Europe and it seems to be a sole country where there is a rather extensive time frame dedicated to school history (appr. 2 or 3 lessons per week on lower secondary level) and with a compulsory school leaving examination (in Hungarian: érettségi) at the end of the upper secondary level (Kojanitz, 2021).

To make the situation even more complex, history teaching in Europe may lose ground due to some covert goals. Is some cases projects aiming at "integrating" history with other school subjects, such as civic education, are explained by "noble social goals". The argument goes that history should be merged into "civic education" because it is a "socially sensitive" discipline (whatever this mean) (Kaposi, 2020). Rosa Cabecinha (University of Minho, Portugal) gave participants in Graz a very recent

example, how this integration of history with civic education was done in Portugal. It might not seem obvious for the first glimpse, but the reduction of history lessons in schools, or their merging into larger school subject units, is linked not only with the appearance of "new challenges", but it is triggered by with "rival canons" and some brand new school subjects that are often introduced to the school system at the cost of history. The description of this process was at the bottom of the lectures by several scholars, such as: Karel Van Nieuwenhuyse (University of Leuven, Belgium) *History education in Flanders: a battlefield of contradictory expectations, competing identities, and rival canons*; Anu Raudsepp (University of Tartu, Estonia) *Training students to instruct pupil's historical researches in school - perspective for intercultural understanding as example of Estonia*; Karel Haav (Tallinn University of Technology, Estonia) *A social theoretical framework for integration of history and social studies*; Aimilia Salvanou (Hellenic Open University, Greece) *Memory cultures and historical education: A challenging relationship*; Joris Van Doorsselaere (Ghent University, Belgium) *Teaching history using heritage in Flanders. Tensions between an imposed top-down model and a bottom-up participative process*; Heidi Eskelund Knudsen (University College Lillebaelt, Denmark) *Grounds for literacy in Danish history education? Interpretations of disciplinary concepts in curricular documents*; Johanna Norppa (University of Helsinki, Finland) *Teacher students' choices in the dissonance of curricula and teaching traditions and others*.

Debates over narrativity

Beyond general problems, the most often cited and debated topic at all recent international conferences on history didactics was the issue of "historical narration". Having been following the related scholarly literature in the last decades (Gautschi et. al, 2012; Gyertyánfy, 2021; Körber, 2011; Rüsen, 2006), no one could be surprised at the conferences to having heard at least three interrelated and yet quite divergent interpretations of "historical narration".

The first interpretation on narration was given by Thomas Sandkühler. The speaker himself was well aware that even though the concept of narrativity is widespread among historians and history didacticians, it still has certain relations hiding in the shades.

> *What exactly is a good history narrative?, T. Sandkühler asked in Graz. "History is explained by or through narratives", he concluded. In other words, "past" is equal to "narratives about the past", which equals to "history", at least in the eyes of the public.*

To which Jörg van Norden (University of Bielefeld, Germany) added his more elaborated definition:

> *"Historical narration is the senseful connection of present, future and past, struggling with current problems."*

When describing that "history is explained by and through narratives", T. Sandkühler rightly mentioned the importance of a "narrative competence" and "tangible references to linguistic actions", referring to students' linguistic abilities that are inevitable for any successful narration. As Jörg van Norden put it on the Chat Wall: "Aren't reading, analysing, and interpeting sources means for developing narrative competencies?" T. Sandkühler finished his lecture with his opinion that "today the demand for historical narrative is extremely high". We can agree with this, neverteheless, it seems appropriate to add that naturally there are other roads to historical (and any kind of) understanding than verbal explanation – for instance by doing things. In school environment "doing things" can be at least as important as "verbal narration" which leads us back to other well known forms of skills based learning in history.

To the second group of interpretations of "historical narration" belong those who emphasize the discursive character of narration. Debate and discussion = narration. In this sense, "History is primarily about argumentation", as Wulf Kansteiner summed it up. Conferene participants in Graz sinked into an extensive (and almost endless) exchange of views over the existence, legitimity, and impact of "narratives" and "counter-narratives". The participants of the debate raised indeed relevant and genuine questions. For instance, how many narratives are there or can there be on a specific historical event? How many should be present at school history teaching? If limited narratives are supposed to

be present in the classrooms, who is to decide on their legitimacy? Which narratives are more valid than others and on what basis? Many conference participants shared Jörg van Norden's view who said that

> *"I want to teach students to construct narrations which they need to orientate themselves; narratives that have consensual cogency (plausibility)."*

While discussing narrative canons and counter-canons, some participants picked up the issue that in modern school environment there are too many parties involved in education, commencing form authorities, through parents, ending with non-governmental organizations. There are far too many involved actors, "stakeholders", with far too many interests, which prevent schools from reaching consensus on certain historical issues. If there should be a selection among rival historical narratives (many times proposed by different interest-groups which may be hostile to each other) then can be the "winner one narrative" turned into a "forcefully prevailing one"? In other words, where are the boundaries of third party involvements, thus where are the boundaries of potential indoctrination attempts at schools? (See so called Patriotic Educational Laws at severeal countries.)

The last type of interpretation on historical narration was articulated explicitly as "narrative competency". In the understanding of most history didacticians, narrative competency includes specific skills such as finding and reading primary historical sources, analyzing them, speaking and writing about them, etc. (see e.g. Körber, 2011; and Gyertyánfy, 2020.) Many scholars agree that these are fundamental skills or "tools" for researching, dealing, and working with history. Historiography is ab ovo narrative, so anyone dealing with it is expected to ask and speak about it via professional competency at best. A certain level of professional competency is the point where any discussion about historical sonsciousness, historical thinking, or meta-narratives, etc. should be launched from (see Erdmann, 2008; Rüsen, 2006; Lee, 2005; and Kojanitz, 2021). There were a few lectures, both in Luzern and Budapest, confirming this rule. From these lectures, for instance it was the one by Eva Müller (University of Würzburg, Germany) and her *lecture Iconic knowledge as a tool for history education* which demonstrated how important a specific competency or skill in a school can be, through describing the ways and means of working with iconic (pictural) sources. Narration articulated as "narrative competency" is the very point where history didactics is the closest both to the historical research and historiography. Also this is one of the key aspects what founding fathers of history didactics used to emphasize back in the 1960s.

The post-colonial debate

The scientific conferences in Graz, Budapest and Luzern offered world-wide international participation, and included speakers from Chile to Russia, from Japan to South Africa, and from Canada to Australia; so these conferences provided participants with an opportunity to be engaged in a truly global scientific discourse. If there is a historical topic which needs a global discourse, then it is surely the post-colonial debate, more precisely the debate over colonialism as a historical process, and the debate over the impact of colonialism on all parties involved.

The post-colonial debate has been with us for some time now. The International Society for History Didactics organized a special conference on the colonialism already in 2013 (see Jahrbuch/Yearbook/Annales 2014 of International Society for History Didactics, 2014; and Vajda, 2013). More recently, there were several lectures contributing to the post-colonial debate at the conferences within the international community of history didacticians. For instance, Philipp Bernhard's (University of Augsburg, Germany) "*Postcolonial theory as one step towards decolonizing (German) history curricula*", or Karl Benziger's (Rhode Island College) contribution in Budapest "*History Teaching, National Myths, and Civil Society*". Clearly, the post-colonial debate is most lively in Western European countries that were heavily involved in the process. Alice Dutra Balbé's (University of Minho, Portugal) lecture on "*Social representations of colonialism in Mozambique and Portugal*" in Graz argued that the topic of colonialism in schoolbooks is very different when looking on it form Portugal or Mozambique. A. D. Balbé researched the Portugal perception of the Portugeese colonialism in Africa, articulated in 30 history schoolbooks, and it is almost nedless to say that she could not report

on almost any kind of "inclusivity" regarding the harm it had done to those colonised. When asked to elaborate a little deeper on her schoolbook analysis, especially on "deconstruction of canonized narratives" on the Portugeese colonisation, A. D. Balbé stressed the difference in number of pictures between Portugeese and Mozambique textbooks, stating that the didactical function of the pictures in the textbooks of the two compared countries is simply too divergent to compare them. (See more on pictures at Engel & Vajda, 2021) We heard very similar conclusions from Anna Clark (Sidney, Australia) in her lecture on "*Historiography and historical consciousness in settlercolonial societies like Australia: The 1938 Day of Mourning as 'History Making*"; in her description, both the Aboriginal community as well as other ethnic minorities or suppressed social groups in Australia today reject these celebrations as demonstrations of "persuasive national exceptionalism".

There were further lectures on colonialism from Knysna Motumi and Elize van Eeden and Pieter Warnich (North-West University, South Africa) "*Voices from a South African community on why history education matters*"; Johan Wassermann (University of Pretoria, South Africa) on "*Forward to the past – moves towards making School History compulsory*"; Eugène Eloundou and Michael Ndobegang (Cameroon) on "*History Education, History Teaching and Political Power: the Manipulation and Usurpation of History Teaching and Learning in Cameroon Secondary Schools*"; and Shraddha Bhatawadekar (Brandenburg University of Technology, Germany) "*Integrating Heritage Education into Academic Curriculum. Building an Experiential Model for Teaching History in India*". Having heard these lectures and viewpoints, it is quite clear that history teaching in countries such as South Africa, Cameroon or India is socially much more important than teaching it anywhere else in Europe. At certain places of the Globe where history teaching had not been a tradition, history teaching has now become a great social value, and it is starting to have an impact on society.

Post-colonial themes are time to time on agenda in East Central Europe too. Recently, it was Gábor Szabó-Zsoldos's lecture Decolonization trends and aspirations in British history teacher training at a scientific conference titled "Changes in pedagogy - change in pedagogy III" organized by the János Vitéz Teacher Training Center of the Pázmány Péter Catholic University in Esztergom, Hungary in November 2021. Also, there was an online event with contributions on global history and post-colonial history in history education, organized by Susanne Popp and Mare Oja in January 2022. Yet, the postcolonial discourse has not gone further than some research on the presence or lack of colonial topics in history schoolbooks, or on the existence or lack of post-colonial aspects. Both deeper research and deeper debate on this issue, including e.g. violent removal of statues of previously adored historical personalities (see e.g. Lévesque, 2018; Liakos, 2009; Benziger, 2021), has been rare so far in East Central Europe (see e.g. Fodor, 2019) where this theme had not echoed significantly up until the 2000s.

Discussion

If we look at the lectures heard at recent conferences in history didactics, one topic that lacks from the programmes of scientific events is *schoolbook research*. Schoolbook research, which used to be a lucrative and dominant feature of history didactical research some twenty years ago (see e.g. Á. F. Dárdai, 2006), today is only rarely a subject of lectures, workshosps, etc. Judged form the recent conferecnes, empirical research on history schoolbooks is usually limited to one or two schoolbooks (which is not a valid quanty for substantial research), or to some very limited research aspects. There have been some exceptions, like Alice Dutra Balbé's lecture in Graz who did a survey abot the post-colonial content in the Portugal history schoolbooks, or Václav Sixta's lecture (The Institute for the Study of Totalitarian Regimes, Czech Republic) on "*Creating historical textbook: the current challenges*" in Luzern. We can observe a trend that history schoolbooks, and of course schoolbooks in general, have been losing in importance as a consequence of massive digitalization of school education materials (see more on this at Fekete, 2021). Yet, in the majority of European states, printed schoolbooks seem still to dominate. And if this is true then it would be quite important to know more on the changing methodology of

contemporary history schoolbook practice (see e.g. Gautschi et al., 2012; or Kratochvíl, 2019), and some forthcoming projects should focus on discovering more on this theme on European scale.

An other importan question is what are the lessons learnt form the scientific discourse over historical narrativity. First, there is no doubt that vivid, sometimes sharp debate took place over the issue of narrativity at all recent conferences. On the one end of the spectre were those who insisted on the most basic form of narrativity in schools, i.e. that history is simply explained through narratives. On the other end of the spectre were those who insist on the original goals of history didactics as a discipline. The advocates of this latter group argue that any work, be it a historian's field research or a school activity, should be conceptually arranged around "narrative competencies". The point of clash between these two groups is the use of primary sources: while the firs group questions the legitimacy of source-based history teaching, members of the second group insist on keeping school history teaching as close as possible to its cradle: ad *fontes*.

Finally, it is obvious that under the influence of so called "most recent challenges", school history teaching in the 21 century is forced to handle a very diverse list of cognitive tasks and challenges. Probably the most common of them is the mutually intertwined structure of "narratives – multiplicity of narratives – counter narratives", which raise many furthers issues, in fact serious problems that particular schools and history teachers in the schools must look into eye to eye. Of course, one can simplify things as one speaker did when he/she simply asked: "Why do you have to distinguish so many narratives? Isn't there only the *narrative*?" Even if the speaker may have a point, yet, it is a fact that we have been witnessing, at least in Europe, several competitions of historical narratives. Plus, it needs to be added to the complexity of the thought that "normative curriculums", especially curriculums involving very strongly directed narratives, can hinder the development of free historical thinking.

References

- Benziger, K. B. (2021). Történelemtanítás, nemzeti mítosz és civil társadalom. *Történelemtanítás* (LVI.) XII. 2021. 3.
- Engel, E. & Vajda, B. (2021). A képi források és az illusztrációk didaktikai szempontjairól - szlovákiai alapiskolás történelemtankönyvek vizsgálata alapján. *Belvedere Meridionale*, Szeged, XXXIII. 2. 144-162.
- Erdmann, E. (2008). Historical Consciousness – Historical Culture: Two sides of the Same Medal? *History Didactics*., Wochenschau Verlag, pp. 27-38.
- F. Dárdai, Á. (2006). *Történelmi megismerés, történelmi gondolkodás* [Historical Cognition, Historical Thinking]. Pécs ELTE BTK / MTT.
- F. Dárdai, Á. & Kaposi, J. (2021). Changing history teaching in Hungary (1990-2020): Trends, mosaics, patterns. *Hungarian Educational Research Journal*, 42, 79-97.
- Fekete, Á. (2021). Digitális szövegértési képeségek mérése a történelem tantárgy keretén belül az általános iskola 8. évfolyamában. *Történelemtanítás* (LVI.) Új folyam XII. 2021. 3. .
- Fodor, R. (2019). Hintapolitika vagy bűnös csalárdság? Az újgenerációs történelemtankönyvek nézőpontjai. In Szőke-Milinte, E. (ed.), *Pedagógiai mozaikok*. János Vitéz Teacher Training Center of the Pázmány Péter Catholic University in Esztergom.
- Fink, N. & Furrer, M. & Gautschi, P. (eds.) (2023). *Why History Education?* Wochenschau Verlag, Frankfurt am Main.
- Furrer, M. & Gautschi, P. & Fink, N. (eds.) (2020). The teaching of one's country: International experiences in a comparative perspective. *Yesterday and Today*. Wochenschau Verlag, Frankfurt/M.
- Gautschi, P., Bernhardt, M., Mayer, U. (2012): Guter Geschichtsunterricht – Prinzipien. In Barricelli, M., Lücke, M. (Eds.), *Handbuch Praxis des Geschichtsunterrichts* (pp. 326-348). Wochenschau, Schwalbach/Ts.
- Gyertyánfy, A. (2021). Képességek, kompetenciák, történelmi gondolkodás. *Történelemtanítás* (LVI.) Új folyam XII. 2021. 1-2.

- Gyertyánfy, A. (2020). Kompetenciák a történelemtanításban – kritikai megközelítésben. *Történelemtanítás* (LV.) Új folyam XI. 2020.
- M. Wobring & K. Gorbahn & D. Röder & J. Schumann (2013*). Colonialism, decolonization and post-colonial historical perspectives: challenges for history didactics and historical teaching in a globalizing world*. Wochenschau Verlag.
- Kaposi, J. (2020). Issues concerning education for democracy in contemporary Hungary. *International Journal of History Education and Culture*, 41, 219-242.
- Kojanitz, L. (2021). A történelmi gondolkodás fejlesztése. Válogatott tanulmányok. *Belvedere Meridionale*, Szeged.
- Körber, A. (2011). German history didactics: from historical consciousness to historical competencies – and beyond? In Bierg, H., Lenz, C. & Thortensen, E. (Eds.), *Historicizing the Uses of the Past. - Scandinavian Perspectives on History Culture. Historical Consciousness and Didactics of History Related to World War II*. (pp. 145-164). Bielefeld. http://dx.doi.org/10.14361/transcript.9783839413258
- Kratochvíl, V. (2019). *Metafora stromu ako model didaktiky dejpisu k predpokladom výučby*. Vydavateľstvo Raabe.
- Lee, P. (2005). Putting principles into practice: Understanding history. In Donovan, M. S. & Bransford, J. D. (Eds.), *How Students Learn: History in the Classroom* (pp. 85-86). Washington D.C., National Academies Press.
- Lévesque, S. (2018). Removing the "Past": Debates Over Official Sites of Memory. *Public History Weekly*, 6 (29). DOI: 10.1515/phw-2018-12570
- Liakos, A. (2009). History wars – Notes from the field. In *Yearbook of the International Society for the Didactics of History 2008/09* Wochenschau Verlag. 62-63.
- Rüsen, J. (2006). Historical Consciousness: Narrative, Structure, Moral Function, and Ontogenetic Development. In Seixas, P. (Ed.), *Theorizing Historical Consciousness*. Toronto, University of Toronto Press.
- Vajda, B. (2013). A Nemzetközi Történelemdidaktikai Társaság konferenciája a kolonializmusról, 2013. szeptember 16-18. *Történelemtanítás* (XLVIII.) Új folyam IV. 2013/3-4.
- Vajda, B. (2023a). Graz, Budapest, Luzern - Which Way is International History Didactics Currently Heading to? *Hungarian Educational Research Journal* "Trends in History Teaching" Volume 13, Issue 4, December 2023, 594-607.
- Vajda, B. (2023b). Report from the conference "Why History Education? Exams as a Mirror for Teaching and Learning History", September 14–16, 2023, Luzern, Switzerland. *Individual and Society/Človek a spoločnosť*. Issue 2, Year 2023, Volume 26.

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Exploring Academic Mobility Experiences of Russian University Faculty Members

Introduction

Internationalization of higher education (IHE) shapes the worldwide academic context and provides the conceptual grounding for this paper. The internationalization process has been deliberated upon at the national, sectoral, and institutional echelons. It has been conceptualized and defined in many ways, one of the generally accepted definitions describes it as "the integration of an international, intercultural, or global dimension into the purpose, functions or delivery of postsecondary education" (Knight, 2003, p.2). Hence, IHE is present in the holistic system of higher education, but primarily is integrated in the triangle of the core missions of higher education which is teaching, research and community service and is motivated by academic, socio-cultural, political and economic categories of rationales (de Witt, 1998; Hudzik, 2011).

Higher education institutions' internationalization efforts may be grounded in more rationales, such as competitiveness in the globalized markets, wider social engagement, education quality assurance, requirements of labor markets and world demographic trends, and others (OECD, 2008, Zha, 2003). Nevertheless, researchers' views are different in terms of relative importance of these rationales. For instance, while many prioritize the economic dimension and approach to IHE as to a response to globalization in the economic perspective, Marmolejo (2012) argues that the most important motivations for internationalization efforts of tertiary education institutions are, in the order of importance, improvement of student preparedness, internationalization of the curriculum, enhancement of the international profiles of the institutions, strengthening the research and knowledge generation, and diversity of the HEI faculty and staff.

Some definitions of IHE support this complex perspective and integrate more human-related dimensions of IHE, such as enhancement of the quality of research and education for the main university stakeholders that are students and faculty (de Wit, 2015), or prioritize the mobility of students, academic staff and educational programs (Albatch & Knight, 2007; Marginson, 2006). In the recent decade, the nexus and balance between the external direction of IHE, such as academic mobility and internally directed processes, such as internationalization at home are underscored in the literature (Hunter et al., 2022; de Wit, 2020). Hence, domestic internationalization, including internationalization of the curriculum becomes one of the major strategies to raise the quality of education and university competitiveness, but it is also an opportunity to develop intercultural competences of students and staff (Buckner, 2019). From this perspective, IHE can be conceptualized as integrating international and intercultural aspects into the planning, execution, and results of educational programs, with a specific emphasis on the teaching and learning processes (Leask, 2009). This notion also acknowledges students and academic staff as the principal stakeholders in the internationalization process and conceptualizes teaching and learning as an important dimension of inter- and intra-institutional efforts. The important role of individuals in IHE was also emphasized by Altbach and Knight (2007). On a similar note, academic mobility of students and staff as an essential part of internationalization effort of the universities can be defined in multiple ways; most of the definitions of faculty mobility imply relocation to the host institution, mainly abroad, for a variety of activities including teaching, research, engagement in other academic activities and professional development (Hoffman, 2009, Mendoza, 2010). All forms of academic mobility, such as short-term teaching or training visits, sabbaticals, long-term professional visits, or employment in HEIs abroad, are regarded as a valuable contribution to internationalization. These types of mobility maintain and even strengthen the scholarly cooperation among institutions and their units at the macro- and meso-levels of the university ecosystem, but also at the micro-level (cf. Hannah & Lester, 2009; Roxå &

Mårtensson, 2012), since individuals gain international experiences through which they may advance as internationally competent scholars (Altbach & de Witt, 2020; OECD, 2008).

Roxå and Mårtensson (2012) describe the complexity of the university ecosystem by using a multilayer approach that includes micro-, meso- and macro-levels, which is also helpful when we explore the systems where mobility experiences are embedded and the organizational dynamics that support or hinder staff mobility. These three levels are discussed from various perspectives. For instance, Renc-Roe and Roxå (2014) use these to capture global, national and local practices of educational internationalization, whereas others regard the micro-level as individuals, meso as internal social structures and networks, and macro as the whole educational institution and its management (Hannah & Lester, 2009; Simmons, 2020; Dorner & Mårtensson, 2021).

In this paper we will refer to individual faculty members as providing the micro-level perspective, meaning that through their lived experiences we will also inquire into their interaction with other formal structures within the institution. In so doing, we will aim to explore their insights about organizational dynamics that are at the intersection of micro- and meso-levels. Their larger context, namely, the educational institution represents the macro-level, that is, they reflect on it as a system which shapes processes occurring at the micro- and meso-level.

Researchers (Craciun, 2018; Dobbins & Kwiek, 2017; Lannert & Derenyi, 2020; Matei et al., 2018) have studied national policies and university internationalization efforts in Eastern Europe, but research on the Russian context is particularly meagre. Our data had been collected before the Ukraine-Russia conflict, nevertheless, findings may reflect individual faculty members' conceptualizations, which should provide further perspectives to the complex dynamics of internationalization in current times. As strategies of internationalization in Russian higher education were primarily anchored in revenue generation and in the increase of the global competitiveness and visibility through university rankings (Rozhenkova & Rust, 2018), supported by the top-down approach to planning, controlling and governing internationalization in the country (Shenderova, 2018), academic mobility of students and staff seems overlooked and underprioritized. While full-degree student mobility is still regarded as a part of a revenue-generating strategy (Krasnova & Polushkina, 2020), mobility of faculty and non-academic staff as a part of the internationalization effort of the university is barely discussed in the literature. Hence, the contribution of this empirical paper (even if results reflect a small sample) should be relevant to the international scholarship.

Faculty mobility: a review of literature

This study is anchored in the notion that academic mobility is a tangible dimension of ongoing internationalization efforts (OECD, 2014). Accordingly, we use the term academic mobility' as it was used by the Council of Europe (Recommendation No. R (95) 8) to describe "a period of study, teaching and research in a country other than a student's or academic staff member's country of residence (henceforth referred to as the "home country"). This period is of limited duration. It is envisaged that the student or staff member return to his or her home country upon completion of the designated period" (p. 2).

Academic mobility is a fundamental aspect of internationalization initiatives of educational institutions, though research on faculty mobility still needs to be explored while student mobility is much more explored (Rostan & Hohle, 2014; Shen et al., 2022). Various studies define different objectives of academic staff mobility, starting from the teaching-aimed activities that are most common for higher education institutions, research-related mobility, which is less widely spread and is often combined with teaching duties in the hosting institutions, and the most recent type of the mobility aimed at training, academic and professional development of the faculty (Kratz et al., 2021). Faculty mobility motivations and outcomes, hindering and fostering factors, quality assurance, and career and professional impacts of the mobility experiences are also under consideration in the European context (Ball, 2019; Horváth et al., 2020; Klimkina & Sharma, 2022; Racke, 2013; Smeby & Trondal, 2005).

The international mobility outcomes (referring to the European context) are relatively positive, as studies reveal that faculty engaged in European mobility programs show more creativity and innovation in teaching, better research performance and scientific productivity, higher ICT proficiency, higher engagement in academic cooperation, enhanced reflexivity and critical thinking ability, self-growth as more culturally-sensitive and socially-skilled professionals (Alemu, 2020; Ball, 2019; Vlad, 2021; European Commission, 2019; Horta, 2013; Horváth et al., 2020, Shen et al., 2022,). Some of the mobility effects are specifically inherent to the faculty members engaged in research activities, such as enrichment of their research repertoire with explicit and tacit knowledge and practices acquired at the host institution, ability to navigate between different socio-cultural and disciplinary contexts, and development of cosmopolitism (Coey, 2018; Jons, 2007). Benefits and outcomes of academic mobility on the global level such as enhancement of knowledge transfer and circulation across borders, boosting of international research cooperation, development of transnational academic networks and communities of practice, as well as non-academic outcomes such as building cross-cultural sensitivity, tolerance, and understanding are also a matter of discussion (Coey, 2018; Marginson, 2007; Shen et al., 2022).

The Russian context

The European context is unique when discussing economic, political, social, or cultural dimensions and rationales for internationalization. Western Europe, in this sense, will visibly differ from Central and Eastern Europe, where some of the countries belong to the "former Soviet bloc" and some to the "former Eastern bloc" that determine their strategies (Orosz & Perna, 2016). Therefore, it is crucial to briefly explain the context of Russia as a former Soviet country that, until recently, and at the time of data collection, shared European values and strived for the Eurasian identity (Pogorelskaya, 2023) in education, as far as academic mobility is discussed. At the end of the 20th Century, while European universities were actively discussing the IHE and including it in their agenda and strategies, Russia stood aside from the global internationalization process for quite a long time due to geographical, political, and historical reasons; the country started active participation in the ongoing educational integration process only in the early 2000th after joining the Bologna Process (Kortunov, 2019).

Faculty mobility is part of institutional internationalization that is very context-sensitive and is embedded in the national educational realities; in fact, Ryazantsev et al. (2019) claim that academic mobility in the Russian internationalization policies is vaguely defined and is more in the spotlight of immigration legislation rather than that of higher education. At the moment of data collection, most research exploring in- and outbound faculty mobility in Russia must be updated (Petriakova, 2015). In particular, the mobility efforts of universities were described as unsystematic; for instance, many needed an internationalization strategy or clear internationally directed institutional policies. On the institutional level, they do not collect and analyze data on the mobility of their students and staff (e.g., access to mobility, motivation to participate, research, and teaching outcomes) and do not integrate internationalization into the core missions of the organization (Zagvyazinskiy et al., 2020; Martynenko & Zhukova, 2008; Fatkhullina & Guryanova, 2014).

Thus, Russia is a unique example of internationalization practices because internationalization is not considered a grassroots initiative of higher education institutions. It is neither driven by national academia nor initiated by universities themselves; instead, it is guided and regulated by the state (Shenderova, 2018). Hence, academic mobility is not that much of a priority for the leadership of the universities, and it is not much perceived as a benefit for the faculty members, not being considered an essential component of their professional development and academic engagement; therefore, they may not even be aware of the advantages of participation in the mobility programs (Petriakova, 2015) or have no or limited access to information about mobility opportunities (Krasnova & Syulkova, 2014). Insights from faculty with mobility experience refine this understanding and add more clarity to this issue.

Research design and methodology

This small-scale research explores the international mobility experiences of faculty members (N = 10) of Russian universities based in regions outside of the country's capital in 4 different universities. The study aims to gain a deeper understanding of academics' conceptualization of mobility and explore their lived experiences in the context of international mobility programs. Our research questions are as follows:

- How do interviewees perceive their lived experiences of academic mobility abroad – particularly their motivations, expectations, and outcomes of mobility?
- How do interviewees reflect on the academic mobility experience in the complex multilayer structure of educational institutions?

We inquired about the process of academic mobility in its entirety; that is, it was an overarching process with multiple phases. The lived experiences were reflected by the faculty member on a personal level. However, perspectives on the different levels of the university ecosystem (Hannah & Lester, 2009; Roxå & Mårtensson, 2012) were also included. As this perspective is embedded in the complex dynamics of stakeholders and settings, the research requires a constructivist approach that strongly emphasizes the social and structural context (Braun & Clarke, 2006).

Data collection and analysis

We used semi-structured interviews, that is, the topic of the interviews was predetermined, which provided the researchers with flexibility in terms of adjusting the questions and discussion during the interview (Patton, 2002). Nevertheless, it also allowed for discovering the personal attitudes, ideas, and assumptions of the interviewees (Kvale, 2007).

The interview included 14 questions on three dimensions of the academic mobility experience. Namely, personal motivation to participate and expected results explored the experiences on the micro-level of the university ecosystem, reflecting on the institutional support and barriers from both the sending and receiving institutions, including the meso-level dynamics, mobility outcomes that affected professional performance in research and teaching and interactions with international and mobile students of the respondents' home institution reflected both levels of the ecosystem.

Ten faculty members from four regional public universities were interviewed in December 2021. We used purposive sampling and aimed to involve participants with predetermined characteristics: being employed at a regional university as academic staff, having participated in an international academic mobility program at least once, and residing in Russia. Nine participants were female and one male; all interviewees had full-time faculty positions engaged in teaching and research activities at the universities. At the time of the first mobility, 3 participants were 22-25 years old, 3 participants were 26-35 years old, and four were 36-42 years old. At the time of the interview, three were 25-35 years old, three belonged to the 36-45 age group, and others were 45-57. The academic experience depended on the participant's age as they all worked as university faculty members since the beginning of their career paths. The demographic data is provided only to describe the sample, as we did not observe any significant relations between the gender and age groups of the participants and their reflections on their mobility experiences.

The interviews were conducted online, which allowed the interviewer to screen both verbal and nonverbal communications in a similar way to face-to-face interviews (Salmons, 2010). They were recorded and transcribed.

We used thematic analysis (Patton, 2002) with a deductive approach to the interview analysis (Kvale, 2007; Patton, 2002; Brown & Clark, 2006). This means that we created a thematic matrix (based on reviewed literature) that enabled us to extract meaningful patterns and construct deductive conclusions, but also allowed themes to emerge, which were primarily implied by the interviews.

The themes included academic staff motivation for participation in academic mobility, support, and barriers they experienced in their home and host institutions, personal constraints like foreign language competencies or fears, cultural issues in educational organizations, informal ways of teacher

training, integration of the academic mobility experiences to their professional life. The key themes can be divided into three main groups, namely:

- Personal motivations of the faculty on the micro-level.
- Experiences connected with home and hosting institutions on the meso-level.
- Outcomes that the academics managed to integrate into their professional performance and career.

This research received ethical clearance from the Research Ethics Committee of the ELTE Faculty of Pedagogy and Psychology (ID 2023/173). Participants were guaranteed confidentiality of data, and they confirmed their volunteer participation by signing the informed consent form.

Results

Motivations to participate in international mobility programs

The motivation to participate was triggered by personal reasons, not necessarily related to professional activities; however, opportunities for self-development in academia, communication, networking, and immersion into a different academic environment mattered to interviewees. However, most of them acknowledged that the decision to participate in a particular mobility program is based on something other than their choice since that program is often the only option that academics know of. As found, lack of available information is often an impediment, although the universities where the interviewees are based have international relations offices. Still, the information on the available academic mobility opportunities only sometimes reached academic staff. Russia's current geopolitical situation has made this isolation even more intensive and resulted in a lack of opportunities caused by the exit of Russia from the Bologna system, the cancellation of international cooperation agreements, visa and flight restrictions, as well as a lack of funding (termination of Erasmus, DAAD and other European mobility programs). These changes, however, were not anticipated at the time of data collection, that is, three months before the crisis.

Interviewees also reported that academic mobility is still not a common practice in their immediate contexts, as also confirmed by studies conducted in the context of Russia (Petriakova, 2015), meaning that faculty members do not search for mobility opportunities until they receive some basic information from their colleagues or international offices of their institutions. Lack of funding is also reported as a constraint as only mobilities with institutional financial support are considered opportunities. Further, participation is not necessarily incentivized by their home institutions, neither at the macro- nor meso-level of the university ecosystem. However, it is conceived of as a personally rewarding experience driven mostly by internal motivation, such as the opportunity to travel, familiarize myself with a new culture, practice a foreign language, or network (Table 1). Nevertheless, in some cases, the home institution fosters participation in academic mobility programs, usually connected to university obligations within the framework of international cooperation agreements or joint international projects with partner institutions.

Table 1. *Motivation for academic mobility*

Themes	Sample Quotes
Personal reasons	
Curiosity	"…the reason is as banal as trivial human curiosity. I wanted to see what is over there [in a foreign country], and how is it there, and what is being done there" (Participant 4) "…my main motivation was to see how they were living and doing." (Participant 9)
Opportunities to travel	"…it was difficult for me to afford any long-distance trips abroad, and academic mobility allowed to get such an opportunity for free" (Participant 1)
Experiencing culture	"…it gives a fuller sense of interaction with culture´(Participant 10)

	"…to see how other people live, in the other country. For example, I compare myself now and before: before I, for example, wore suits [at work], and now I wear jeans and sneakers." (Participant 4)
Professional reasons	
Academic development	"…developing myself is more important to me. That's why I chose a mobility" (Participant 5) "…trying to lecture in English was my personal challenge. But I knew that if I try, it would be a great step forward" (Participant 8)
Learning new professional practices	"…started preparing for the lecture, you become aware that you will lecture abroad not in the same way as you do at home" (Participant 2) "…if we want to join international research agenda, we need to learn methods and instruments that our foreign colleagues apply" (Participant 3)
Academic networking	"…when contacts are established, these people got included in the organizing committees of conferences, and so on…" (Participant 4)
Foreign language improvement	"…this was a sort of my primary goal: since I work as an English teacher, I need to improve my language accordingly" (Participant 1) "…aside of other goals I expected my English level improvement" (Participant 3)

Support for academic mobility

On the institutional structures level, which is referred to here as the meso-level of the university ecosystem, faculty felt supported by the international offices. For instance, academics were provided visa support or help with other travel arrangements (Table 2). However, international officers lacked the skills and competencies needed to provide more strategic guidance or support for career development.

The interviewees also revealed that in most cases, faculty mobility from Russian universities is supported financially by host institutions or international organizations, though recently, this has dramatically changed. Faculty members reflected on the importance of such support as it enables them to collaborate, access different lab equipment, resources, and facilities unavailable in their home institutions, and explore advanced research and teaching methods.

Table 2. *Institutional support of academic mobility*

Themes	Sample Quotes
Support from the home institutions	
Financial support	"…both sending and hosting parties supported me, my institution covered some expenses too, for instance, they paid my flight" (Participant 2) "…my university did not participate in mobility funding anyway…" (Participant 8) "…[my mobility] was arranged as a business-trip. The employer did not cover my travel costs, but kept paying the teaching salary, and I did not have to take a leave for this travel" (Participant 4)
Administrative support	"…the university had a prearranged procedure for all professors, a kind of "green corridor" for arranging visas and invitations" (Participant 2) "…I did not have to do anything, and my Erasmus+ mobility was fully arranged by the university" (Participant 9)
Informational support	"…I did not have any information. But I used every opportunity that I could find myself" (Participant 7)
Support from the host institution	
Financial support	"…the hosts provided us with dormitories and gave lunch vouchers for the canteen, we appreciated it" (Participant 4). "…all funding was provided by the host university" (Participant 1)
Administrative support	"…[in the host institution] I had mentors, and an advisor who guided me through all legal procedures" (Participant 5)

> "…they [the hosts] arranged everything – a working place, access to internet and the university library, all that I needed" (Participant 3)

Perceived success of academic mobility

The perceived success of the mobility experience was related to the type of mobility and academic activities they were engaged in. Faculty mobility may differ depending on the institutional internationalization practices, participants' roles at their universities, and their interests. For instance, it may depend on the type of engagement, that is, engagement in research, teaching, and administrative activities and the related objectives of the mobility; and aligned to these activities, it may vary according to its duration (short- or long-term) (Rostan & Höhle, 2014). Further, interviewees who referred to themselves primarily as researchers and associated their goals during the mobility with research activities reported professional accomplishment and reflected on their mobility period as being able to finally devote themselves entirely to their research (Table 3). Perceived success, therefore, meant efficiently using research time and progress. The research environment, access to resources, the professional attitude of the host institution's academic staff, and the opportunity to join international research groups on-site contributed to the perceived success of the mobility experience.

Academics who conceptualized themselves as teachers and performed teaching activities on mobility reflected on their interaction with students and colleagues as exciting but also challenging due to language barriers, cultural differences, and lack of awareness about academic cultures and practices of the host institutions. However, feeling engaged in the academic environment, appreciated as teachers by the hosting institutions' students and academic staff, and comfortable in these interactions have contributed to their self-perceived success and self-awareness. Further, interviewees referred to themselves as active learners during the mobility period, which was not so much connected to foreign language communication but to informal professional development. In particular, they reflected on their learning in the workplace setting, that is, attending courses, workshops, or talks and experiencing informal learning in their interactions with students and faculty at the host institution. The role of teachers in a given national context was also one of the topics that interviewees reflected upon. In particular, they highlighted the differences in teacher-student relations in local (national) contexts and the emerging need to develop teachers capable of teaching both domestic and international students.

Steadily navigating through the institutional culture of the host institution was also mentioned as an essential contribution to feeling successful as a visiting faculty member. In particular, this perspective was mentioned in connection with differences in teaching and research approaches (Table 3), e.g., the policies that regulate teaching and research, the classrooms as a physical space, teaching strategies used, student workload, and assessment. The institutional culture was also described as unfamiliar to the participants. Thus, the experience of academic mobility was likely to broaden participants' boundaries in terms of using their cultural competencies and, in so doing, providing new insights and lived experiences as teachers. It may be integrated into one's inventory at the home institution after the mobility period completion, which is one of the goals of the internationalization of higher education.

Table 3. *Perceived success of academic mobility*

Themes	Sample Quotes
Researchers' perspective on mobility success	
Research engagement	"…I left the students for three months, left my family, and was engaged in science fully. I have done a tremendous amount of work. Thanks to mobility, I made a huge contribution to my doctoral thesis." (Participant 4)
Academic networking	"…the experience greatly influenced my job – now we're having a joint project with my hosting professor, and another project is under development, and the foreign colleagues are waiting for us to participate" (Participant 3)

	"…We have joint publications. These are not world-class discoveries, this is clear, but at least the material was collected for good publications that got into the citation databases of SCOPUS, Web of Science and so on." (Participant 6)
Engagement with the international research agenda	"…academic mobility in terms of science is very useful for us, I mean, for the Russian researchers, as it shows how we compare to international colleagues" (Participant 4) "…participation in research, those joint scientific projects with the Institute of [city]for instance – it was more than I could expect" (Participant 3)
Teachers' perspective on mobility success	
Teaching practices	"…I observed how those teachers do it, how they teach... For this purpose, I also signed up for language courses as a student." (Participant 1)
Formal and informal learning	"…it was not that much about formal sharing of the knowledge, but enriching interaction that allowed changing the perspective. Mutually enriching" (Participant 10) "..you are not only learning, you get enriched with cultural knowledge as well – about that country, people, their way of working, both professional and personal" (Participant 7)
Feedback from colleagues/students	"…I felt the feedback, communication, we exchanged information with students, and they were interested. I also felt I am achieving my professional ambitions." (Participant 5)

Disciplinarity and teaching in English

Those interviewees who reflected on themselves as researchers highlighted the importance of participation in transnational research collaborations. They stressed that it is an obligation and one of the main objectives of participation in scientific collaboration to follow the international research agenda and to be able to advance as researchers. In so doing, they referred to the importance of this bridge between their agenda as well as their disciplinary community, hence, the perspective of interconnecting micro- and meso-levels (Table 3). Nevertheless, some faculty referred to themselves as teachers, focusing on the importance of sharing teaching practices and stressing the bilateral nature of this exchange. However, much attention was paid to preparing and practicing teaching in English, which was quite a unique experience for most faculty members as English is not a language of instruction in their home institutions. Being successful in facilitating a class in their discipline in English affected their self-perception and contributed to the feeling of professional integrity and growth. They also added that in so doing, they experienced appreciation by the hosting academic community and the students, which positively impacted their work motivation, engagement in international academic events, and internationalization of the curricula back at their home institutions. Another important insight was the opportunity to stay updated in teaching practices, as the interviewees found considerably different teaching methods and strategies, which enriched their academic repertoire.

Discussion

Faculty mobility experience across vertical and horizontal axes

The decision to embark on faculty mobility is not a spontaneous process based on personal assumptions but underpinned by information from colleagues and international officers. It reflects the importance and usefulness of collegial conversations at the meso-level of the institution and expands the engagement of academic and non-academic staff in this dialogue. The high degree of trust among faculty members that affects this decision-making process is often anchored in strongly connected smaller academic communities, which show similarities with microcultures, as their members share specific professional values and internal trust (Roxå & Mårtensson, 2013).

Similarly, international cooperation officers may participate in collegial conversations on mobility opportunities and experiences. These contribute to the horizontality of such knowledge sharing at the meso-level. Nevertheless, as Bartell (2003) explains, such a horizontal connection needs to be more evident, and the difference in professional roles and aims between professors and administrative staff may impede this communication. In our study, interviewees also also expressed the need for more skilled support for strategic career guidance and administrative support. Nevertheless, this could imply the need for researcher development (Evans, 2011) and holistic academic development (Sutherland, 2018), which are sporadically or unavailable in Russian universities.

Further, our findings point towards the misalignment between university leadership and faculty in terms of perceptions of the importance of mobility for the individual teachers and researchers and the organization. In particular, our results confirmed Petriakova's (2015) claim that faculty did not expect career advancement or benefits from their university management due to their mobility. The interviewees recollected that university leadership generally appreciated their mobility initiatives but neither initiated nor promoted mobility opportunities. However, the engagement of committed leaders on the vertical axe, such as deans, department chairs, faculty coordinators, and international officers, is imperative for moving towards comprehensive internationalization, a basic goal of academic mobility (Hudzik & McCarthy, 2012). In the European context, faculty perspectives align with our empirical results, namely, faculty efforts toward academic mobility are not appreciated enough by the university management, or the appreciation is not explicitly expressed by compensations, awards, or career promotion (Engel, 2010; Horvath et al., 2020).

In the Russian context, these conclusions are also confirmed by Teplyakov's (2018) analysis showing that faculty mobility is only sometimes regarded as an essential contribution to complex university internationalization, which also is indirectly evidenced by the university management's lack of encouragement of faculty mobility. In other words, personal commitment and self-initiated efforts of faculty to participate in mobility programs may be appreciated by the leaders but not much supported by the home institutions. In Russian universities, international cooperation agreements are sufficient evidence of internationalization, and so is incoming student mobility, which is regarded as an export of education or revenue generation (Ryazantsev et al., 2019). Hence, faculty mobility is not a priority at the institutional level (Teplyakov & Teplyakova, 2018; Shenderova, 2018).

To sum, university internationalization is formally acknowledged on the macro-level, and the administrative support of faculty mobility is provided on the meso-level, but the initiative followed by action towards participation in mobility emerges primarily on the micro-level. This misalignment or fractured dynamic across the various levels suggests that faculty mobility is not integrated, neither conceptually nor operationally, in the university ecosystem, which also indicates that researcher or academic development would be needed to provide streamlined support at the micro-, meso- and macro-levels.

Integrating (or not) mobility experiences

Reported integration of experiences and practices acquired during the mobility differ depending on self-conceptualization of the faculty as teachers or researchers and on the main activities they are engaged in in their home institutions. Interviewees who identified themselves more as researchers highlighted concrete, 'measurable' outcomes which they described as evidence of successful mobility. They mentioned accomplished doctoral research, engagement in international research projects, or publications in indexed journals. Academics who described themselves as teachers or educators, although discussed changes in their teaching practices, expressed personal fulfillment and professional accomplishment, did not necessarily relate these to career enhancement nor identified them as concrete substantial outputs of the mobility experience. Implications of this difference in perceptions of accomplishments during the mobility period are twofold. First, it implies the divide between teaching and research. Particularly, the notion that in the context of faculty mobility, too, the clearly identifiable artefacts are those that remain tangible from a performative perspective, albeit the claims

that this binary is problematic as it inadequately describes the complexities of academic work and identities (cf. McAlpine & Åkerlind, 2010). Second, it also indicates that the intellectual and reflective post hoc groundwork may be lacking. Hence, structured opportunities for self-reflection and self-assessment, which may result in integrating lessons learned in the post-mobility academic work are missing. This is partially explained by universities not recognizing mobility as career development (Ball, 2019; Horvath et al., 2020) as well as by the lack of its integration in institutional career progression systems (Racke, 2013), which is also the case in Russia.

Limitations

The study is affected by methodological, theoretical, and more general constraints (cf. Price & Murnan, 2004). The methodological issues relate to empirical data collection, namely, to sampling and generalizability of the results. The sampling was purposive as the research focuses on the predetermined national context. However, in the Russian context, internationalization differs from region to region and institution by institution due to the large territory. Different levels of access to international cooperation characterize it. Also, the national focus of academic mobility shifts from east to west across the country, affecting both motivations for and outcomes of mobility. Similarly, the context and the period of the study constitute a significant limitation as data collection barely preceded the Ukrainian-Russian war, which has radically shifted the framing of this research.

Conclusions

Faculty mobility is widely acknowledged as an essential indicator of internationalization in higher education; however, in some higher educational systems, for instance, in Russia, faculty mobility is neither regarded as a priority nor recognized as an essential constituent of internationalization success (Shenderova, 2018). Hence, faculty mobility from Russian universities is self-induced and driven by personal rather than external motivations. In the university ecosystem (Hannah & Lester, 2009; Roxå & Mårtensson, 2012), opportunities for faculty mobility are rarely provided or promoted on the macro level and induced by the university management, even though the institutions have resources and capacity to provide this support, mobility is initiated on the micro level by individual academics. Hence, participation in mobility is not regarded as a part of the internationalization efforts by the university management and, hence, not valued (Petriakova, 2015). Nevertheless, personal incentives are generally supported at the macro level but are not likely to result in any reward or career advancement (Teplyakov & Teplyakova, 2018). Administrative support is provided on the meso level and is embedded in horizontal communications among groups of academics and administrative colleagues; however, the lack of trust and partnership between these groups inhibits support and circulation of information about mobility opportunities across institutions. Opportunities for career advising and self-reflection preceding and following the mobility experience as a part of mobility strategic planning are also lacking, which could potentially have longer-term effects on the micro as well as meso-level, such as fostering internationalization at home (cf. Teekens, 2007) or enhancing the culture of teaching and learning (cf. Trowler & Cooper, 2002). Although anchored in a specific setting and small in scale, these findings may contribute to the scholarly discussion on university internationalization and provide further insights into specific contextual dynamics.

References

- Alemu, S. K. (2020). Transnational Mobility of Academics: Some Academic Impacts. *CEPS Journal, 10*(2), 77-100. https://doi.org/10.25656/01:20758
- Altbach, P. G. & de Wit, H. (2020). Post-pandemic Outlook for Higher Education is Bleakest for the Poorest. *International Higher Education, 102* (special issue), 3–5. https://ejournals.bc.edu/index.php/ihe/article/view/14583

- Altbach, P. G. & Knight, J. (2007). *The Internationalization of Higher Education: Motivations and Realities*. Journal of Studies in International Education, 11(3-4), 290-305.
- Ball, S. (2019, May 1). Improving the impact of international staff mobility on individuals and institutions. [Conference presentation] REALISE 2019, London, UK. https://doi.org/10.1023/A:1021225514599
- Bartell, M. (2003). Internationalisation of universities: a university culture-based framework. *Higher Education, 45*, 43-70. https://doi.org/10.1023/A:1021225514599
- Braun V. & Clarke V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101, https://www.tandfonline.com/doi/abs/10.1191/1478088706qp063oa
- Buckner, E. (2019). The Internationalization of Higher Education: National Interpretations of a Global Model. *Comparative Education Review, 63,* 309-461. https://doi.org/10.1086/703794
- Coey, C. (2018). International researcher mobility and knowledge transfer in the social sciences and humanities. *Globalisation, Societies and Education, 16*(2), 208–223. https://doi.org/10.1080/14767724.2017.1401918
- Council of Europe: Committee of Ministers. (Recommendation No. R (95) 8 of the Committee of Ministers to Member States on Academic Mobility. 2 March 1995. https://rm.coe.int/16804e4d00
- Crăciun, D. (2018). National Policies for Higher Education Internationalization: A Global Comparative Perspective. In Curaj, A., Deca, L., Pricopie, R. (Eds) *European Higher Education Area: The Impact of Past and Future Policies* (p. 95-106), Springer, Cham. https://doi.org/10.1007/978-3-319-77407-7_7
- de Wit, H. (1998). Rationales for Internationalisation of Higher Education. *Polytechnic Institute of Viseu. http://www.ipv.pt/millenium/wit11.htm*
- De Wit, H. (2015). *Internationalization of Higher Education: A Critical Review*. Brussels: European Parliament.
- Dobbins, M. & Kwiek, M. (2017). Europeanisation and Globalisation in Higher Education in Central and Eastern Europe: 25 years of Changes Revisited (1990–2015). *European Educational Research Journal, 16,* 519-528. https://doi.org/10.1177/1474904117728132
- Dorner H. & Mårtensson, K. (2021). Catalysing pedagogical change in the university ecosystem: Exploring 'big ideas' that drive faculty development. *Hungarian Educational Research Journal 11* (3), 225–229. https://doi.org/10.1556/063.2021.00089
- Engel, C. (2010). The impact of Erasmus mobility on the professional career: Empirical results of international studies on temporary student and teaching staff mobility. *Belgeo (4),* 351-363. https://doi.org/10.4000/belgeo.6399
- European Commission, Directorate-General for Education, Youth, Sport and Culture, (2019). *Erasmus+ higher education impact study: final report*, Publications Office. https://data.europa.eu/doi/10.2766/162060
- Fatkhullina L. & Guryanova T. (2014). Internationalization of the Russian Higher education: Problems and Perspectives. *Vestnik of Kazan Technical University, 17*(14), 482-485. https://www.elibrary.ru/download/elibrary_22268937_65221078.pdf
- Hannah, S.T. & Lester, P.B. (2009). A Multilevel Approach to Building and Leading Learning Organizations. *The Leadership Quarterly, 20*, 34–48. https://doi.org/10.1016/j.leaqua.2008.11.003
- Hoffman, D. (2009). Changing Academic Mobility Patterns and International Migration: What Will Academic Mobility Mean in the 21st Century? *Journal of Studies in International Education*, 13(3), 347-364.
- Horta, H. (2013). Deepening our understanding of academic inbreeding effects on research information exchange and scientific output: New insights for academic based research. *Higher Education, 65*(4), 487–510. https://doi.org/10.1007/s10734-012-9559-7
- Horváth, L. & Hangyál, Zs. & Kasza, G. & Czirfusz, D. (2020). Teach with Erasmus+ Research Report. ELTE Eötvös Loránd University Department of Erasmus+ and International Programmes. https://uni-foundation.eu/uploads/2020_TWE_Research_Report.pdf

- Hudzik, J. (2011) *Comprehensive Internationalization: From concept to action*. NAFSA, Association of International Educators, Washington, DC. USA.
- Hudzik, J.K. & McCarthy, J. (2012). Leading Comprehensive Internationalization: Strategy and Tactics for Action. NAFSA: Association of International Educators. Washington, DC. USA.
- Hunter, F., Sparnon, N., & Latorre, P. (2022). Moving internationalisation beyond exceptionalism using the MARS model. *Higher Education Quarterly*, 76, 311–327. https://doi.org/10.1111/hequ.12385
- Jöns, H. (2007). Transnational Mobility and the Spaces of Knowledge Production: A Comparison of Global Patterns, Motivations and Collaborations in Different Academic Fields. *Social Geography 2*(2), 97–114. https://doi.org/10.5194/sg-2-97-2007
- Klimkina E. & Sharma P. (2022). Impact of International Educational Experience on Career Development and Professional Advancement: a Meta-Analysis. In Steklács J. & Molnár-Kovács Z. (Eds.) "*21 Századi Képességek, Írásbeliség, Esélyegyenlőség*", pp. 398. XXII. Országos Neveléstudományi Konferencia, Pécsi Tudományegyetem,
- Knight J. (2003). Updated internationalization definition. *International Higher Education 33* (33), 2-3. https://doi.*org*/10.6017/ihe.2003.33.7391
- Kortunov A. (2019). Russia and the Bologna Process: 20 years later. *The Russian International Affairs Council (RIAC)*. https://russiancouncil.ru/en/analytics-and-comments/analytics/russia-and-the-bologna-process-20-years-later/
- Krasnova, G. & Syulkova, N. (2014). On the Issue of Academic Mobility. Vestnik of Peoples' Friendship University of Russia. Series*: International Relations, (4),* 214-217. https://repository.rudn.ru/en/records/article/record/16391/
- Kratz, A. & Brossico, L. & Saso, L. (2021). *Improving Staff Training Mobility in Europe: Administrative and Technical Staff Training,* UNICA – Network of Universities from the Capitals of Europe. staffmobility.eu. https://www.unica-network.eu/wp-content/uploads/2021/02/Report-on-Improving-staff-training-mobility-in-Europe_-administrative-and-technical-staff-training-2601-ak.pdf
- Kvale S. (2007). *Doing interviews*. Sage Publications.
- Leask, B. (2009). Using formal and informal curricula to improve interactions between home and international students. *Journal of Studies in International Education, 13*(2), 205-221. https://doi.org/10.1177/1028315308329786
- Lannert, J. & Derenyi A. (2020). Internationalization in Hungarian higher education. Recent developments and factors of reaching better global visibility. *Hungarian Education Research Journal 10* (4), 346–369. https://akjournals.com/view/journals/063/10/4/article-p346.xml
- Marginson, S. (2006). Dynamics of National and Global Competition in Higher Education. *Higher Education*, 52(1), 1-39.
- Marginson, S. (2007). The public/private divide in higher education: A global revision. *Higher Education, 53*(3), 307–333. https://doi.org/10.1007/s10734-005-8230-y
- Marmolejo, F. (2012). Internationalization of higher education: the good, the bad, and the unexpected. *Chronicle of Higher Education*. http://chronicle.com/blogs/worldwise/internationalization-of-higher-education-the-good-thebad-and-the-unexpected/27512
- Martynenko, O. & Zhukova, N. (2008). Academic mobility in Russia: today's problems, and nearest perspectives (Viewed from a Regional University). *Integration of Education, (2),* 3-10. https://edumag.mrsu.ru/content/pdf/08-2.pdf
- Matei, L. & Craciun, D. & Torotcoi S. (2018). A resounding success or downright failure? Understanding policy transfer within the Bologna Process in Central and Eastern Europe. In Batory A., Cartwright A. & Stone, D. (Eds.) *Policy Experiments, Failures and Innovations* (pp. 170-188). https://doi.org/10.4337/9781785367496.00016
- McAlpine, L. & Akerlind, G. (2010). *Becoming an Academic: International Perspectives*. (2010 ed.) Palgrave Macmillan. https://www.booktopia.com.au/becoming-an-academic-lynn-mcalpine/prod9780230227910.html

- Mendoza, P. (2010). Academic Mobility and Professional Networks in Latin America. *Journal of Studies in International Education*, 14(3), 289-311.
- OECD (2008). Internationalisation: Shaping Strategies in the National Context, in *Tertiary Education for the Knowledge Society:* Volume 1 and Volume 2, OECD Publishing, Paris. https://doi.org/10.1787/9789264046535-13-en
- OECD. (2014). *Higher Education at 2030*. Vol. 2. Globalisation: OECD-indicators: OECD Publishing. https://www.oecd.org/education/ceri/highereducationto2030volume2globalisation.htm
- Orosz, K. & Perna, L. W. (2016). Higher Education Internationalization in the Context of Ongoing Economic-Political Transitions: Insights from Former Soviet and Eastern Bloc Nations. *Hungarian Educational Research Journal*, 6(1), 3-19. https://doi.org/10.14413/herj.2016.01.01
- Patton M.Q. (2002). *Qualitative research and evaluation methods*. 3rd Edition. Sage Publications.
- Petriakova N. (2015). *Academic mobility of teachers of the university* [Paper presentation]. International Conference on Strategies of Social Communities, Institutions, and Territories. Yekaterinburg, Russia. Vol. 2. 97-100. https://elar.urfu.ru/handle/10995/38850
- Pogorelskaya, A. (2023). Academic mobility for region-building and the creation of a Eurasian identity, *European Journal of Higher Education, 13*(2). 161-178. https://www.tandfonline.com/doi/full/10.1080/21568235.2022.2093240
- Price, J.H. & Murnan J. (2004). Research Limitations and the Necessity of Reporting Them. *American Journal of Health Education*, *35.* 66-67. https://doi.org/10.1080/19325037.2004.10603611
- Racké, C. (2013). Staff mobility in higher education: National policies and programmes. Brussels: European Commission. https://www.dzs.cz/sites/default/files/2021-11/14.pdf
- Renc-Roe, J. & Roxå T. (2014). The Internationalisation of a University as Local Practices: A Case Study. *Education Inquiry, 5*(1). https://doi.org/10.3402/edui.v5.24048
- Roxå, T. & Mårtensson, K. (2013). *Understanding strong academic microcultures: an exploratory study*. CED, Centre for Educational Development, Lunds Universitet. https://lucris.lub.lu.se/ws/files/55148513/Microcultures_eversion.pdf
- Roxå, T. & Mårtensson, K. (2012). How effects from teacher training of academic teachers propagate into the meso level and beyond. In E. Simon & G. Pleschova (Eds.) *Teacher development in higher education. Existing programs, program impact, and future trend*. (pp. 213-233). London, UK: Routledge
- Rostan, M. & Höhle, E. (2014). The International Mobility of Faculty. https://doi.org/10.1007/978-94-007-7278-6_5.
- Rozhenkova, V. & Rust, V.D. (2018). Internationalization of higher education in Russia: aiming for global recognition. In J. Zajda (Ed.), Globalization and education reforms. Series: *Globalization, comparative education and policy research* (pp. 93-106). Netherlands: Springer.
- Ryazantsev S. & Rostovskaya T. & Skorobogatova V. & Bezverbny V. (2019). International Academic Mobility in Russia: Trends, Types, State Stimulation. *Economy of Region (15).* 420-435. https://doi.org/10.17059/2019-2-9.
- Salmons, J. E. (2010). *Online interviews in real time*. Thousand Oaks, CA: Sage.
- Shen, W. & Xu, X. & Wang, X. (2022). Reconceptualising international academic mobility in the global knowledge system: towards a new research agenda. *High Educ*ation (*84),* 1317–1342. https://doi.org/10.1007/s10734-022-00931-8
- Shenderova, S. (2018). Internationalisation of higher education in Russia: National policy and results at institutional level. In: Korhonen, V., & Alenius, P. (Eds.). *Internationalisation and Transnationalisation in Higher Education* (pp. 69-100). Bern, Switzerland: Peter Lang AG. https://doi.org/10.3726/b11212.
- Simmons, N. (2020). The 4M framework as analytic lens for SoTL's impact: A study of seven scholars. *Teaching & Learning Inquiry, 8(1)*. https://doi.org/10.20343/teachlearninqu.8.1.6
- Teekens, H. (2007). Internationalization at Home: An introduction. In Teekens, H. (Ed.) *Internationalization at Home: Ideas and Ideals* (pp. 33–39). Amsterdam, The Netherlands: European Association for International Education (EAIE).

- Teplyakov D. & Teplyakova O. (2018) National Policy for Academic Mobility in Russia and the BRICS Countries: 20 Years of the Bologna Process Implementation. *BRICS Law Journal, 5*(1). 5–26. https://doi.org/10.21684/2412-2343-2017-5-1-5-26
- Trowler, P. & Cooper A. (2002). Teaching and Learning Regimes: Implicit theories and recurrent practices in the enhancement of teaching and learning through educational development programmes. *Higher Education Research & Development, 21*(3). 221-240. https://doi.org/10.1080/0729436022000020742
- Vlad D. (2021). The Importance of International Experience Through Staff Mobility Programmes in Higher Education. *Social Sciences and Education Research Review, 8(1), 270–281.* https://zenodo.org/records/5090806
- Zagvyazinskiy, V. & Volosnikova L. & Kukuev, E. & Patrusheva, I. (2020). Academic Mobility in Teacher Education. *The Education and Science Journal (22)*. 31-48. https://doi.org/10.17853/1994-5639-2020-6-31-48
- Zha, Q. (2003). Internationalization of Higher Education: Towards a Conceptual Framework. *Policy Futures in Education (1).* 248-270. https://doi.org/10.2304/pfie.2003.1.2.5.

Anikó KÁLMÁN és Phyu WIN

Influences on teacher trainers' lifelong learning competencies

Introduction

Lifelong learning should embrace the full range of informal, non-formal, and formal learning and its focus on learning from early childhood through post-retirement (Commission, 2002). Depending on the researchers ' formulation, there are various lifelong learning competencies to measure the lifelong learning process. In 2006, the European Commission launched a wide-ranging consultation process to revise the Recommendation on Essential Competencies for Lifelong Learning (Commission, 2018; European Commission, 2018).

In their studies, a significant finding, starting with the education sector, is that a wide range of terminology and meanings are used despite competency frameworks addressing a similar set of competencies. The intended application, target audience, and geographic location influence its diversity. The major conclusions of the review process were (a) to assist students of all generations in acquiring the key competencies necessary for continuous learning, (b) to modify the benchmark structure to reflect present and emerging demands to guarantee individuals can acquire the necessary competencies and (c) to identify strategies for fostering competency-based education, using lifelong learning approach. Teacher educators and other education personnel all play critical roles in achieving this.

The essential core competencies have become included in the proposal for an updated European guideline structure of critical competencies for lifelong learning:

- literacy competence
- multilingual competence
- mathematical and science competence
- digital competence
- learning to learn competence
- citizenship competence
- entrepreneurship competence
- cultural awareness and expression competence

- ***Literacy competence*** is recognizing, comprehending, communicating, producing, and interpreting ideas, sentiments, information, and opinions in oral and written form using visual, aural, and digital media. The native tongue, the official language of a country or region, and the language of communication all contribute to its development. In this scenario, literacy competence can be acquired in various societal and cultural contexts, including education, training, employment, family life, and leisure.
- ***Multilingual competence*** is the capacity to use a variety of languages successfully and appropriately for communication. Understanding, expressing, and interpreting ideas, concepts, ideas, emotions, information, and perspectives in spoken and written form are the foundations of communication in foreign languages.
- ***Mathematical competence*** is acquiring and utilizing numerical concepts and reasoning for various issues in real-world contexts. The focus is on methods and activity in addition to information, building on a solid foundation of numeracy. To various extents, the capacity and readiness to apply mathematical forms of thought and presentation are components of mathematical competence. The capacity and inclination to explain the natural world through research and observation, formulate questions, and come to conclusions supported by evidence is referred to as ***competence in science***.
- ***Digital competence*** refers to the robust, critical, and ethical integration and use of digital technology for professional and social learning. It covers data and information, education,

teamwork and communication, media literacy, media creation, online digital creation, safety, and property rights.

- ***Learning to learn competence*** is the capacity for self-reflection, adequate time and information management, and teamwork in a better direction, maintaining resilience, and managing one's learning. It includes the capacity to deal with complexity and uncertainty, to learn new things, to encourage and preserve one's mental and physical health, to live a health-conscious, future-focused life, to show empathy, and to handle disputes in an inclusive and encouraging environment.
- ***Citizenship competence*** is the ability to participate fully in civic and social life and engage as responsible. It depends on one's awareness of concepts and systems in the economic, social, legal, and political fields, sustainability, and globalization.
- ***Entrepreneurial competence*** is the ability to capture opportunities and develop ideas into commodities that benefit others. It is built on the ability to design and manage initiatives that have cultural, social, or economic worth by using originality, rational thought, and problem-solving skills.
- ***Competence in cultural awareness*** is understanding and respecting the diverse artistic and other cultures so that information is imaginatively conveyed and shared in all the other cultures. It entails being actively involved in comprehending, growing, and communicating one's personal opinions and identity as a member or position in society in various situations and manners.

These key competencies are also defined as a combination of attitudes, knowledge, and skills. Moreover, they are described in terms of sustainability, gender, equal rights and opportunities, acceptance of cultural diversity, innovative thinking, and media literacy. Another point of view is that the first three are specific to a particular domain. Their description, adoption of syllabi, and appraisal seem pretty straightforward. The last five relate to domains of generality or transversality (Steffens, 2015). This reference framework utilizes an extensive range of themes, including critical reflection, innovation, enterprise, conflict, risk analysis, judgment, and therapeutic emotion management in each of the eight primary skills. Practitioners in education and training can use it as a standard guideline. It creates a shared knowledge of the skills that will be necessary in the present and the future. The reference framework outlines practical strategies for fostering competence growth through cutting-edge teaching strategies, testing procedures, and staff assistance (Commission, 2019; European Council, 2006).

Myanmar's GDP is declining due to political instability, with services and industrial sectors suffering the most. The Southeast Asia 2023 Survey Report shows a 47% increase in socioeconomic gaps. Urbanization is increasing, with 89.5% literacy rate (Seah et al., 2023). The European Framework is a vital resource for evaluating the lifelong learning competencies of teacher trainers in Myanmar. International collaboration and sharing of best practices are facilitated by comparing their skill sets to global standards. This information and policy decisions can also shape initiatives for the professional development of trainers in Myanmar. Myanmar may enhance the quality of teacher training programs and education by comprehending these competencies.

Many researchers have addressed how to transform educational institutions to foster lifelong learning among educators, administrators, and students; our previous systematic literature review of lifelong learning helped us gain a deeper understanding of the phenomenon. The research gaps we identified led us to plan an investigation of the lifelong learning competencies of teacher trainers using a mixed-method research design. In our previous empirical studies (Thwe & Kálmán, 2023a, 2023b), we examined the lifelong learning competencies of teacher trainers and some background factors, but our prior quantitative studies have some limitations, and the findings are still controversial compared to previous studies (For example, Pilli et al., 2017; Sen & Durak, 2022; Shin & Jun, 2019). Therefore, we conducted this qualitative study to explain more factors influencing teacher trainers' lifelong learning competencies. The purpose of preparing this paper was to explore their perceptions of lifelong learning competencies as well as the impacts of learning communities and learning strategies on those competencies.

Literature Review

The factors that can influence lifelong learning competencies can be identified qualitatively, quantitatively, or both. Shin and Jun (2019) identified the faceted effects of both personal and institutional factors on lifelong learning competencies, and Deveci (2019) used a Scale of Interpersonal Communication Predispositions for Lifelong Learning to study present-day interpersonal interactions in the classroom as well as to predict future lifelong learning engagement. Separately, using a lifelong learning scale, Bath and Smith (2009) discovered features and traits that might point to a person's propensity for lifelong learning, and using the responses to a questionnaire on experience with lifelong learning as well as scores from two semesters at the university, Grokholskyi et al.(2020) established the importance of psychological traits and metacognitions for lifelong learning competences. Meanwhile, Adabaş Kaygin and Sahin et al. (2010; 2016) also quantitatively analyzed lifelong learning competencies based on background characteristics and identified the role of personal traits in the capacity for lifelong learning.

Yen et al. (2019) described how personal learning environments can be used to promote never-ending learning, andBuza et al. (2010) explained how education can guarantee high standards and lifelong learning; the latter authors found that their teacher educators had varying ideas about lifelong learning; they focused on acquiring a variety of skills; recognized problems; had strategies for addressing, locating, and using information; and comprehended learning strategies for acquiring and applying new knowledge. In a mixed-methods study, Matsumoto-Royo et al. (2022) demonstrated that assessment can improve metacognition abilities and foster lifelong learning in teacher education. Lavrijsen and Nicaise (2017) highlighted the significance of extrinsic barriers for explaining unfair involvement in lifelong learning using data from the Program for the International Assessment of Adult Competencies. Meanwhile, in a qualitative study, Zuhairi et al. (2020) discussed the challenges in enhancing lifelong learning in open universities and suggested integrating online instructional design and strategies with policies and strategies for school leavers, student portfolios, and services and support for students with special needs.

Muller and Beaten (2013) studied lifelong learners' learning strategies by administering a learning style instrument and a coping strategies scale and found that learning strategies can affect their lifelong learning. Separately, Nacaroglu et al. (2021) found that those with self-regulatory solid learning capacity are more likely to pursue lifelong learning. They recommended that future researchers consider extraneous influences such as post-COVID-19 learning communities and learning strategies. Meanwhile, according to Entürk and Baş (2021), Klug et al. (2014), and Selvi (2010), teacher competencies are also related to lifelong learning competencies. We also considered the potential effects of specific learning strategies for teaching competencies on lifelong learning competencies.

The findings from our previous studies showed that teacher trainers perceive that they demonstrate lifelong learning competencies that are related to their perceptions of lifelong learning and learning strategies, and the student participants' ages influenced these and where their education degree colleges were located. Our findings are consistent with results from other studies in which gender (Pilli et al., 2017; Sen & Durak, 2022; Shin & Jun, 2019), education level (Ayanoglu & Guler, 2021), and years of teaching service (Bozat et al., 2014; Kuzu et al., 2015; Yildiz-Durak et al., 2020) affected lifelong learning competences. In the current study, we measured teacher trainers' lifelong learning competencies based on their background factors; specifically, we measured the teacher trainers for eight main competencies identified as related to lifelong learning.

In those previous studies, the teacher trainers perceived that they were most competent at learning how to learn and the minor competent in math and science; education level and gender had no significant influences on any of the eight lifelong learning competencies. We did find that the region of the interviewee's education degree college had recognizable impacts on the teacher trainer's multilingualism, digital citizenship, entrepreneurship, learning to learn, and cultural awareness competencies. Additionally, age played a critical role in literacy, digital, and citizenship competencies, but only teaching services affected digital competence. Here, we note that additional factors such as

socioeconomic status, individual differences, exposure, and training could have also affected teachers' lifelong learning competencies. However, we did not explore any such factors in this study. Instead, based on these previously identified factors, in this study, we investigated the lifelong learning competencies of teacher trainers in Myanmar based on their background factors, learning communities, preexisting teaching competencies, and learning strategies.

Previous researchers have clearly defined and discussed learning communities for professionals (Buysse et al., 2003; Hord, 2004; Thompson et al., 2004; Xiao & Saedah, 2015), and Deveci (2022) reminded researchers to consider the effects of the COVID-19 pandemic on such learning communities and competences. The pandemic and the associated societal impacts substantially changed every aspect of teaching and learning, including engendering different learning communities. To date, researchers have not established a definition of a new learning community, which made it necessary to prepare an operational definition for this study. The pandemic restrictions required teachers and students to establish new methods of teaching and learning remotely, a brand-new circumstance; however, many teachers did have access to online training and online communication with other teacher learners during the time they were not actively teaching. Based on the current findings, the operational definition of a *new learning community* is a place where teachers can teach and learn online, acquire both technological and pedagogical skills, and share new experiences.

In response to our above conclusions, we conducted the current study to resolve the limitations of our previous studies by exploring more possible factors that can influence the lifelong learning competencies of teacher trainers. The following research questions guided our study efforts:

- How do teacher trainers understand lifelong learning and lifelong learning competencies?
- What are the factors that promote or hinder the lifelong learning competencies of teacher trainers?
  - How can teacher trainers' learning communities influence their lifelong learning competencies?
  - Which learning strategies do teacher trainers use to improve their teaching competencies?
  - How can teacher trainers' teaching competencies relate to their lifelong learning competencies?

Methodology

Research Design and Data Collection Procedure

In this study, we followed our previous quantitative works to conduct a qualitative study that would support or reject the quantitative results (Creswell, 2012) with the aim of understanding the critical factors of teacher trainers' lifelong learning competencies. We prepared a qualitative semistructured interview instrument based on our quantitative study variables and findings and conducted the interviews remotely using the messaging applications Vibe and Messenger; the first author also recorded the audio of each interview. The first author initially wrote the interview questions in English so the co-author could check and revise them. The first author, a native of Burma, then translated them into Burmese. Two PhD candidates who were formerly teacher trainers in Myanmar aided this effort by reviewing the translated version and offering their feedback on the questions' content and clarity. The instrument was modified based on their recommendations. This study adhered to the interview topic guides' methods, questions, and note-taking areas to conduct the interviews (Creswell, 2012). One-on-one interviews are conducted so that participants can freely share ideas without feeling uncomfortable. In addition, each participant gave oral consent, which we recorded before each interview. **Following the interviews, we reviewed each transcript and filled in any gaps.**

Participants

The participants in the formal study were 12 teacher trainers performing at education degree colleges in Myanmar whom we selected according to purposive sampling based on their background factors including age and region. Table 1 presents the interviewees' profiles, and we note that only one male teacher trainer was willing to participate in this interview.

Table 1. Profile of the interviewees

Background factors		frequency	%
Gender	male	1	8.33%
	female	11	91.67 %
Age	20-30 years	6	50.00%
	31-40 years	5	41.67%
	41-50 years	1	8.33%
Region	Lower	3	25.00%
	Upper	9	75.00%
Education level	Bachelor	1	8.33%
	Master	3	25.00%
	Phd (still studying)	8	66.67%
Teaching Service	1-5 years	5	41.67%
	6-10 years	6	50.00%
	11-15 years	1	8.33%
Total		12	100%

Instrument

Although we conducted semistructured interviews using a predetermined order of questions as a guide, we asked additional questions when it seemed appropriate to encourage interviewees to explore their perceptions more deeply (Cachia & Millward, 2011). Our leading interview guide consisted of 15 questions covering the teacher trainers' perceptions of lifelong learning and lifelong learning competencies, factors they felt influenced lifelong learning competencies, and the impacts of new learning environments and learning strategies. However, participants were encouraged to elaborate on any of their answers. The interviews followed the protocol below:

Perceptions of lifelong learning and lifelong learning competencies:

- How do you understand lifelong learning?
- How can you tell if someone is practicing lifelong learning?
- According to the European Commission, there are eight key competencies for lifelong learning: literacy, multilingual, math and science, digital, learning to learn, citizenship, entrepreneurship, and cultural awareness. Among these, which are your highest and lowest competencies? Why do you think so?

Factors influencing each competency phase:

- Based on your answers, how do you think these highest and lowest competencies are related to your background factors?
- What factors could improve your competences?
- What factors hinder them?

New learning community phase:

- Since COVID-19, how is your learning environment?
- Which areas have changed, and which remain the same?
- How do you think that these changes or the absence of changes can affect any of your Lifelong learning competences?

Learning Strategies phase:

- Which learning strategies do you use to improve your teaching competencies?
- Which one do you prefer to use?
- By improving them, how can you also improve your lifelong learning competencies? Which competence?

Data Analysis

Before the main study, we conducted a pilot study on these study questions with a group of aforementioned PhD students who did not take part in the study to ensure its validity. With their consent, the first author took notes on their performances while they pretended to be being interrogated. Before the formal interview started, the first author made a few minor wording adjustments for the Burmese translation. We used the six interconnected qualitative data analysis processes to understand the recorded data from formal interviews (Creswell, 2022). For anonymity, we coded each interviewee as TT1, TT2, ... We first transcribed the data to determine whether hand analysis would be appropriate. We then read each full transcript multiple times for more than thirty days to better understand their responses. Next, we used inductive reasoning to code the text data based on drawing meanings and developing themes from the data. Inductive approaches are commonly used in qualitative data analysis, incredibly grounded theory (Strauss & Corbin, 1998), and provide a simple, straightforward method of deriving conclusions related to evaluation questions (Thomas, 2006).

This technique also helps us use mixed methods to compare our current qualitative and previous quantitative results and draw more insightful conclusions (Grbich, 2022; Vaismoradi & Snelgrove, 2019). Two themes were ultimately chosen for this study after they were labeled and defined. The findings of this study then revealed the themes of perceptions of lifelong learning and lifelong learning competencies as well as the factors influencing them.

Results and Discussion

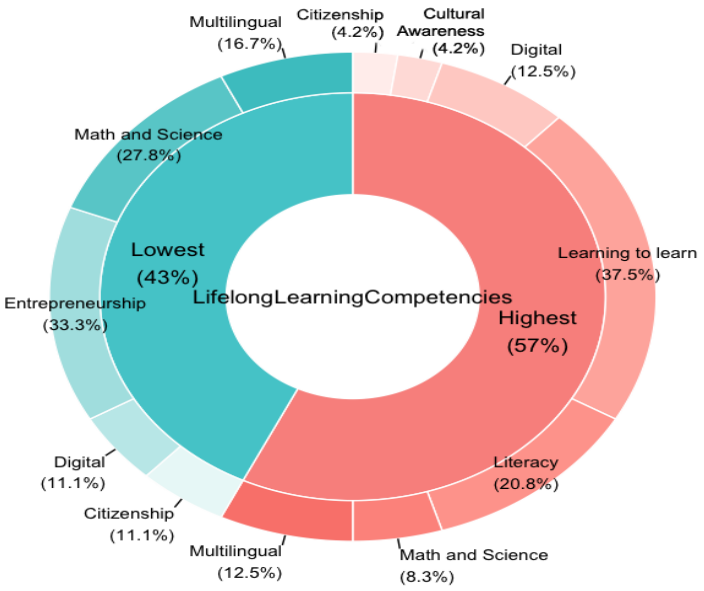
Understanding of Lifelong Learning and Lifelong Learning Competencies

With the first research question, we aimed to explore how teacher trainers perceived lifelong learning and its competencies. According to Table 2, they understood that everything is changing at an incredible rate in modern times and that teaching is not an exception, and they also understood lifelong learning to entail keeping current with contemporary developments. Through reflection, everyone learns consciously and unconsciously throughout their lives and applies what they have learned and where they should apply it. The majority of their perceptions about lifelong learning come from their teaching profession. All teacher trainers view that the lifelong learning of a person can be measured by communicating with them and gauging their professional performance and attitudes. In contrast, only one teacher trainer responded that it is impossible to assess the lifelong learning of a person. It is supposed that they need to recognise that eight key competencies can be used to determine whether or not a person practices lifelong learning. Then, they are explained about eight key competencies and asked to assess themselves which are their highest and lowest competencies. In more detail, Figure 1 graphically displays how the 12 study interviewees perceived their strongest and weakest lifelong learning competencies.

Table 2. Teacher Trainers' Perceptions on Lifelong Learning

Teacher trainers	**Lifelong Learning means**
TT1	Staying up to date with the ever-changing world.
TT2	Keeping up with 21st century learning is always necessary as a student and as a teacher of students.
TT3	Performing new things in the teaching profession is also a constant learning process, since every teacher is a forever student, not only to gain the degree but also to adopt new teaching methods.
TT4	The process of improving oneself through learning.
TT5	All of us learn consciously and unconsciously throughout our lives, and by reflecting we apply what can be useful and where it should be applied.
TT6	Learning unknown things.
TT7	It is true that everyone learns the things they need in their daily lives, but the amount that they learn is different. Everyone is interested in learning new things.
TT8	Humans, as well as all living things, are constantly learning for survival.
TT9	Learning for the sake of gaining new knowledge.
TT10	Gaining knowledge about the profession by learning new things.
TT11	Every person learns for the basic needs and professions, social skills, and how to create new things unconsciously and consciously throughout their lives.
TT12	Besides formal education, informal learning and non-formal learning are also included.

Fig. 1. Highest and lowest competences of lifelong learning of teacher trainers



Factors That Promote or Hinder Each of Lifelong Learning Competencies

Teacher trainers' opinions on the reason for their highest and lowest level in their various competencies were continually sought. Most of the teacher trainers reported that gender, age, region of college, education level, and teaching experience had had no effect on their lifelong learning competences. TT1 reported that her competences were only partially associated with her teaching experience and where her education degree college was located, but TT5 and TT7e reported that their lifelong learning competences had been related to their teaching experience; TT5 also stated that the education level might have influenced her lifelong learning competences. TT8 also associated her lifetime learning competences with the region where her college was located, and TT1, TT8, and TT9 agreed that they were meant to just obey directions from those in higher positions in their schools and could not question them; it should be clear that teachers cannot achieve entrepreneurial competence in this manner. TT9 also felt that being a woman and her fear of making a mistake had contributed to her low entrepreneurial competence, and TT10 perceived age as associated with her weak math and science competence.

In addition to the background factors listed above, other factors contributed to determining each competency of lifelong learning competencies. They revealed fostering factors by focusing on their highest competences, which include learning to learn, literacy, multilingual, and digital. TT1 recognized that she was a fast learner, and she learned what she needed to succeed in her job if the skill qualified her for promotion; TT2 was also interested in learning new things related to the profession. TT3 believed her grandfather's teaching her English had made her multilingual, and TT4 perceived himself as a fast learner and a competent digital professional based on his experience at a media and advertising company. TT5 became multilingual by participating in a foreign language course focused on learning English. TT6 asserted that a person who is interested in something familiar is likely to want to learn more about it, and in fact, TT7 enjoyed her job as a teacher trainer despite some challenges; she was consistently learning about the new curriculum, and in this way, she increased her capacity to learn. TT8 considered that practicing and developing habits were related to learning to learn, and TT9 expected that she would become knowledgeable and interested in math because it had been her university's specialized major; TT10 reported being interested in learning a skill if the individuals around her possessed the skill of interest. TT7 and TT11 were very enthusiastic about participating in new curriculum training and learning for personal growth. In the same way as TT1, TT12 reported having learned and applied new knowledge to pursue a promotion.

The teacher trainers also identified factors that limited their competencies, particularly science and math, entrepreneurship, and multilingualism, and they admitted that their limited competence in these areas was attributable to their lack of confidence, interest, awareness, and drive. Some also chose not to put effort into lifelong learning competencies without connection to the teaching profession or applicability to their current positions. TT3 believed that because she was raised in an ordinary household, she lacked any entrepreneurship abilities, and TT8 reported that her lack of entrepreneurial competence was linked to a fear of failing. TT7 also reported being overworked and depressed and reported certain aspects of her health and family history as all having an impact on her capacity for lifelong learning. In a related sentiment, TT9 believed genetics was vital to developing specific competencies.

New Learning Community

All the teacher trainers in this study indicated that the COVID-19 pandemic had drastically changed their learning communities, although they revealed considerably different perspectives and experiences, particularly concerning lifelong learning competencies. Most reported that their multilingual and digital competencies had had time to improve after the pandemic. Additionally, while the schools were closed entirely, the teacher trainers had extra time to acquaint themselves with new digital tools and participate in online training. However, TT6 admitted that she had stopped learning English and using the computer once training programs such as the Toward Results in Education and English (TREE) program had ended; instead, she focused on how to teach the new curriculum to her students. TT8 had a different perspective because she had more post-pandemic options for online and

offline courses, which increased her learning capacity. TT4 and TT7 reported that their digital competence had already been good and discussed how they would have the chance to apply their skills after the pandemic.

Regarding drawbacks to the new learning communities, TT2 and TT7 discussed how it was impossible to reach an instructor or communicate face-to-face in real-time during asynchronous online classes. Also discussed her experience as a PhD student who studied in China and returned to Myanmar following the pandemic. She felt that because everyone around her was speaking Burmese, her multilingualism decreased, particularly in English and Chinese; despite this, she reported that she was still motivated to continue writing her dissertation in English. Meanwhile, TT 4 talked about his changes. He had been fired from the media and marketing firm following the COVID-19 outbreak and decided to earn a master's degree; subsequently, he joined the academic community. This interviewee found that his learning strategies had changed as the number of lessons decreased during the pandemic, and all interviewees reported generally experiencing new learning communities after the pandemic that had affected their lifelong learning competencies, particularly their digital and multilingual skills. Despite this, they still prefer face-to-face learning.

Learning Strategies and Teaching Competencies

We found in the previous quantitative studies that the strategies the teacher trainers had applied to improve their teacher competencies were associated with their lifelong learning competencies, but we did not show which specific learning strategies they were practicing. In this study, our interview data revealed which learning strategies this group of 12 teacher trainers had used to improve their teaching competencies. Most reported relying on self-regulation, such as TT1:

- *Implementing the new curriculum for four-year degree colleges is a transition period. I have to learn a lot about how to teach the new curriculum to the student teacher because my colleagues are too busy to share their ideas, and all are pursuing studies for their Master's and PhD degrees locally and abroad.*

As less experienced teacher trainers, TT3 and TT4 reported that they usually conducted a lesson study with the heads of their departments and with experienced colleagues before delivering their lessons in the classroom, although they both preferred to study on their own when possible. TT5 and TT9 recognized that they learned through reading books, watching online video tutorials, imitation, observation, and reflection, but they did understand that collaborative learning should also be practiced. They are considered strong lifelong learners since they are more inclined to pursue lifelong learning if they believe they have great self-regulatory learning capacity (Nacaroglu et al., 2021). Overall, the respondents showed noteworthy differences in their learning strategies. Two preferred collaborative learning with their colleagues because they heard about different ideas; they sought training in newer curricula and school support to improve their teaching competencies. TT12 also said, "I prefer formal learning and expect the organizational arrangement as I cannot decide the appropriate training informally."

All the teacher trainers reported that their teaching competencies were also related to their lifelong learning competencies; for instance, they said they had improved while studying to improve their teaching competencies. Some teacher trainers reported significant improvements in their literacy, multilingualism, and cultural awareness competencies, attributing their improved literacy and multilingualism skills to the fact that they continued learning Burmese while they were also using English textbooks and teacher manuals; meanwhile, because the new curricula had been developed based on diverse cultures, the teacher trainers' cultural competence also increased. Separately, the teacher trainers reported apparent increases in their entrepreneurship competence as they learned to apply new teaching methods and create teaching learning resources. The teacher trainers in this study reported that their digital competence had improved when their new curricula included opportunities to apply their digital skills to their teaching practice. However, one teacher trainer felt her student teachers had greater digital competence than hers.

Some of the teacher trainers in this study offered suggestions for enhancing both teaching and lifelong learning competencies, including the following:

- Teacher trainers should be pre-assessed for particular competencies before undergoing formal training.
- Training must be conducted by experts who have experience in the field.
- More than training is needed; practical experience is necessary as well.
- Digital competence is crucial, so teacher trainees should have access to computers.
- A post-training assessment should also be conducted.
- Focusing on good health and engaging in reflective thought is more important, but it has nothing to do with their time.
- Teacher trainers should be interested in lifelong learning and should regularly evaluate themselves.
- It is essential to be aware of and pay attention to lifelong learning.
- Supportive learning communities and incentives such as promotions are essential for improving lifelong learning.
- Improving one's lifelong learning competencies will entail challenges.

These recommendations made by the teacher trainers are consistent with the findings of the previous studies. For example, Klug et al.(2014) listed the controllable factors for the lifelong learning model. Training, experience, and reflection are changeable facets of their studies on lifelong learning. Assessment is also a fostering factor for lifelong learning (Matsumoto-Royo et al., 2022).

Influencing Factors on Teacher Trainers' Lifelong Learning Competencies

Two main themes emerged from all the responses of the teacher trainers, each of which highlighted the influencing factors on lifelong learning competencies. These two themes revealed that all of the teacher trainers reported being influenced by both internal and external factors regarding their lifelong learning competences, as reflected in Table 2.

Table 3. Internal and external influences on lifelong learning competences

Internal factors	External factors
Confidence	Promotion
Interest	Chance to apply in the teaching Profession
Self-regulated learning	First teacher
Attitude and performance	Family background
Intelligence	Workload
Awareness	Time management
Laziness	Previous job experience
Loving profession	Opportunities to learn
Health	Training
Afraid	Pre-and post-assessment
Practice and Habits	Collaborative learning
Genetics	New curriculum
Enthusiasm	Challenges
	Supportive learning community
	Shortage of teacher trainers
	COVID-19

Internal and external elements are considered as the individual variables in the study of Shin & Jun (2019), including administrative position experience, lifelong learning experience, learning agility, learning motivation, and positive mental assets. They also discovered that these individual characteristics can significantly explain the variations in lifelong learning competence among schools. Additionally, they noted that the socio-psychological variables substantially impacted lifetime learning competencies more

than the demographic variables provided. Considering the present study's overall results, it can also be concluded that internal and external factors fall under socio-psychological variables. Due to this, background factors such as age and gender had less impact on lifelong learning competencies.

Although my interview was designed to emphasize these 12 teacher trainers' professional competencies and their development of lifelong learning competencies, only a few expressed personal development as well: "Having experienced the pandemic, I realize there are things we cannot control, so we must accept them, forgive ourselves and others, and become more understanding" (TT1) and "I have become more entrepreneurial and courageous because of the pandemic, and I see the potential in planning a second job outside teaching" (TT11). Their opinions align with the literature of Smith (2015) and Shrestha et al. (2008), who determined that lifelong learning had different dimensions, including a personal component, and called this process horizontal integration: a process during which learning activities are harmonized.

Limitations and Suggestions

This study has some limitations. First, because we developed the interview questions based on the results of previous, specific quantitative studies, they cannot be generalized to guide a comprehensive interview protocol for international contexts. Second, we applied purposive sampling, but influences of particular phenomena are particular to the participants in a study, which means the experiences of these 12 teacher trainers again might be different from broader populations. In addition, there could be other internal and external influences on lifelong learning competencies that we did not identify; for that reason, we propose that future researchers investigate the possible factors that influence teacher lifelong learning competencies both in Myanmar and worldwide. It is also important to note that we intended to explore teacher trainers' qualitative perceptions of their lifelong learning competencies with this study, and we did not quantitatively measure their actual lifelong learning competencies. However, our study highlights the need to build tests to assess the levels of lifelong learning competencies.

Conclusion

The present study explored more possible factors that can influence the lifelong learning competencies of teacher trainers. First, it revealed that teacher trainers perceived lifelong learning as learning to keep current with contemporary developments, focusing on their teaching profession. None of them are aware that a person's ability to engage in lifelong learning can be assessed using eight essential competencies. However, they reported that their highest competencies while the lowest are their scientific and mathematical competence and entrepreneurial and multilingual competence. They stated that their competence for learning to learn, literacy, multilingual, and digital were at the highest level of their list, while their competence for science and math and entrepreneurial and multilingual were at the bottom. Secondly, it found that most teacher educators hold the opinion that no factor, including gender, age, region of the education degree colleges, educational level, or area of employment, may affect the level of their lifelong learning competencies.

Additionally, their learning community changed due to the pandemic, which affected their digital and multilingual competence. Fourth, teacher trainers practiced self-directed learning and collaboration to improve their teaching competencies. As a result of this approach, their lifelong learning competencies are also enhanced. These findings reveal that internal and external factors significantly shape teacher trainers' lifelong learning competencies in Myanmar. The study results can be used to establish a strategic road map for lifelong learning, arrange professional development training in the light of lifelong learning, and promote each of the lifelong learning competencies in Myanmar.

References

- Adabaş, A. & Kaygin, H. (2016). Lifelong Learning Key Competence Levels of Graduate Students. *Universal Journal of Educational Research*, *4*(12A), 31–38. https://doi.org/10.13189/ujer.2016.041305
- Ayanoglu, C. & Guler, N. (2021). A study on the teachers' lifelong learning competencies and their reading motivation: Sapanca sample. *University of South Florida M3 Center Publishing*, *3*(2021), 3. https://www.doi.org/10.5038/9781955833042
- Bath, D. M. & Smith, C. D. (2009). The relationship between epistemological beliefs and the propensity for lifelong learning. *Studies in Continuing Education*, *31*(2), 173–189. https://doi.org/10.1080/01580370902927758
- Bozat, P. & Bozat, N. & Hursen, C. (2014). The Evaluation of Competence Perceptions of Primary School Teachers for the Lifelong Learning Approach. *Procedia - Social and Behavioral Sciences*, *140*, 476–482. https://doi.org/10.1016/j.sbspro.2014.04.456
- Buysse, V. & Sparkman, K. L. & Wesley, P. W. (2003). Communities of practice: Connecting what we know with what we do. *Exceptional Children*, *69*(3), 263–277. https://doi.org/10.1177/001440290306900301
- Buza, L. & Buza, H. & Tabaku, E. (2010). Perceptıon of Lifelong Learning In Higher Education. *Problems of Education in the 21st Century*, *26*, 42–51. http://www.scientiasocialis.lt/pec/files/pdf/vol26/42-51.Buza_Vol.26.pdf
- Cachia, M. & Millward, L. (2011). The telephone medium and semistructured interviews: A complementary fit. *Qualitative Research in Organizations and Management: An International Journal*, *6*(3), 265–277. https://doi.org/10.1108/17465641111188420
- Commission, E. (2018). *Report on a literature review of reforms related to the 2006 European Framework of Key Competences for Lifelong Learning and the role of the Framework in these reforms*. Publications Office. https://doi.org/doi/10.2766/533014
- Commission, E. (2019). *Key competencies for lifelong learning*. Publications Office. https://doi.org/doi/10.2766/569540
- Commission, E., Directorate-General for Education Sport and Culture, Y., & Directorate-General for Employment, S. A. and I. (2002). *A European area of lifelong learning*. Publications Office.
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. In *Educational Research* (Vol. 4). https://drive.google.com/file/d/1d5ZzlgJuCrwAyLpdBeK5dhKMZTpE2HNb/view
- Deveci, T. (2019). Interpersonal Communication Predispositions for Lifelong Learning: The Case of First Year Students. *Journal of Education and Future-EGITIM VE GELECEK DERGISI*, *15*, 77–94. https://doi.org/10.30786/jef.358529
- Deveci, T. (2022). UAE-based first-year university students' perception of lifelong learning skills affected by COVID-19. *Tuning Journal for Higher Education*, *9*(2), 279–306. https://doi.org/10.18543/tjhe.2069
- European Commission. (2018). Proposal for a Council recommendation on Key Competences for Lifelong Learning. In *European Commission*. https://ec.europa.eu/education/sites/education/files/annex-recommendation-key-competences-lifelong-learning.pdf
- European Council. (2006). Recommendation of the European Parliament and the Council on key competencies for lifelong learning. *Official Journal of the European Union*, *March 2002*, 10–18. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:394:0010:0018:en:PDF
- Grbich, C. (2022). Qualitative Data Analysis: An Introduction. *Qualitative Data Analysis: An Introduction*. https://doi.org/10.4135/9781529799606
- Grokholskyi, V. L. & Kaida, N. I. & Albul, S. V. & Ryzhkov, E. V. & Trehub, S. Y. (2020). Cognitive and metacognitive aspects of the development of lifelong learning competencies in law students. *International Journal of Cognitive Research in Science, Engineering and Education*, *8*(2), 1–14. https://doi.org/10.5937/IJCRSEE2002001G

- Hord, S. M. (2004). Learning together, leading together: changing schools through professional learning communities. In *Critical issues in educational leadership series* (pp. viii, 184 p.). Teachers College Press. http://mirlyn.lib.umich.edu/Record/004358360
- Klug, J. & Krause, N. & Schober, B. & Finsterwald, M. & Spiel, C. (2014). How do teachers promote their students' lifelong learning in class? Development and first application of the LLL Interview. *Teaching and Teacher Education*, *37*, 119–129. https://doi.org/10.1016/j.tate.2013.09.004
- Kuzu, S. & Demir, S. & Canpolat, M. (2015). Evaluation of Life-Long Learning Tendencies of Pre-Service Teachers in Terms of Some Variables. *Journal of Theory and Practice in Education*, *Eğitimde Kuram ve Uygulama Articles /Makaleler 11*(4), 1089–1105. https://doi.org/10.17244/EKU.09104
- Lavrijsen, J. & Nicaise, I. (2017). Systemic obstacles to lifelong learning: the influence of the educational system design on learning attitudes. *Studies in Continuing Education*, *39*(2), 176–196. https://doi.org/10.1080/0158037X.2016.1275540
- Matsumoto-Royo, K. & Ramírez-Montoya, M. S. & Glasserman-Morales, L. D. (2022). Lifelong Learning and Metacognition in the Assessment of Pre-service Teachers in Practice-Based Teacher Education. *Frontiers in Education*, *7*. https://doi.org/10.3389/feduc.2022.879238
- Muller, R., & Beiten, S. (2013). Changing learning environments at university? Comparing the learning strategies of non-traditional European students engaged in lifelong learning. *Journal of Educational Sciences & Psychology*, *65*(1), 1–7.
- Nacaroglu, O., Kizkapan, O., & Bozdag, T. (2021). Investigation of Lifelong Learning Tendencies and Self-Regulatory Learning Perceptions of Gifted Students. *Egitim ve Bilim*, *46*(205), 113–135. https://doi.org/10.15390/EB.2020.8935
- Pilli, O., Sönmezler, A., & Göktan, N. (2017). Pre-Service Teachers' Tendencies and Perceptions towards Lifelong Learning. *European Journal of Social Sciences Education and Research*, *10*(2), 326. https://doi.org/10.26417/ejser.v10i2.p326-333
- Sahin, M. & Akbasli, S. & Yelken, T. Y. T. Y. (2010). Key competencies for lifelong learning: The case of prospective teachers. *Educational Research and Reviews*, *5*(10), 545–556. http://www.academicjournals.org/ERR2
- Seah, S. & Lin, J. & Martinus, M. & Suvannaphakdy, S. & Thi, P. & Thao, P. (2023). *Southeast Asia 2023 Survey Report*. www.iseas.edu.sg
- Selvi, K. (2010). Teachers' competencies. *Cultura. International Journal of Philosophy of Culture and Axiology*, *7*(1), 167–175. https://doi.org/10.5840/cultura20107133
- Sen, N. & Durak, H. Y. (2022). Examining the Relationships Between English Teachers' Lifelong Learning Tendencies with Professional Competencies and Technology Integrating Self-Efficacy. *Education and Information Technologies*, *27*(5), 5953–5988. https://doi.org/10.1007/s10639-021-10867-8
- Şentürk, C. & Baş, G. (2021). Investigating the relationship between teachers' teaching beliefs and their affinity for lifelong learning: The mediating role of change tendencies. *International Review of Education*, *67*(5), 659–686. https://doi.org/10.1007/s11159-021-09917-7
- Shin, Y.-S. & Jun, J. (2019). The hierarchical effects of individual and organizational variables on elementary school teachers' lifelong learning competence. *International Electronic Journal of Elementary Education*, *12*(2), 205–212. https://doi.org/10.26822/iejee.2019257668
- Shrestha, M. & Wilson, S. & Singh, M. (2008). Knowledge networking: A dilemma in building social capital through nonformal education. *Adult Education Quarterly*, *58*(2), 129–150. https://doi.org/10.1177/0741713607310149
- Smith, C. R. (2015). Continuous Professional Learning Community of Mathematics Teachers in the Western Cape: Developing a Professional Learning Community Through a School-University Partnership. In *Unpublished doctoral dissertation. Cape Town: University of the Western Cape.* (Issue November). University of the Western Cape.
- Steffens, K. (2015). Competences, learning theories, and MOOCs: Recent developments in lifelong learning. *European Journal of Education*, *50*(1), 41–59. https://doi.org/10.1111/ejed.12102

- Strauss, A. & Corbin, J. (1998). *Basics of qualitative research techniques* (2nd ed). Sage Publications, Inc.
- Thomas, D. R. (2006). A General Inductive Approach for Analyzing Qualitative Evaluation Data. *American Journal of Evaluation*, *27*(2), 237–246. https://doi.org/10.1177/1098214005283748
- Thompson, S. C. & Gregg, L. & Niska, J. M. (2004). Professional Learning Communities, Leadership, and Student Learning. *RMLE Online*, *28*(1), 1–15. https://doi.org/10.1080/19404476.2004.11658173
- Thwe, W. P. & Kálmán, A. (2023a). Relationships between the perceptions of lifelong learning, lifelong learning competencies, and learning strategies by teacher trainers in Myanmar. *International Review of Education*, *0123456789*. https://doi.org/10.1007/s11159-023-10029-7
- Thwe, W. P. & Kálmán, A. (2023b). The regression models for lifelong learning competencies for teacher trainers. *Heliyon*, *9*(2). https://doi.org/10.1016/j.heliyon.2023.e13749
- Vaismoradi, M. & Snelgrove, S. (2019). Theme in qualitative content analysis and thematic analysis. *Forum Qualitative Sozialforschung*, *20*(3). https://doi.org/10.17169/fqs-20.3.3376
- Xiao, S. & Saedah, S. (2015). Professional learning community in education: Literature review. *The Online Journal of Quality in Higher Education*, *2*(2), 65–78.
- Yen, C. J. & Tu, C. H. & Sujo-Montes, L. E. & Harati, H. & Rodas, C. R. (2019). Using personal learning environment (PLE) management to support digital lifelong learning. *International Journal of Online Pedagogy and Course Design*, *9*(3), 13–31. https://doi.org/10.4018/IJOPCD.2019070102
- Yildiz-Durak, H. & Seferoglu, S. S. & & Sen, N. (2020). Some personal and professional variables as identifiers of teachers' lifelong learning tendencies and professional burnout. *Cypriot Journal of Educational Sciences*, *15*(2), 259–270. https://doi.org/10.18844/cjes.v15i2.3797
- Zuhairi, A. & Hsueh, A. C. T. & Chiang, I.-C. N. (2020). Empowering lifelong learning through open universities in Taiwan and Indonesia. *Asian Association of Open Universities Journal*, *15*(2), 167–188. https://doi.org/10.1108/AAOUJ-12-2019-0059.

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The New Paradigm of Integrating Community Engagement Concept in Ethiopian Public Universities: Challenges and Opportunities

Introduction

Less than 20 years have passed since Ethiopia's national legislators explicitly mandated Ethiopian Higher Education Institutions (HEIs) to promote societal development by proclamation no. 650/2009, which was later updated to proclamation no. 1152/2019. (FDRE, 2009; FDRE, 2019). Since then, research and discovery (knowledge advancement), teaching and learning (knowledge transmission), and community service (application of knowledge) have been the main duties of Ethiopian Higher Education Institutions. Due to its operational definition, the community service mandate—also known as "the third mission"—which is part of corporate social responsibility (CSR) encountered significant structural and functional issues.

According to the definition, “Community Service” means any unremunerated service that is performed by academic staff or students of HEIs with the knowledge of the responsible office; it is undertaken for the benefit of the public, its institutions, or for non-profit organizations (*MoSHE, 2019*). The localized ethnic political sentiment believes to be the cause of this definition. Politicians hoping to further their careers confuse the potential implications of university construction by associating it with the possibility of receiving "the third mission" at no cost to the people i.e. put the community as service receiver only. This creates non-reciprocating implementation of ‘the third mission’ in Ethiopian HEIs. The third mission culture that permeates Ethiopian Higher Education Institutions views these institutions as the exclusive providers and implementers of all resources, including community development. It is thought that this culture has contributed to the development of dependency syndrome in the local community that has been receiving these services. Because of this, the Ethiopian Ministry of Education has committed to redefining "the third mission" and envisions standardized, knowledge-based community engagement as a central function of Higher Education Institutions. This is because it is necessary to move from the previous model of "community service" to one of "community engagement," which fosters mutual relationships and reciprocity between the community and HEIs. Therefore, the new paradigm of ‘the third mission’ start working with setting operational definition to curve the challenge. In addition, the connotation (‘the third mission’) makes important stakeholders (at all levels: ministry of education, the university, college, and department) to give lesser attention this mandate. Hence, the new paradigm of redefining the approach of implementing ‘the third mission’ expected to correct the challenges of structural and functional of HEIs, resource allotted (share of budget, credit hour of staff, student engagement, etc.), and systematic link that connect HEIs with local and international community.

The new operational definition of the ‘the third mission’ of Ethiopian HEIs explained as: “Community Engagement (CE)” describes the collaboration between institutions of higher education and their larger communities (local, regional/state, national and global) for the mutually beneficial exchange of knowledge, resources, and practices to address pressing societal problems in a context of partnership and reciprocity according to operational definition of Community Engagement Directive for Higher Education Institutions, Ethiopian Ministry of Education (MoEDR1, 2019).

In the culture of ‘the third mission’ thought, emerging universities of Ethiopia have been sandwiching between the challenges from two sides: on one hand; budget allotted for society development project is the smallest portion of budget government allotted for each institution, on the other hand; the community ever increasing development demand. Thus, the paradigm shifts on "the third mission" aimed to save Ethiopian Higher Education Institutions by providing a chance to combine resources from all parties involved and help in expanding the institutions' reach for community development.

Additionally, as required by HEIs decrees, can foster collaborative planning, execution, and reporting of societal development initiatives and assist government efforts to reduce poverty. (FDRE, 2009; FDRE, 2019; United Nations, 2015). The process will not be easy, it calls for repeated multi-sectoral stakeholder collaborative dialogue to create awareness on the new paradigm of community engagement framework and strategies: service receiving to collaborating for service realization (United Nations, 2015).

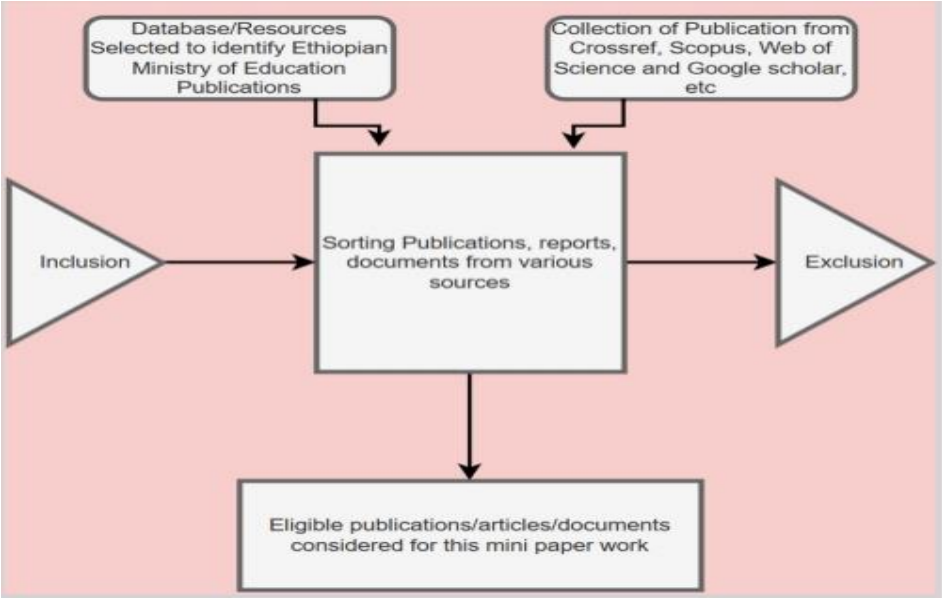
Therefore, corporate social responsibility mandate that given by UNESCO decree to HEIs is important for community dwelling in developing countries like Ethiopia and based on the concept Ethiopian HEIs have been working to improve the livelihoods for realization of sustainable economic development single handed. Introduction of community engagement approach to pool the necessary resources (such as expertise, material, and financial resources) is brought both opportunities and challenge and hardly studied (UNESCO, 1998; FDRE, 2009; FDRE, 2019; United Nations, 2015).

In conducting our literature and secondary data review, we meticulously selected sources to provide a comprehensive overview of the evolution of corporate social responsibility (CSR) in Ethiopian higher education institutions. Our research involved an extensive search of multiple academic databases, including Google Scholar and Web of Science, to ensure a broad and diverse representation of perspectives. We also relied on institutional databases, with the FDRE Ministry of Ethiopia being a primary source of data on the country's higher education institutions. We examined Ethiopian universities across all four generations and considered their respective dates of establishment to assess their experiences in fulfilling their CSR. Additionally, we gathered basic information from the official websites of each university for two key reasons: first, to link their establishment dates with their experience in CSR, and second, to understand their working definitions of corporate social responsibilities. To ensure our literature review was focused and relevant, we used keywords such as “community service,” “community engagement,” “corporate social responsibility,” and “higher education institutions of Ethiopia.” This careful and systematic approach provided a solid foundation for analyzing the challenges and opportunities within the paradigm of CSR in Ethiopian higher education institutions. Hence, the purpose of this research paper is to bridge this research gap and the aim of paper is to assess the new paradigm of Integrating Community Engagement Concept in Ethiopian Public Universities.

Methodology of the study

Several publications, organization documents such as Federal Democratic Republic Ethiopia Ministry of Education and websites visited as an approach grasp important information to realize the objective the paper. To make clearer review approach, the illustration below (Fig.1) to serve as conceptual diagram of the entire review processes. The article/publication/document selection criterion was not limited to geographical areas where the studies were conducted. The recent time frame is considered from 2020-2023 for articles but others time also considered with exception of the timeline specified to see the retrospect literatures about the issue at hand. Various databases were considered during reviewing such as (UNESCO, Federal Democratic Republic of Ethiopia Ministry of Education, more than 20 universities’, etc.). The keywords/search terms and combination of words from the topic the essay was used. As illustrated by conceptual diagram (Fig.1), database-based search, material collections, inclusion and exclusion of eligible/ineligible material was the process used as method for preparation of the paper.

Figure 1. Conceptual Diagram of the review process



Source: own illustration

Retrospective and Present Literature Review

Concepts and definitions taken from the sources of these databases are put together make understand the literature is about. The concept of university social responsibility (USR) is very explored in the literature, but there is not a single definition (Ribeiro et al., 2021). The operational definition HEIs in Ethiopia is showed on the introduction section of this paper. The definitions are from book that extracted the concept from 1998 UNESCO Decree for HEIs: World Declaration on Higher Education for the Twenty-first Century: Vision and Action (UNESCO, 1998; Ribeiro et al., 2021; Singh et al., 2023). UNESCO chair in CBR (2015, p.3) proposes that: Community University Engagement (CUE) as a 'concept implies relationships between universities and communities, which is mutually beneficial and adopt a bidirectional flow of information between the two; this engagement between universities and communities can be at the local, regional, national or even virtual levels, and aimed at the co-creation of knowledge, which is beneficial to society at large' whereas Benneworth et al., (2018, p.28) defines CE as: 'a process whereby universities engage with external organizations to undertake joint activities that can be mutually beneficial, even if each side benefits in a different way'.

University Community Engagement as CSR: Global trends and practices

In response to the increasing dynamism and complexity of the environments in which organizations function, including higher education institutions (HEIs), stakeholder theory was developed in the 1980s. One of the main goals of stakeholder theory's development is the creation of value for local communities (Langrafe et al., 2020). The 1998 UNESCO World Declaration on Higher Education for the Twenty-first Century: Vision and Action, which emphasized the social tasks of the entire higher education system, was conceived in a much more democratic spirit, as cited by (Reisinger & Dános, 2021). As the study showed that higher education institutions have been contributing to development through their missions, but still higher education systems need to respond to several challenges according to various demands from society (Olo et al., 2021). This is where the current popularity of HEIs' corporate social responsibility as university social responsibility originates (Reisinger & Dános, 2021). The declaration was believed to lay stepping stone for European HEIs university social responsibilities. As a result, the global trend of CSR in HEIs revealed a variety of experiences. For instance, in the case of Hungary, the research revealed that university social responsibility is one of the new approaches to this third mission and has gained more traction in recent years in Hungarian

higher education and there has been a university social responsibility program for almost 20 years (Reisinger & Dános, 2021). Like this, community engagement—also known as corporate social responsibility—is not new idea in Indian higher education, but it has taken on a new meaning and perspective in the last ten years due to a number of factors, with India gradually becoming a hub for CE in the Global South and having enormous potential to develop further in the future. (Singh et al., 2023). The authors claim that HEIs in the Global South are closely trailing behind HEIs in the Global North when it comes to CE in higher education. It is noteworthy that various nations exhibit varying degrees of maturity concerning the integration and mainstreaming of corporate social responsibility activities within their higher education discourses. Universities in North America and Europe have rebranded themselves and taken on more active and entrepreneurial missions. It's unclear how and to what extent African institutions are strategically shifting their positions in that regard (MoE, 2015). In addition, the book by Singh et al pointed out that now adays community engagement has defined values and principles as shown on table below (Table 1). Built on these values and principles, CE in HEIs can take multiple and diverse forms and can be adapted in different ways, depending on the local context, and understanding of the practice (Singh et al., 2023).

Table 1. Value and Principles of CE

Values	**Principles**
Capacity	Mutual interest and needs
Commitment	Multi-function focus
Contribution	Equality of opportunities
Continuity	Incentivization for mainstreaming CE
Collaboration	Embedding partnerships
Conscience	Mutual respect

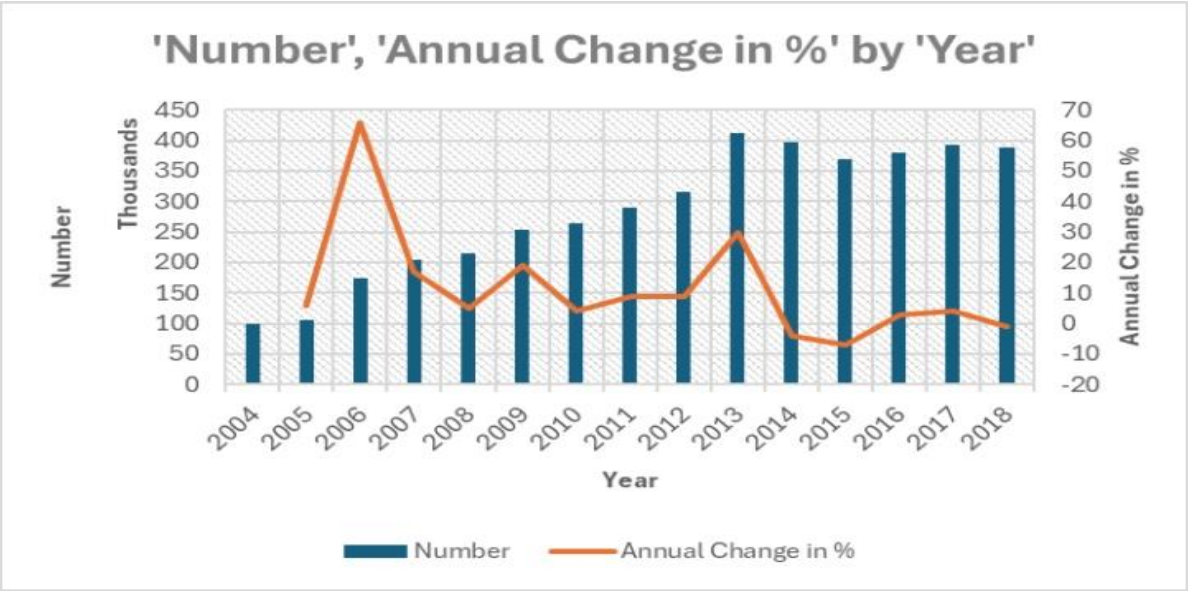
Source: adapted from Singh et al., 2023

Despite its crucial role in social transformation, higher education institutions face a number of internal and external challenges and barriers that must be overcome in order to realize the world we envision. These include differences in audience types, the political climate, and stakeholder interests (Žalėnienė & Pereira, 2021).

Ethiopian Higher Education Institutions

According to World Bank and UNDP, Ethiopia is the second most populous in Africa after Nigeria with about 123 million people (2022) and is growing at an annual rate of 2.6 percent, making it the second highest in Sub-Saharan (MoE, 2018; UNDP, 2022). According to Ministry of Education (MoE) of Ethiopia educational statistics 2022/23, the country has 52,202 schools with 26,457,127 students and 752,580 teachers (MoE, 2023). Despite the disparity in enrolment and graduation rates, research on higher education conducted by Dilla University scholars revealed a trend of increase in regular undergraduate enrolment and graduation rates at Ethiopian government universities. For example, enrolment was soaring showing significant difference in 2007, 2013, and 2016, and graduation rates were gradually increasing. These shifts (**Figure 2**) could be attributed to the emergence of second, third, and fourth generation universities. Hence, the scholars pointed out that the emergence of universities in the second, third, and fourth generations may be responsible for these shifts (Mekonnen Yimer et al., 2022).

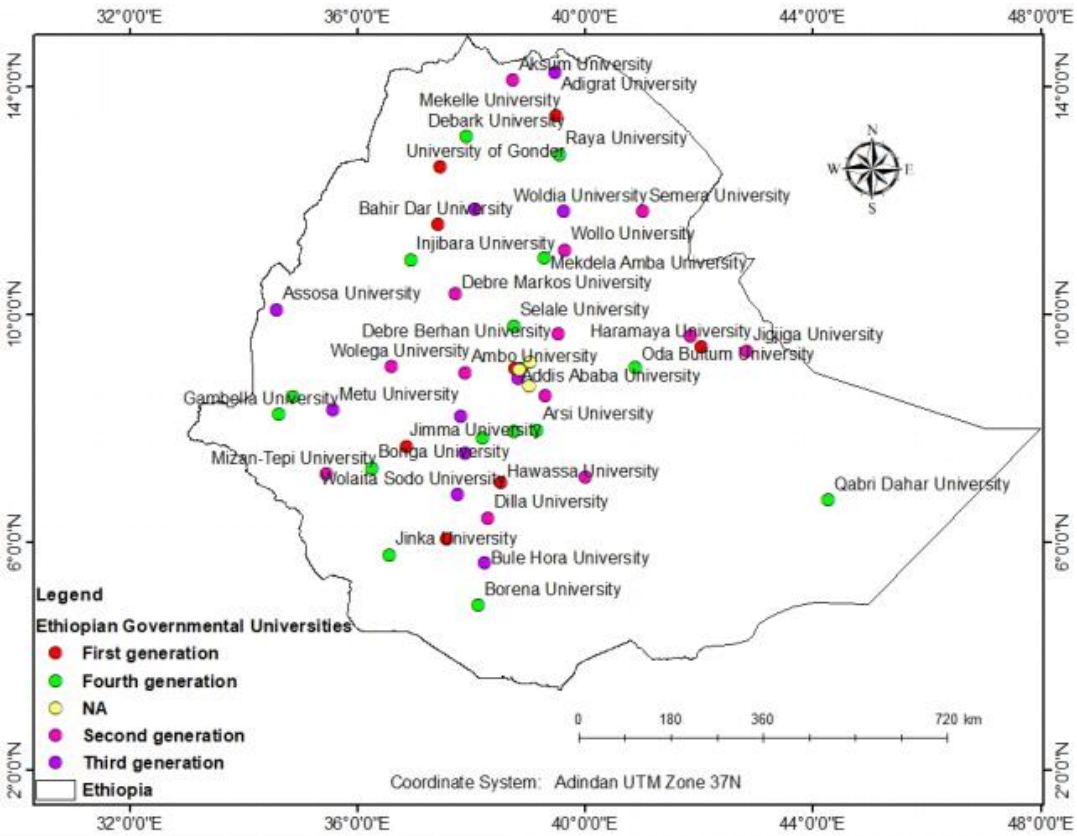
Figure 2. Ethiopian Higher Education Enrolment Trend



Source: using published data (Mekonnen Yimer et al., 2022)

Recently due to strict procedures followed by MoE the number of students enrolled in Ethiopian higher education is decreasing but no recent data found. As Table 2, Ethiopian higher education enrolment showed ever increasing number of student population in public universities located all over the regions of the country, Figure 3.

Figure 3. Ethiopian Higher Education Enrolment Trend



Source: Map Prepared by Wondifraw Nigussie, 2024

The Context of Ethiopian HEIs: Challenges and Opportunities in Implementing 'the third mission' of higher education

During the 20th century, Ethiopia's higher education system encountered challenges such as inequitable access, outmoded curriculum, inefficient resource usage, and poor educational quality (Endrődy et al., 2022). Since its genesis, higher education in Ethiopia has been through three governments whose ideological makings hold different forms: three regimes in Ethiopia, namely, the Imperial (1916-1974), the Socialist (1974-1991), and the Revolutionary Democratic regimes (1991-2018) (Aboye, 2021; Gurmessa & Bayissa, 2015; Journal & Vol, 2020). According to a decree, Ethiopian HEIs are required to carry out the society development mission, which enhances their reputation (FDRE, 2009; FDRE, 2019; Elifneh, 2015). The usual context of 'the third mission' work on operational definition of 'Community Service' which non- reciprocating flowing from one direction: from university to local community. With very few exceptions, Ethiopian HEIs and university faculty are young, and it is not useful to compare them to institutions in Europe that are 500, 250, or even older. For example, the oldest university**,** Bologna, established in 1088 (Zeleke & Hirko, 2018). There are advantages and disadvantages to the new paradigm's implementation. Opportunities for resource pooling will impact societal problem solutions, but the primary difficulties will still be limited collaboration and internationalization due to the country's institutional capacity limitations.

The table (Table 2) depicts the total lists of Ethiopian Public Universities with details such as year of establishment and generation. Based on their establishment Ethiopian public universities are grouped into 1st, 2nd, 3rd, and 4th generations. **University generation is exceptional to Addis Ababa University because it is the oldest, largest, and top-ranked public university in Ethiopia (Kitaw et al., 2020).** Studies and government strategy documents showed that there is noticeable difference among the 'old' and latest generations of Ethiopian universities in terms of quality of **educational and research infrastructure and facilities and their faculties.** Recently established university generations (**3rd and 4th generation universities**) have poor campus environment, are encountered with poor connectivity and a lack of technical expertise to properly develop and use ICT for academic and research purposes (MoE, 2018). In addition, Universities' research capacity is constrained by low available finances and by a small supply of capable researchers (MoE, 2015). Generally, according to Ethiopia Education Roadmap (2018-30), **majority of universities in Ethiopia have concentrated on teaching**, **and are not participating actively in research, community services and development endeavours of the country** as expected. Most faculties are engaged on teaching only. Only few faculties, especially in first generations universities involve in research (MoE, 2018).

Table 2. Total List and Data Summary of Public Universities in Ethiopia

No.	University	Year established	Generation
1	Addis Ababa University	1950	*
2	8 Universities	1999	1st Generation including AAU
3	13 Universities	2006	2nd Generation
4	10 Universities	2007-2011	3rd Generation
5	19 Universities	2012 - now	4th Generation and others

Source: Own table based on data from FDRE Ministry Education and Universities website

The table just show how young are HEIs in Ethiopia. The nation's first university, Addis Ababa University, was founded in the 1950s, marking the establishment of the country's higher education system. the early 1990s, when the Ethiopian government started to restructure the higher education industry. Between 1996 and 2005, the number of public universities increased significantly as a result of the reform, and which reached 50 in 2020 (MoSHE, 2020; Chalchisa, 2012).

To make clear how young Ethiopian universities are, Addis Ababa University was the first only university with some colleges in different parts of the country until 1999. In 1999 most of the colleges under Addis Ababa University decreed and upgraded to universities with additional two new universities (Arba Minch and Mekelle) to increase the number of universities into eight. In 2006 additional 13 universities added and then from 2007 to 2011 another ten added to increase the

number of universities 31 public universities in Ethiopia. With exception of Addis Ababa University and those universities in the first generation with age of less than 20 years. Currently public universities sum up to 50, including those higher institutions under the army and regional state 19 universities established after 2011 to date (MoE website; (Chalchisa, 2012).

Nowadays there is new paradigm in Ethiopian HEIs that have essence of differentiation into research universities, university of applied sciences, science and technology universities, and comprehensive universities (MoSHE, 2020). (MoE, #12). As one can clearly understand from the table (Table 2.) most Ethiopian HEIs are newly emerging and young to be innovative and reputable in international context due to resource and institutional capacity limitation. According to Ethiopian HEIs proclamation no. 650/2009 and the revised proclamation no. 1152/2019 the responsibility given to HEIs to contribute societal development coupled with enormous community development demand due to the prevailing poverty in local community give HEIs a huge burden to shoulder. This calls for paradigm in Ethiopian HEIs to revisit their organizational structure, systematic link of their institution with local, regional, national, and international communities structurally as well as functionally.

In terms of theory (research) and practice (implementing the new paradigm) of CSR in HEIs there seems to have limitation. A study conducted at three universities in South Africa on the community engaged teaching-learning modality has concluded that a transformation in nursing education can be achieved through the appropriate integration of community engaged teaching-learning into program design and curriculum development, as well as the use of explicit community engaged teaching-learning methods with intentional outcomes for students and communities (Muzeya et al., 2020). The Case-study of SCR on Addis Ababa University as recommended similar study replication of higher learning institutions in the country would refine and allow for generalizations of results as there is no study in the area about CSR in Ethiopia (Elifneh, 2015). The key finding of the study indicated that there is still the need for more efforts to improve the social responsibilities of the university.

Hence, HEIs making significant efforts to curve whatever the challenges in university social responsibility to opportunities. CSR is resource demanding, for example, the post-Bologna HEIs of Europe looking for ways in which to articulate the social dimension of HEI and their “third mission” fostering public-minded alumni through powerful experiences of engagement for both the students and the community (Coelho & Menezes, 2021). Among the innovative approaches to build community belongingness a genuine relationship that has a meaning is important specially to involve HEIs students to the work of community engagement (Haddow & Brodie, 2023). Furthermore, to cultivate the essence of CSR in HEIs its essential to begin from curriculum inception as a research paper pointed out that during the student-hood in higher education the design of teaching and learning scenarios with focus on social action projects shall ensure that the graduates are not only fit for labour market but also cooperative, thoughtful, and responsible citizen (Muzeya et al., 2020). By and large, Community engagement can serve as a vehicle through which the objective of nation-building and sustainable social development achieved (Singh et al., 2023).

Summary

As several literature pointed out and the concept of CSR to be put in practice in best proper way all stakeholders must be clear with the central essence of the concept/the paradigm. In case of Ethiopian HEIs top management (those from ministry of education, University president and vice presidents), middle level management (college deans, directors to community service, research, and technology transfer), lower-level management (department head), staff (teachers and technical staff) and student should be clear with the corporate social responsibilities of universities. The same from the local community side because the reciprocating benefit call for equal understanding of the concept from both sides.

Even though Ethiopian HEIs are so young that the institutional, staff, resource, etc. capacity is not giant but on adays the world is open to take lessons and the sooner they can discharge their responsibilities because of ‘the late comer advantage’. It’s clear that institution which are emerging, with young staff,

less exposed to the international similar scenarios, nurtured from curriculum not designed in view of CSR, faced new paradigm evolved from the previous but without knowing what was the former one, etc. are a real challenge that emerging universities of Ethiopia should face to be able to cultivate CSR principles and realized the community development mission.

Operating 'the third mission' single handed pooling all resources (financial, professional, material, etc.) from a university will not sustain the mission. The paradigm importance of shifting to community engagement in that it is a good strategy to pool of resources from all concerned stakeholders this can sustain the development of the society. The issue at hand requires a strong foundation that make sure third mission linked with the other two important missions of HEIs: teaching-learning and research. To start with the former, Universities should commit to the development of curricular/extracurricular activities to improve students' educational level and skills in sustainability (Ribeiro et al., 2021). Like with thematic research area must aligned with the local community development priorities. Approach of community engagement is better not only matching fund but also other non-finance resources for collaborative community development projects.

Generally, the essence of CE in HEIs win-win and realistic and make an opportunity to enhance the mission HEIs in a such way that bring the mutual beneficial exchange of knowledge and resources, encompassing all three of the dimensions of higher education, i.e., teaching, research, and societal development, realizing widening of capacity and development in both sides for community wellbeing. To this end, opportunities are conducive environments from local to international scope whereas challenges are issues related to linking CSR from inception of curriculum, community awareness about the CE paradigm, etc. In conclusion the new paradigm is very important in that it value the principle of working "with" community partners and not "for" them.

In conclusion, the international HEIs in the globe have been supporting staff from HEIs of developing countries in order to enhance their institutional capacity through scholarship, for example, Stipedium Hungaricum is the playing significant role by awarding about 50 post graduate Ethiopian universities each year. Therefore, such good start of nurturing and enhancing HEIs in developing nations like Ethiopia will have massive importance higher education sector capacity and economic development of the country.

References

- Aboye, A. (2021). Political Ideology and Academic Autonomy in Ethiopia. *Journal of Comparative & International Higher Education*, *13*(4), 16–27. https://doi.org/10.32674/jcihe.v13i4.2871
- Chalchisa, D. (2012). *Ethiopia by Regional Administrations* (Vol. 2519116378).
- Coelho, M. & Menezes, I. (2021). University Social Responsibility, Service Learning, and Students' Personal, Professional, and Civic Education. *Frontiers in Psychology*, *12*(February), 1–8. https://doi.org/10.3389/fpsyg.2021.617300
- Endrődy, O.& Tarrósy, I. & Kondorosy, C. (2022). *Ethiopia – the gateway to Africa*.
- Elifneh, Y. (2015). The Corporate Social Responsibility Practices and Concerns of Addis Ababa University: Implications for Higher Learning Institutions in Ethiopia. *Ethiopian Journal of Business and Economics (The)*, *4*(2), 309. https://doi.org/10.4314/ejbe.v4i2.5
- Federal Democratic Republic of Ethiopia, Ministry of Education:https://moe.gov.et/Publication (view on 2 January 2024) website of FDRE MoE HEIs Differentiation Document. https://doi.org/10.1007/978-3-658-39082-2
- Federal Democratic Republic of Ethiopia, Ministry of Education: https://moe.gov.et/ https://www.worldbank.org/en/country/ethiopia/overview
- FDRE (2009). Higher education proclamation No. 650/2009. Addis Ababa, Ethiopia: Federal Negarit Gazeta, No 64:4976-5044.
- FDRE (2019). Higher education proclamation No. 1152/2019. Addis Ababa, Ethiopia: Federal Negarit Gazeta, No.1152/2019.

- Gurmessa, Z. B., & Bayissa, J. T. (2015). Pay and performance in Ethiopian higher education: Implications towards staff motivation and engagement. *European Journal of Business and Management*, *7*(7), 328–339. Doi=10.1.1.734.7027&rep=rep1&type=pdf, https://iiste.org/Journals/index.php/EJBM/article/view/20542
- Haddow, C. & Brodie, J. (2023). Harnessing innovation approaches to support community and belonging in Higher Education. *Innovations in Education and Teaching International*, *00*(00), 1–14. https://doi.org/10.1080/14703297.2023.2176907
- Ibidunni, O. S. (2013). Corporate Social Responsibility in Higher Education Institutions in the Development of Communities and Society in Nigeria. In: Okpara, J. & Idowu, S. (eds) *Corporate Social Responsibility*. CSR, Sustainability, Ethics & Governance. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-40975-2_14
- Kitaw, D. & Seyoum, A. & Solomon, A. & Ejigu, G. & Ashenafi, M. & Abebe, T. & Mekonnen, Y. & Zewdie, B. & Ejigu, G. & Ashenafi, M. & Abebe, T. & & Mekonnen, Y. (2020). *Report of the Addis Ababa University Revitalization Study Committee*. *July*. file:///E:/Qualitative_Proposal/Addis Abeba university.pdf
- Langrafe, T. de F. & Barakat, S. R. & Stocker, F. & Boaventura, J. M. G. (2020). A stakeholder theory approach to creating value in higher education institutions. *Bottom Line*, *33*(4), 297–313. https://doi.org/10.1108/BL-03-2020-0021
- Mekonnen Yimer, B. & Demissie, M. & Herut, A. H. & Legesse Bareke, M. & Agezew, B. H. & Dedho, N. H. & Lebeta, M. F. (2022). *Higher Education Enrolment, Graduation, and Employment Trends in Ethiopia: An Empirical Analysis*. *June*. https://doi.org/10.20944/preprints202206.0093.v1
- Reisinger, A., & Dános, Z. (2021). Examining the Visibility of Social Responsibility on the Websites of Hungarian State Universities. *Deturope, 13*(3), 58–72. https://doi.org/10.32725/det.2021.019
- Ribeiro, V. & Monteiro, S. & Lemos, K. (2021). Sustainability and Accountability in Higher Education Institutions. In: Crowther, D. & Seifi, S. (eds). *The Palgrave Handbook of Corporate Social Responsibility*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-42465-7_27
- Singh, M. & Bhatt, P. & Singh, W. & Pareek, K. S. (eds.). (2023). *Community Engagement in Higher Education: From Theory to Practice* (1st ed.). Routledge India. https://doi.org/10.4324/9781003285670
- UNDP. (2022). Ethiopia 2030: A Country transformed? Options for A Next Generation of Reforms. *Working Paper Series |*, *2*, 1–41.
- UNESCO (2005) World Declaration on Higher Education for the Twenty-first Century: Vision and Action and Framework for Priority Action for Change and Development in Higher Education, adopted by the World Conference on Higher Education: Higher Education in the Twenty-first Century, Vision and Action, 9. October 1998: https://unesdoc.unesco.org/ark:/48223/pf0000141952
- Žalėnienė, I. & Pereira, P. (2021). Higher Education For Sustainability: A Global Perspective. *Geography and Sustainability*, *2*(2), 99–106. https://doi.org/10.1016/j.geosus.2021.05.001
- Zeleke, B. & Hirko, B. (2018). The dynamics of higher education governance policy process in Ethiopia. *The Ethiopian Journal of Higher Education*, *5*(2), 1-28.

Dóra HEGYESI & Ágota KRISZTIÁN

Gamification: is it suitable for all students?

Introduction

In the first school year after an extended COVID-19 lockdown, motivating children and making them collaborate after months of isolation was challenging. Moreover, in Hungarian vocational education and training, students can only learn the science subjects related to their vocation next to mathematics and a subject called "complex science," which is supposed to teach the basics of all STEM subjects combined. In this system, students have very little chance to understand complex processes, and this often leads to a high level of anxiety connected to these subjects.

Due to this situation, vocational students' motivation in STEM subjects – even if they are related to their future profession – could be more robust. This demotivation led to many students failing Geography in the examined vocational school, to which gamification was considered a viable solution. It led to two hypotheses. Firstly, a gamified learning environment will significantly affect the learners' motivation (H1). Secondly, students with different learning orientations or motivational styles will interact significantly differently with gamified learning (H2).

Literature Review

Motivation is one of the most popular interest fields in research of the past few decades for two reasons: it not only affects cognitive and psychological processes, but in today's consumer society, it is an essential trait as it is related to and determines one's feeling of self-efficacy (Ryan & Deci, 2000). A person's motivations are mainly formed throughout childhood and remain approximately the same throughout one's life (Atkinson, J.W. 1988). Motivation has two types: extrinsic and intrinsic. People experience intrinsic motivation when they perform an activity out of interest or enjoyment. *Extrinsic motivation* is a rather heterogeneous term that refers to any motivation that does not solely stem from inherent satisfaction, e.g., when one's main motive is to avoid failure (Ryan & Deci, 2000).

Kozéki and Entwistle (1983) state that affective, cognitive, and moral motives significantly affect students' in-school behavior. Their motivation is affected by five dimensions: a positive attitude towards school learning, the motive to avoid failure, curiosity, conformity, and the need for social recognition. Three types of students can be identified through these motivational dimensions: followers, performers, and enquirers (Kozéki & Entwistle, 1984). Follower-type students prefer detailed instructions and try to avoid individual work and failure. Enquirer students usually only participate in projects connecting to their interests, but if they do, they enjoy taking the lead. Performer-type students are mainly led by their potential success, but they tend to take responsibility for their learning so that a gamified system might help them the most. They also identified a subscale that shows whether a person experiences high outside performance pressure.

As a supplement to the motivational types, three learning orientations were also identified to gain more information about the traits and attributes of the examined learners: reproductive, organized, and deep learners. Reproductive learners' main goal is fulfilling the teacher's requirements, thus avoiding failure, but in extreme cases, these students are prone to high levels of anxiety. Students with an organized learning orientation seek a system in their studies; they find interdisciplinary connections easily and manage their time well. However, they mainly learn for rewards. Learners with deep orientation enjoy challenges and exploring on their own, though they tend to learn only those subjects that they specifically find interesting. A separate subscale identifies the level of instrumentality (how much one thinks of acquired knowledge as a tool to obtain something) regarding one's motivation (Kozéki & Entwistle, 1984). These two tools combined are regularly used in Hungarian educational

research, for example, as a diagnostic tool to develop better differentiation methods in language learning (Péter-Szarka, 2010) or to explore the underlying motivational components of students doing either recreational or competitive sports (Szűcs, 2016).

The connection between motivation and gamification

Based on the Self-determination Theory (Ryan & Deci, 2017), the need to develop ourselves is an innate trait. Thus, students who experience autonomy and self-efficacy during their learning process develop higher and predominantly intrinsic motivation.

Experiencing a classroom climate that supports autonomy and self-regulation (such as a gamified context) often results in higher motivation and better grades, even in STEM subjects (León et al., 2015). Since STEM courses often arouse anxiety in students, it is essential to introduce a system where motivation and autonomy can increase because anxiety and demotivation can lead to low performance. Furthermore, low participation during the lesson might negatively interfere with mastering key concepts (Ababio, 2013). Gamification is the implementation of game elements in a non-game environment (Al Fatta et al., 2019). It is now a widespread method in education however the usefulness of gamification is controversial.

According to Borys and Laskowsky (2013), who compared students' performance through traditional courses and gamified ones, gamification increases the involvement of students throughout the semester. However, it does not affect their academic performance. In theory, gamification is ideal for raising motivation levels since the critical elements of motivation are emotions and interest. In contrast, previous meta-analyses support the cognitive benefits of gamification (Karakoç et al., 2020; Wouters et al., 2013) but not in the area of motivation (Wouters et al., 2013).

From a cognitive point of view, gamification's clear guidelines and goals enhance motivation. Behaviouristic theories suggest that gamification's instant gratification system also supports the growth of motivation levels (Sailer et al., 2015). However, suppose students get points or rewards for every activity. In that case, it might push their motivation towards being extrinsic, resulting in students working for an external reward rather than for developing themselves.

Thus, gamification can quickly become extrinsically motivating and only sometimes lead to student learning (Hung, 2017; Mayer, 2020). Some possibilities for avoiding this are emphasizing collaborative methods or escape rooms, in which students have to compete against the game or the time limit and not against each other (Hanus & Fox, 2015). This is a more progress-oriented approach that highlights collaboration rather than instant gratification.

In a university setting, gamification can raise motivation for a particular subject. Moreover, it helps students develop predominantly intrinsic motivation towards that subject due to their experienced self-efficacy, rooted in the small successes obtained during the semester (Banfield & Wilkerson, 2014). A teacher has many instructional and methodological possibilities to enhance intrinsic motivation, such as structuring lessons consistently or introducing experiments and inquiry-based learning into the classroom (Komsoon, 1999).

Even though many research papers focus on comparing the motivational effects of traditional and gamified learning, the problem of learner types is only sometimes included in these papers, even though this factor extensively interacts with one's motivation. Regarding young adults (university students), there are recommendations for identifying learner types and player types since tailoring the game elements and the course structure around their specific needs might increase their learning efficacy (Abdollahzade & Jafari, 2018). In addition, most experiments are performed in a university setting, where students are generally motivated about their studies. At the same time, this research was conducted in a vocational school, where attendance is compulsory for the students, no matter their interests.

Methods

Research questions and hypotheses

The research was built around the following research questions and hypotheses:

- Q1: Do students with different motivational styles or learning orientations react differently to a gamified classroom context?
- Q2: Are there any motivational components that might shift towards the negative due to a gamified learning environment?
- H1: Students' motivational style and learning orientation affect the motivational response to gamified learning.
- H2: Students with deep learning orientation will experience significant positive change in their intrinsic motivation.
- H3: Not all learning orientations will react positively to gamification.

Sample Size and Sample Selection

The experiment was conducted in a vocational school of tourism and hospitality in the capital city of Hungary, Budapest. Two unrelated classes were picked for the research: a 10th-grade class on the tourism track and an 11th-grade class on the hospitality track. Students of both classes had two geography lessons per week. The classes were chosen by convenience; however, these two classes were chosen from all the possible participants because this combination provided the most significant possible heterogeneity to the sample. All students participated on their own, as well as with parental consent. The research ethics board allowed the study since the course's learning outcomes were still provided, and students could choose whether to continue learning in a gamified context or return to the more traditional evaluation methods.

The research participants were the students of the two classes whose parents allowed the data collection and who could participate in both of the data collection sessions. Twenty-one 10th-grade and eighteen 11th-grade students participated throughout the process (n=39) due to a COVID-19 wave during the research period.

Research Design

The research was conducted from September 2021 to January 2022. During the examined period, both classes covered two units of the same complexity in geography. The first unit material was traditionally presented (frontal, pair, and group work), and students received marks for each of their tests and projects, which were all compulsory. At the end of this unit, students' learning orientation and motivation style were identified using the tests developed by Kozéki and Entwistle (1984), and they filled out two questionnaires to monitor their motivation levels. The first one, the Instructional Material Motivation Survey (Keller, 1987) (from now on IMMS), assesses the factors in an instructional process that lead to increased motivation: attention, confidence, relevance, and satisfaction. The second one was a revised version of Fachraini's (2017) test on motivation type, assessing whether the participant experiences intrinsic or extrinsic motivation dominantly. The revision narrowed down the scope of the test to geography learning instead of general education-related statements.

The second unit was conducted through a gamified context. Students had compulsory and facultative tasks, which they could even design. For the tests and assignments, the learners received points, which they could exchange for certain benefits during the lessons, and the sum of their points provided their grade for the unit - so that the system could be transferred into the traditional educational requirements. The amount of points gained to reach a particular grade was known to the students from the beginning of the semester. Game elements were introduced during the lessons, such as board games, escape rooms, virtual field trips, and trivia games. At the end of this second unit, IMMS and motivation type were reassessed, and students could vote on which instructional method they would prefer during the next semester. The two motivation level tests were chosen to provide considerable heterogeneity to the dataset.

Data analysis

The data was analyzed using JASP. Saphiro-Wilk tests were performed to explore the data's distribution. After the assumption of a normal distribution, paired samples t-tests were performed to explore significant changes between the beginning and the end of the examined learning period. Based on these results, one-way ANOVAs were performed to further investigate the shift of motivational components separately.

Results

Descriptive statistics

Of the 39 participants, 20 belonged to the deep learning orientation, eight fell into the organized category, and 11 belonged to the reproductive orientation. It suggested a very interesting experiment outcome since, theoretically, students with deep learning orientation especially require autonomy and challenges throughout their learning process, which were provided through the gamified system. However, those students who have a reproductive learning orientation might experience a loss of motivation in a gamified context because of the more significant responsibility. The instrumentality factor, which shows whether students are primarily motivated by external rewards, had a mode equal to or higher than three in 12 sample cases. The two examined classes were very different in this aspect. While the majority of the 11th graders had deep learning orientation (14 out of the 18 participants), in the 10th-grade class 9 students belonged to the reproductive category, and six-six students to the deep and Fig. 1. - The composition of the 10th-grade class based on learning orientation Fig. 2. - The composition of the 11th grade class based on learning orientation organised categories.

Fig. 1. The composition of the 10th-grade class based on learning orientation

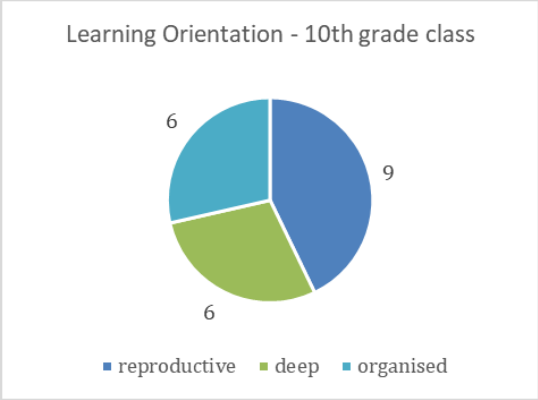
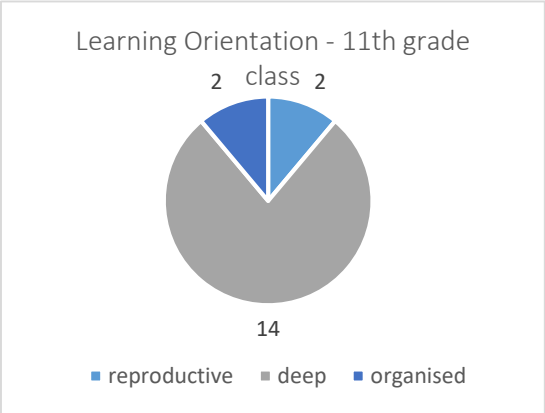


Fig. 2. The composition of the 11th grade class based on learning orientation



Regarding motivation type, the dataset was rather polarised. Twenty-three of the participants belonged to the performer type, 14 to followers, and 2 to inquire. Performer types usually take responsibility for their learning and prefer to plan, so an increase in their motivation was expected. Interestingly, the "pressure" factor, which measured the extent to which students experienced environmental stress regarding their studies, had an equalling to or higher mode than 3 in 14 cases at the beginning of the experiment, out of which 13 were performer students. These students' feelings of self-efficacy will grow during the examined period. The students who belonged to the inquiring type were not analyzed separately due to the small size of the sample.

Since all research tools in this study include five or more items per category, the variables can be treated as continuous, despite Likert-scale being traditionally treated as ordinal (Sullivan & Artino 2013). For a possible paired samples t-test a test of normalcy was done on the difference of variables between the first and second assessments. The Saphiro-Wilk tests' null hypotheses with a confidence interval of 5% can be rejected, suggesting the normal distribution of the dataset (Table 1). This allowed the performance of paired sample t-tests.

Table 1. Descriptive statistics of IMMS and motivation type subscales (change between start and end of experiment) with a confidence interval of 95%

Subscale	Mean	Std. Deviation	p-value of Saphiro-Wilk	W-value of Saphiro-Wilk
Extrinsic motivation change	0.286	0.664	0.111	0.974
Intrinsic motivation change	0.663	0.873	0.797	0.946
Attention change	0.664	1.054	0.207	0.124
Confidence change	0.361	0.815	0.869	0.890
Relevance change	-0.548	0.938	0.158	0.968
Satisfaction change	-0.921	1.236	0.599	0.800

Results of the paired sample T-tests

Table 2. Results of paired sample t-tests divided by learning orientation

	Deep			Organised			Reproductive		
	p	Cohen's d	t	p	Cohen's d	t	p	Cohen's d	t
extrinsic	0.142	-0.402	-1.558	0.028	-0.893	-2.224	0.500	-0.211	0.700
intrinsic	<.001	- 1.499	-5.807	0.057	-0.741	-2.679	0.536	-0.193	-0.624
confidence	0.001	-0.947	-3.903	0.048	-0.724	-2.289	0.449	0.238	0.788
attention	<.001	-1.000	-4.122	0.068	-0.656	-2.073	0.659	-0.137	-0.455
satisfaction	0.001	-0.951	-3.923	0.002	-1.380	-4.365	0.950	-0.020	-0.065
relevance	0.014	-0.666	-2.748	0.031	-0.809	-2.559	0.423	-0.252	-0.835

The paired sample t-tests brought varying results. Regarding learning orientation, unexpected results can be seen. Students with deep learning orientation experienced statistically significant change indicating a shift in the positive direction on all measured subscales except for extrinsic motivation. Per contra, organised students showed significant change in extrinsic motivation but not on the intrinsic subscale, despite the fact that all their IMMS components increased significantly except for attention. Even more interestingly, reproductive learners experienced no significant change on any of

the subscales, but there is a possible decrease of confidence in the case of these learners based on their needs mentioned in the literature review (Kozéki & Entwistle, 1984). This latter result led to a more in-depth analysis of the results through one-way ANOVAs to further investigate the differences in the changes between the students with different learning orientations or motivational styles during the studied learning period.

Table 3. Results of paired sample t-tests divided by motivational style

	Performer			**Follower**		
	p	**Cohen's d**	**t**	**p**	**Cohen's d**	**t**
extrinsic	0.099	-0.368	-1.725	0.205	-0.460	-1.380
intrinsic	0.001	-0.794	-3.725	0.067	-0.705	-2.114
confidence	0.129	-0.315	-1.573	0.044	-0.796	-2.388
attention	0.002	-0.706	-3.528	0.150	-0.531	-1.594
satisfaction	< .001	-0.810	-4.050	0.016	-1.019	-3.056
relevance	0.004	-0.631	-3.153	0.003	-1.444	-4.331

Regarding motivational style, both performer and follower students showed significant changes, however, in different subscales. In the case of performer students, a significant positive change can be proved on the subscales of intrinsic motivation, attention, satisfaction and relevance. Follower students showed so significant change in intrinsic or extrinsic motivation, but they also showed significant positive change on the satisfaction and relevance subscales, and interestingly, their confidence increased significantly during the studied period.

Results of one-way ANOVAs on the changes of motivation levels

The difference of motivation levels (change of averages per person) was calculated regarding each subscale in the IMMS and the motivation type survey, which were the calculated differences of values between the beginning and the end of the examined period. The relevant descriptive statistics can be seen in Table 1.

Since these variables are typically distributed, one-way ANOVAs were conducted, examining each subcategory individually (p values are shown in Table 4).

Table 4. The p and F values of ANOVA tests on motivation type and IMMS results

	Learning orientation		**Motivation style**	
	F-value	p-value	F-value	p-value
Extrinsic motivation	0.696(2,32)	0.506	0.262(2,32)	0.771
Intrinsic motivation	3.541(2,32)	0.041	0.389(2,32)	0.681
Attention	2.205(2,35)	0.125	0.419(2,35)	0.661
Confidence	4.636(2,35)	0.016	0.394(2,35)	0.678
Relevance	1.636(2,35)	0.209	0.583(2,35)	0.564
Satisfaction	5.556(2,35)	0.008	1.302(2,35)	0.285

While the ANOVA showed no significant difference in the change of attention and feeling of relevance between the students with different learning orientations, it can be seen that regarding satisfaction and confidence, reproducing learners experienced change during the examined period (Fig. 3., Fig. 4., Table 5.). Interestingly, during the gamified period these learners' confidence significantly dwindled, but the satisfaction factor of their motivation significantly grew.

Table 5. Results of Tukey Test on Satisfaction

Post Hoc Comparisons – Learning Orientation

		MeanDifference	SE	t	Cohen's d	p_{tukey}
reproductive	deep	1.123	0.428	2.621	1.014	0.034 *
	organised	1.522	0.484	3.146	1.375	0.009 **
deep	organised	0.399	0.441	0.904	0.360	0.641

* p < .05, ** p < .01

Note. P-valueadjustedforcomparing a family of 3

Fig. 3. Change of confidence grouped by learning orientation

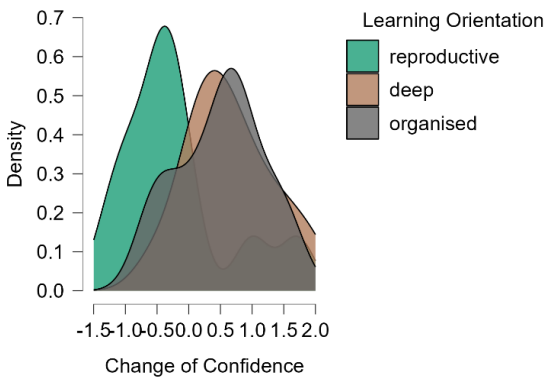


Fig. 4. Change of satisfaction grouped by learning orientation

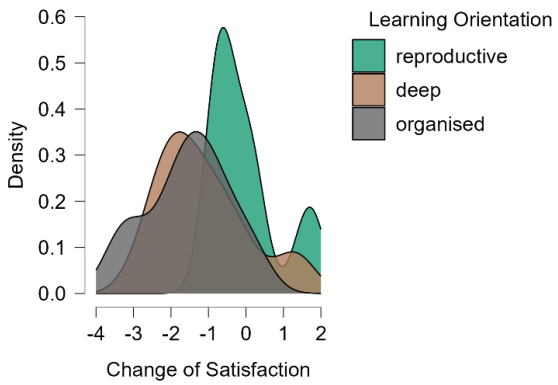


Table 6. Tukey Test results on confidence

Post Hoc Comparisons – Learning Orientation

		MeanDifference	**SE**	**t**	**Cohen's d**	**p_{tukey}**
reproductive	deep	-0.855	0.288	-2.966	-1.148	0.015 *
	organised	-0.708	0.325	-2.175	-0.950	0.090
deep	organised	0.147	0.297	0.495	0.197	0.874

* p < .05

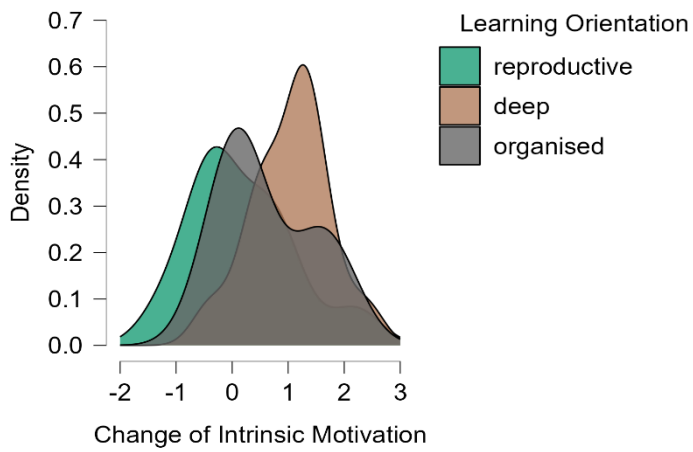
Note. P-value adjusted for comparing a family of 3

Table 6 suggests that there is a significant difference in confidence between students with reproductive and deep learning orientations (applying a 95% confidence interval). The effect size was

collated as part of the Tukey Test for post hoc comparisons. As Fig. 3 shows, reproductive learners' confidence decreased during the examined period, separating this group from the two others regarding this aspect.

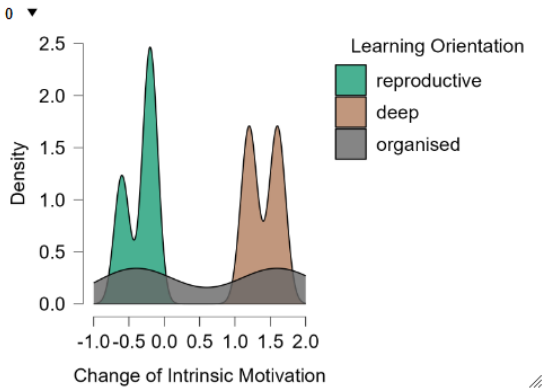
When the samples were filtered based on the level of pressure and level of instrumentality, the formerly mentioned phenomena were examined in more detail. When only those students' results were examined who either experienced high outside pressure or high instrumentality (mode > 3), there were no significant differences between the learning orientations. However, when only those students were included in the dataset who did not show instrumentality (p=0.861, variance=0.633), it appeared that the reproductive learners experienced a significant drop in confidence compared to deep learners (ptukey= 0.046, Cohen's d = -1.304). In the case when only students who did not experience high levels of outside pressure were included (p=0.912, variance=0.500), the negative change in confidence of reproductive learners was significantly different both from deep learners (ptukey= 0.020, Cohen's d = -1.667) and organized learners (ptukey= 0.046, Cohen's d = -1.601). When the two filters were applied simultaneously, and only those students' samples were examined, who experienced neither high instrumentality nor high outside pressure, there were no significant differences, but that could be a result of the small sample size in this case (n=15). The other subscales of IMMS showed no difference based on these filters.

Fig. 5. Change of intrinsic motivation grouped by learning orientation



Based on the Saphiro-Wilk test, the normal distribution of the motivation type results can be assumed (p=0.797 and p=0.111), and Levene's Test (p=0.480) also allowed the performing of a one-way ANOVA. During the examination of the motivation type results, a connection could only be found between learning orientation and the growth of intrinsic motivation. The Tukey test showed that only those students' intrinsic motivation grew significantly, who belonged to the deep learning orientation (ptukey=0.032, Cohen's d= -1.054) (Fig. 5).

Fig. 6. Change of intrinsic motivation when only the students with low instrumentality but high pressure included



Interestingly, when the data was filtered, and only the students with a high level of instrumentality (mode>3) were examined, the test showed no significant change in motivation levels. However, when the results were filtered both by the level of pressure and instrumentality, the results suggested that students with a high level of pressure but low level of instrumentality react very differently to motivation, based on learning orientation: such reproductive learner's intrinsic motivation seems to dwindle slightly, while students with profound learning orientation showed an increase in their intrinsic motivation (fig. 6). Unfortunately, the difference between them did not prove to be significant. Moreover, it turned out that no students with organized learning orientation experienced a high level of pressure in this sample.

At the end of the examined period, when the points had to be transformed into grades, a fascinating phenomenon occurred. While both classes voted for the gamified system against the traditional learning environment, not all students could turn this system to their advantage. It is impossible to connect the grades to learning orientations because of the anonymity of the project, but while in the class where most students had reproductive learning orientation, the class's average grade increased by almost 20%, in the class where nearly all students belonged to the deep learning orientation the class's average dropped by 17% during the gamified period.

Discussion

The results may be confusing, considering some contrasting tendencies. Even though most of the secondary literature connects gamification to motivation change, based on this data, a gamified classroom context affects students differently based on one's learning orientation. It is essential to mention that most of the students had the same motivational style, so significant differences between these measures were impossible to prove during this study.

The t-test results show the possibility of improvement in extrinsic and intrinsic motivation for most learners. Interestingly, regarding motivation style, performer students showed a significant increase in intrinsic motivation. It might be connected to the flexible nature of gamification, during which they can make up for worse grades and pick a project to work on based on their preferences or interests. This might be why performer students also showed a significant increase in attention while followers showed growth in confidence. Based on motivational style, nearly all students experienced significant growth on the satisfaction and relevance subscales.

However, if the same group of students is examined from the learning orientation aspect, a more complex situation unfolds. Learners belonging to the deep learning orientation experienced a significant change towards the positive in nearly all components of motivation, except for the extrinsic variable. Organized learners went through positive motivational changes in the extrinsic domain, but also regarding their feeling of confidence, satisfaction, and relevance. However, It is fascinating that reproductive learners were seemingly unaffected by the gamified learning context. Unfortunately, a slight decrease in motivation could be detected (with a higher confidence interval), which suggests that with a bigger sample size, gamification might cause loss of motivation for specific learners.

If one takes a closer look at the needs of students with different learning orientations, that might lead to an explanation. Students with a reproductive learning orientation usually try to avoid failure with hard work and much supplementary practice. In the case of the 10th graders, in which class there were many students with this orientation, several students submitted all of the assignments – even though not all of them were compulsory, thus collecting many points, which led to better grades. It could have raised their level of satisfaction, since their hard work brought a result. However, it has to be highlighted that while the change inin satisfaction brought significant results with the students having deep and organized learning orientations, based on Fig. 4, it is suspected that on a bigger sample, a significant decrease in satisfaction could be proven regarding all the other learning orientations.

On the other hand, in a gamified context, the reward comes in the form of points, and students expressed their insecurity about this at the end of the examined period. It was problematic for them

to communicate gaining points towards their parents, who were used to getting grades for each assignment or test. However, more is needed to fully explain the phenomena since the significant drop appeared in the case of those students who experience no instrumentality or no outside pressure. Achievement-oriented students appreciate or accept the point system more than those students who are not that focused on performance. Since gamification is performance-focused, it could be a demotivating environment, especially for those students who do not prefer learning individually with less guidance. Interestingly, Entwistle et al. (1987) have found a group of students with reproducing learning orientation who experienced high anxiety levels and outside pressure regarding their studies despite having better than average academic results during their research, which could also connect to the phenomena above regarding the decrease confidence, despite the lack of high anxiety levels in this case.

In the case of the motivational type, it is to no surprise, that students with profound learning orientation, who enjoy challenges and exploration, experienced a more significant increase in their intrinsic motivation. HoweverThe increase of motivation may not be enough for better academic results. In the case of the 11th-grade class, consisting of students with profound learning orientation mainly, participation during the lessons increased. However, even the growing intrinsic motivation was not enough to make the students hand in the assignments, which led to a significant drop in their grades. Based on the in-class discussion, they enjoyed the lessons and the methods of gamification, but this only raised their interest in geography, not in getting better grades.

Conclusion

In conclusion, even though this sample cannot be considered representative, it might suggest that gamification is only equally beneficial to some students. Learning orientation might affect the changes in motivation when one is learning in a gamified classroom context. While some learners might experience an increase in their intrinsic motivation, others might lose their confidence in themselves. Interestingly, while Entwistle et al. (1987) found that those reproducing learners' confidence drops who experience a high level of outside pressure induced anxiety, the opposite results appeared in this research. Nonetheless, this might be a very problematic aspect of gamification since if it makes one lose their feeling of self-efficacy, in the long term it could result in instrumental motivation - as autonomy and the feeling of self-efficacy are necessary for intrinsic motivation, or the loss of motivation all together.

Moreover, the student's academic outcomes should be taken into account as well. Based on these results, students with a reproductive learning orientation could grasp the opportunities and flexibility provided by gamification, which led to better grades. On the other hand, those students who belonged to the deep learning orientation didn't tend to utilize these possibilities.

The feeling of pressure was only assessed at the beginning of this research, but in later cases, it might be interesting to reassess that factor during the second data collection session. Based on the aforementioned results, different tendencies could be expected for specific learning orientations. To sum up, this study shows that gamification has not only benefits but also possible risks.

As a limitation of the research, the sample size was not representative to the school or to a general population of students, only regarding these two examined classes. On a bigger sample size, more refined connections could be discovered. The inner connections of the examined subscales could be examined through exploratory factor analysis in the long run and with a bigger sample size, identifying precisely what element of gamification leads to an increase or a decrease in motivation and which circumstance led to a slight decrease in this study.

References

- Ababio, B. T. (2013). Motivation and Classroom Teaching in Geography*, International Journal for Innovation Education and Research* Vol. 1-03, pp. 26-36.
- Abdollahzade, Z. & Jafari, S. M. (2018). Investigating the Relationship between Player Types and Learning Styles in Gamification Design. *Iranian Journal of Management Studies* (IJMS), 11(3), 573–600. https://doi.org/10.22059/ijms.2018.256394.673107
- Al Fatta, H. & Maksom, Z. & Zakaria, M. (2019). Game-based Learning and Gamification: Searching for Definitions*. International Journal of Simulation: Systems, Science &Technology*. 19, https://doi.org/10.5013/ijssst.a.19.06.
- Atkinson, J. W. (1988). A kockázatvállaló viselkedés motivációs meghatározói. In: Barkóczi Ilona és Séra László (szerk.): *Az emberi motiváció I-II.* – Tankönyvkiadó, Budapest. pp. 179–201.
- Banfield, J. & Wilkerson, B. (2014). Increasing student intrinsic motivation and self-efficacy through gamification pedagogy. *Contemporary Issues in Education Research (Online)*, *7*(4), p. 291.
- Borys, M. & Laskowski, M. (2013). Active Citizenship by Knowledge Management and Innovation. In *Implementing game elements into didactic process: a case study* – Zadar, Croatia. pp. 819-824.
- Entwistle, N., Kozéki, B., Pollitt, A. (1987). Measuringstyles of learning and motivation. *European Journal of Psychology of Education*, 2(2), 183–203. https://doi.org/10.1007/bf03172647
- Fachraini S. (2017). An Analysis of Students' Motivation in Studying English (A Survey Study at Uin ArRaniry Banda Aceh). *Getsempena English Education Journal*, 4, pp. 47-57.
- Hanus, M. D. & Fox, J. (2015). Assessing the effects of gamification in the classroom: A longitudinal study on intrinsic motivation, social comparison, satisfaction, effort, and academic performance. *Computers & Education*, 80, pp. 52–161.
- Hung, A. C. Y. (2017). A critique and defense of gamification. *Journal of Interactive Online Learning*, *15*(1), 57–72.
- Karakoç, B. & Eryılmaz, K. & Özpolat, E. T. & &Yıldırım, İ. (2020). The effect of game-based learning on student achievement: A meta-analysis study. *Technology, Knowledge and Learning*, 1–16, 207–222. https://doi.org/10.1007/s10758-020-09471-5
- Keller, J. M. (1987). Development and use of the ARCS model of instructional design. *Journal of Instructional Development* 10, 2.
- Koomson, A. (1999). "Basic teaching techniques" in *Educational Psychology Handout for PGDE Programme* (Unpublished): University of Cape Coast.
- Kozeki, B. & Entwistle, N. (1983). Describing and utilizing motivational styles in education. *British Journal of Educational Studies*, 31(3), 184-197 https://doi.org/10.1080/00071005.1983.9973658
- Kozéki, B. & Entwistle, N. J. (1984). Identifying dimensions of school motivation in Britain and Hungary. *British Journal of Educational Psychology*, 54, 306-319.
- León, J. & Núñez, J. L. & Liew, J. (2015). Self-determination and STEM education: Effects of autonomy, motivation, and self-regulated learning on High School Math Achievement. *Learning and Individual Differences*, 43, 156–163. https://doi.org/10.1016/j.lindif.2015.08.017
- Mayer, R. E. (2020). *Cognitive Foundations of Game-Based Learning*. Handbook of Game-Based Learning. MIT Press.
- Péter-Szarka, S. (2010). Az idegennyelv-tanulási motiváció és az azzal összefüggésben álló tanulói jellegzetességek változása a felső tagozatban. *Iskolakultúra*, 20(9), 105–117. https://ojs.bibl.u-szeged.hu/index.php/iskolakultura/article/view/21060 (2024.06.04.)
- Ryan, R. M. & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54-67.
- Ryan, R. M. & Deci, E. L. (2017*). Self-determination theory: Basic psychological needs in motivation, development, and wellness*, 3-19. https://doi.org/10.1521/978.14625/28806
- Sailer, M. & Hense, J. & Mandl, H. & Klevers, M. (2015). *Psychological Perspectives on Motivation through Gamification*. pp. 1-10.

- Sullivan, G. & Artino Jr. A. R. (2013). Analyzing and Interpreting Data From Likert-Type Scales. *Journal of Graduate Medical Education*. *5*(4), pp. 541-542.
- Szűcs, K. D. (2016). Az élsportoló diákság teljesítménymotivációja. In *„A mi tendenciáink…" Szakkollégiumi Tanulmányok* (Vol. 4, pp. 53–69). chapter, Hatvani István Szakkollégium.
- Wouters, P. & van Nimwegen, C. & van Oostendorp, H. & van derSpek, E. D. (2013). A meta-analysis of the cognitive and motivational effects of serious games. *Journal of Educational Psychology*, 105(2), 249–265. https://doi.org/10.1037/a0031311.

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The Role of Internationalization in the Sustainability of Private Colleges in the Malaysian Higher Education System

Introduction

The Malaysian higher education landscape has witnessed significant transformations over the past few decades, primarily driven by quality development and internationalization. This strategic direction aims to enhance the global standing and competitiveness of Malaysian institutions (Knight, 2004; Marginson, 2006), which aligns with principle 4 of the UN Sustainable Development Goals on quality education (UN.ORG, 2024). Internationalization in higher education is multifaceted, involving the integration of international, intercultural, and global dimensions into the purpose, functions, and delivery of post-secondary education (De Wit, 2011).

Higher education is critical in supporting education and research, significantly influencing a country's economic competitiveness. With a population of nearly 34 million, Malaysia has transitioned into a middle-income country characterized by a rapidly developing, multi-sector economy. After swiftly recovering from the downturn caused by the Asian financial crisis, Malaysia now boasts one of the highest standards of living in the region, according to the World Bank (2024)

Over the past two decades, the Malaysian government's strategic objectives have led to substantial advancements in its education system, particularly in higher education. These improvements serve as a model for other nations. Malaysia's strategic geographical location, its status as a liberal, multi-ethnic nation, and its dynamic initiatives have established it as an appealing hub for academic studies (EMGS, 2024). The government's strategy for higher education aims to enhance Malaysia's stature in the international education market. However, despite these achievements, the recent pandemic has highlighted the urgent need to stabilize and sustain the higher education sector (MEB, 2015).

Aim of the Study

This study presents a case study on the role of internationalization in the sustainable development of two Malaysian private institutes. It offers a detailed analysis of the structure and dynamics of the Malaysian higher education system. The paper aims to showcase practical approaches to addressing economic sustainability challenges faced by the rapidly evolving and internationalizing private higher education sector. This study provides insights that could benefit other organizations by analyzing and comparing the internationalization practices of emerging institutions with small student populations through the lens of selected partner institutions.

In the first part of our article, we provide a concise and comprehensive overview of the diversified system and current structure of Malaysian higher education, supplemented by figures and data, as well as the government's efforts towards internationalization and development that also impact the private institutions under review. Our analysis primarily draws on the abundant literature, data, and statistics provided by the Ministry of Higher Education and its agencies.

This foundational part sets the stage for the second part of our study, where we explore how enhanced internationalization contributes to more stable operations, supported by data from personal and onsite experiences.

The institutions examined, *IHM College* and *Erican College*, are official partner institutions of the University of Nyíregyháza. Given the dynamism and effective management observed in their development, the University is keen to develop these relationships further, establish joint educational programs, and intensify future cooperation with these selected organizations.

Based on the background and purpose of the study, here are three research questions that could guide the investigation into the role of internationalization in the sustainable development of Malaysian private Institutes:

- **How has internationalization influenced the economic sustainability of private higher education institutions in Malaysia?**
  - This question explores the impact of internationalization strategies on the financial stability and growth of private institutes in Malaysia, considering the challenges posed by unexpected global events.
- **What specific internationalization practices have contributed to the success of emerging private higher education institutions in Malaysia, and how can other similar institutions adopt these practices?**
  - This question seeks to identify and analyze effective internationalization strategies employed by successful private universities in Malaysia, emphasizing how these practices can serve as models for other institutions aiming to enhance their global presence and operational stability.
- **How have the partnerships between Malaysian private Institutes and international institutions, such as the University of Nyíregyháza, affected the development and execution of their educational programs and institutional growth?**
  - This question examines the impact of international collaborations on curriculum development, faculty exchange, student mobility, and broader institutional strategies, assessing how these partnerships facilitate mutual growth and international competitiveness.

These research questions are designed to delve into the critical aspects of internationalization within Malaysian higher education and assess its effects on institutional sustainability and strategic development.

The Structure and General Characteristics of Higher Education in Malaysia

The Malaysian higher education system was established in 1959 with the founding of the University of Malaya in Kuala Lumpur (Munusamy & Hashim, 2019). Since its inception, the development of this system has been continuous, primarily driven by the need to meet social demands and enhance economic competitiveness. Globalization, internationalization, and establishing international higher education networks have significantly shaped the system (Morshidi, 2010).

A pivotal moment in the evolution of higher education was the establishment of the independent Ministry of Higher Education (MOHE) in 2004, which marked a rapid sector development phase (Munusamy & Hashim, 2019, p. 23). The MOHE oversees the operation of public higher education institutions and also sets the guidelines for private higher education. (studymalaysia, 2024) The ministry aims to foster scientific and institutional excellence to meet national and global needs (MOHE, 2024). Over the past decades, the higher education sector has been prioritized in the national budget and supported by comprehensive legal regulations, reflecting the government's steadfast commitment to educational advancement.

Key elements of the legal framework regulating higher education include (studymalaysia, 2024):

- The Education Act 1996 (Act 550)
- The Private Higher Educational Institutions Act, 1996 (amended 2009)
- The National Council of Higher Education Act, 1996
- Malaysian Qualifications Agency Act 2007, which replaced the National Accreditation Board Act 1996 (now repealed)
- The Universities and University Colleges (Amendment) Act, 1996 (amended 2009)
- The National Higher Education Fund Corporation Act, 1997 (Amendment 2000)

The Private Higher Educational Institutions Act 1996 (Act 555) is particularly relevant to our study. It governs establishing and upgrading private universities and university colleges, branches of foreign universities, and converting existing private colleges to universities (EMGS, 2024).

In Malaysia, higher education providers are categorized into two main groups: public higher educational institutions and state-funded and private higher educational institutions, as detailed in Table 1.

Table 1. Higher Education Providers

Categories of Public Higher Educational Institutions (HEIs)	**Categories of Private Higher Educational Institutions** (PHEIs)
Public universities	Private universities
Community colleges	Private university colleges
Polytechnics	Foreign university branch campuses
	Private colleges

Source: (studymalaysia, 2024)

Table 2. Higher Education Qualification Levels Its Entry Requirements and Duration of Stud

Higher Education (Academic qualification levels)	**Type of Students/Duration of Study**	
Certificate Level	For students with secondary school qualifications such as SPM	Duration of 1 to 1,5 years
Diploma Level	For students with secondary school qualifications such as SPM	Duration of 2 to 3 years
Bachelor's Degree Level	For students with post-secondary or pre-university qualifications such as STPM, GCE A-levels, etc.	Duration 3 to 5 years
Master's Degree	For students with a bachelor's degree	Duration 1 to 3 years
PhD (Doctor of Philosophy)	For students with a master's degree	Duration 3 to 5 years

Source: (MQA, 2024)

The SPM (which is equivalent to GCSE 'O' levels) and STPM (which is equivalent to GCE 'A' levels) are the two recognised secondary and post-secondary qualifications.

Current Systems for Measuring and Ranking Performance in Higher Education

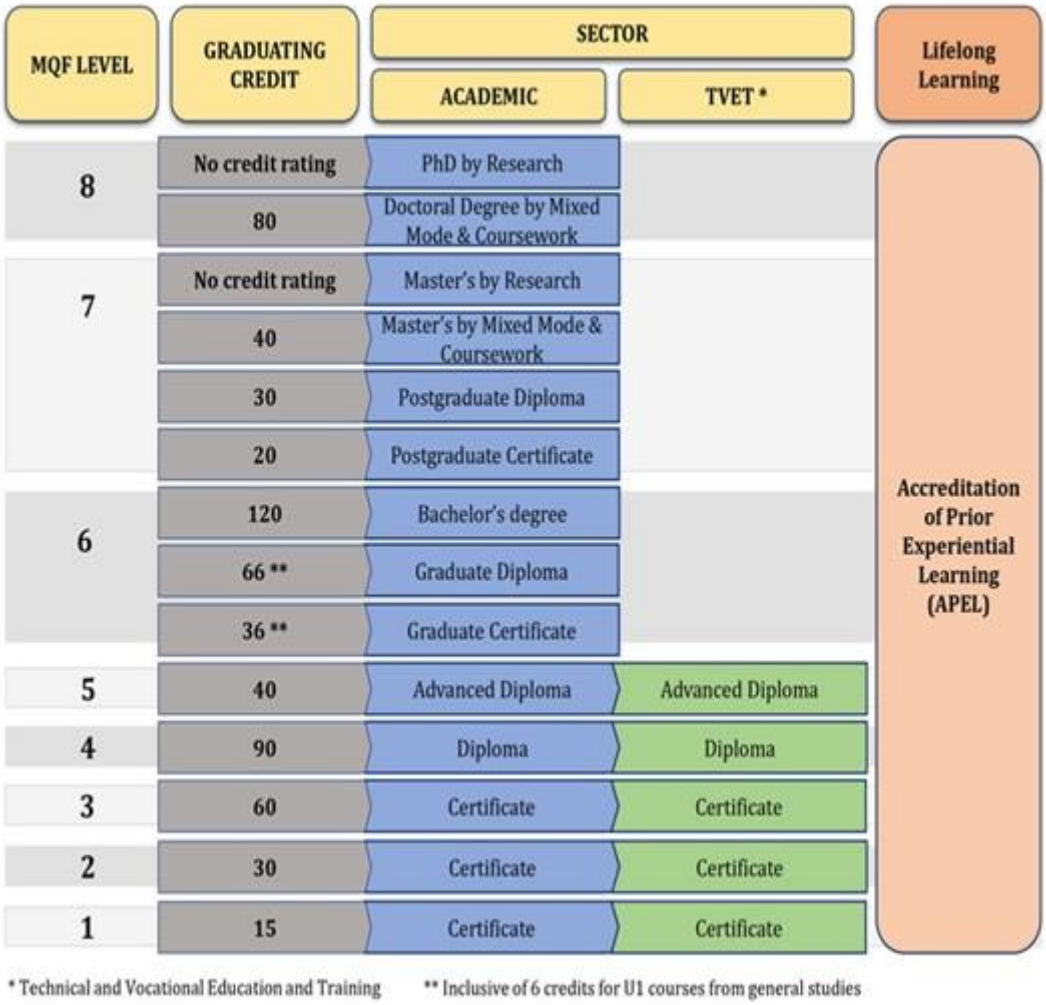
In Malaysia, the performance levels of higher education service providers are assessed through a dual rating system:

- SETARA, established in 2009, serves as the Rating System for Higher Education Institutions in Malaysia.
- QUEST, introduced in 2011, is the Malaysian Quality Evaluation System for Private Colleges (EMGS, 2024).

Levels and Providers of Higher Education

Higher education in Malaysia encompasses various levels including higher education certificates, diplomas, undergraduate degrees, and postgraduate degrees. Educational services are provided through a network of colleges, polytechnics, and universities according to Table 1, and Table 2. (EMGS, 2024).

Figure 1. Malaysian Qualification Framework 2nd Edition



Source: (MQA, 2024)

The Results of the Recent Past, the Current Situation, and the Direction of Strategic Development in Malaysian Higher Education

As reflected in the historical data, Malaysia's leadership has long demonstrated a commitment to dynamically developing the education system. In 1957, only 6% of the population had secondary education, but by the 1980s, this figure had risen to 45%, and by 2011, 78% of the relevant age group was enrolled in upper secondary education (MEB, 2015, p. 7). These results are notably superior to those of many developing countries.

The 2010s marked a historic period for higher education participation in Malaysia. According to ministry data, there was significant growth in enrollment rates between 2010 and 2019, with approximately 280,000 diplomas issued annually (WHEC, 2022). Enrollment increased by 16% until 2019, with 1.3 million students participating. However, data also indicate a continuous decline in private higher education enrollment since 2016. (Table 3.)

Currently, the higher education system in Malaysia provides a broad range of courses through an accessible, high-quality, and affordable system. According to recent data, 595 higher education institutions operate, including 20 state universities, 36 polytechnics, and 105 community colleges recognized as state higher education institutions (HEIs). Additionally, there are 404 private higher education institutions (PHEIs) and ten international branch campuses (IBC) (MOHE, 2024).

Critical national plans guide the strategic direction of development. The Shared Prosperity Vision 2030 (SPV, 2030) and the Twelfth Malaysia Plan 2021-2025 outline medium-term objectives, aiming to enhance the quality of higher education and increase the number of highly qualified workers in a competitive economy by supporting sustainable development and social progress (MOHE, 2024). At the policy level, the Malaysia Education Blueprint 2015-2025 (MEB) is a pivotal plan that applies to all higher education institutions in the country. It outlines five key directions for the future development of the education system: access, quality, equity, unity, and efficiency (MEB, 2015, p. 18).

Table 3. The Number of Enrolment in HEIs from 2010 to 2021

TYPE OF INSTITUTION	PUBLIC UNIVERSITY	PRIVATE HEIs	POLYTECHNIC	COMMUNITY COLLEGE	TOTAL
2010	462,780	541,629	87,642	18,200	**1,110,251**
2011	508,256	428,973	89,292	6,319	**1,032,840**
2012	521,793	454,616	92,148	22,380	**1,090,937**
2013	560,359	484,963	89,503	21,468	**1,156,293**
2014	563,186	493,725	92,181	17,985	**1,167,077**
2015	540,638	580,928	96,069	18,529	**1,236,164**
2016	532,049	695,026	99,551	20,232	**1,346,858**
2017	538,555	666,617	99,606	20,921	**1,325,699**
2018	552,702	668,689	96,370	26,069	**1,343,830**
2019	567,625	633,344	96,362	26,118	**1,323,449**
2020	584,576	537,434	85,936	16,152	**1,224,098**
2021	590,254	517,580	84,556	14,741	**1,207,131**

Source: (WHEC, 2022)

Internationalization Goals and Aspirations in Malaysian Higher Education

Today, national higher education policies are primarily focused on achieving international visibility. The strengthening of internationalization processes and the increasing influx of international students are crucial for the success of Malaysia's educational system and its goal of becoming an international education hub.

Although Malaysia's internationalization efforts commenced in the early 1980s, they intensified after the Ministry of Higher Education (MOHE) was established as the governing body. Creating the National Higher Education Strategic Plan 2011 marked a significant step in formalizing these efforts (Munusamy & Hashim, 2019). This plan outlined six core strategies for internationalization: student mobility, staff mobility, academic programs, research and development, governance, and autonomy, including aspects of social integration and cultural engagement (MOHE, 2011).

This initiative aimed to attract 200,000 international students by 2020, positioning Malaysia among the top six global destinations for international students (Mohd et al., 2013). Although this target still

needs to be met due to the pandemic, the strategic plan significantly enhanced the international visibility of Malaysia's higher education.

The Malaysian Education Blueprint (MEB) 2015-2025 aims to elevate the Malaysian higher education system to be among the world's best, enabling institutions to thrive in a globalized environment and increase the number of globally ranked universities (MEB, 2015).

International networking is pivotal in bolstering the internationalization of Malaysian higher education. Institutions engage in various international programs, such as twinning arrangements with foreign institutions, primarily from the United Kingdom, Canada, Australia, and the United States (Richards & Ismail, 2013). In these twin-institution programs, students typically spend the first two years of their studies in Malaysia and the final year abroad.

Over the past two decades, the dynamics of student mobility have significantly shifted, transforming Malaysia from a predominantly sending country to a receiving one. While research and knowledge creation has gained new emphasis, the government's policies aim to increase the number of incoming students to boost export earnings. The approaches of public and private sector institutions vary; public institutions benefit from state research resources, whereas private institutions focus more on attracting international students and dynamically increasing their numbers (Tham, 2013).

Economic factors often drive internationalization, as confirmed by Munusamy and Hashim (2019), who noted that income generation, financial sustainability, and economic growth are the predominant factors in the internationalization processes of institutions. Additional sources of income include the establishment of foreign branches in Malaysia, subsidized exchange programs, and foreign research grants.

The relatively low cost of living, high employment rates, job opportunities, vibrant, diverse culture, and safe environment contribute to the increasing attraction of international students to Malaysia. Education Malaysia Global Services (EMGS), an organization under MOHE, reported a significant rise in international student applications for 2022. Although official figures on the number of international students are not provided, various media sources estimate the number to be between 130,000 and 170,000 for 2022. Against an immediate target of 50,000 international student applications for 2022, EMGS received 51,270 applications by the end of December, marking a 27.5% increase from 2021. The primary source countries include China, Indonesia, Bangladesh, India, and Nigeria (ICEF Monitor, 2023).

With the growing number of international students, Malaysia is well on its way to attracting 250,000 international students by 2030 (MEB, 2015).

Sustainability Challenges in the Private Higher Education System in Malaysia

Despite its remarkable success, Malaysia's dynamically developing higher education sector is currently facing multifaceted challenges. (WHEC, 2022). On the one hand, there is a strategic need to upgrade outdated infrastructure and advance in digitalization to improve the quality of education (MEB, 2015). On the other hand, the COVID-19 pandemic has highlighted the vulnerability of a higher education system heavily reliant on internationalization, particularly within the private sector. (Liam, 2022)

The impact of the pandemic is evident in the enrollment figures: the number of registered students dropped to 1,207,131 in 2021, marking a 1.4% decrease from the previous year. (Table 3). The situation in private higher education institutions (PHEIs) is even more pronounced, with enrollments falling from 695,026 in 2016 to 517,580 in 2021, a reduction of nearly 25% (Table 3).

The private higher education sector is crucial in attracting international students to Malaysia, with about 45% of Malaysian tertiary students studying at PHEIs. From 2018 to 2020, the tuition fees from these students contributed approximately RM40 billion to the Malaysian economy (WHEC, 2022). However, most PHEIs operate as for-profit entities primarily funded through tuition fees, making them

especially susceptible to external pressures. (Tan, 2015) These institutions have long faced intense competition and significant financial and sustainability challenges (Tan, 2015).

Research indicates that 55% of PHEIs were unprofitable before the pandemic, 44% were technically insolvent, and 64% faced severe debt issues in 2018 (Asia Sentinel, 2020). The onset of the COVID-19 pandemic exacerbated these challenges as international students had to defer enrollments due to the Movement Control Order (MCO).

The number of operational PHEIs has declined: 89 PHEIs ceased operations between 2015 and 2019. 2018 there were still 447 PHEIs, hosting over 666,000 students, including 131,000 international students (Lim, 2022). An additional 16 PHEIs closed during the pandemic (2020-2021), mainly due to financial distress. From more than 600 PHEIs in 2013, only 434 remained by the end of 2021, and this number further decreased to 404 by 2024 (WHEC, 2022; MOHE, 2024).

These trends indicate that the financial difficulties within the sector predate the pandemic. Reports and articles long before the pandemic highlighted the financial struggles faced by PHEIs (Tan, 2015). It suggests that the sustainability challenges of private higher education institutions extend beyond the impacts of COVID-19 and continue to affect the Malaysian higher education system today. These issues are currently under scrutiny by the Ministry of Higher Education (MOHE), which plans and implements several intervention strategies and initiatives to address them (MOHE, 2024).

IHM College

IHM College, located in downtown Kuala Lumpur, is a private higher education institution known for its outstanding infrastructure. Since its establishment in 1993 as In-House Multimedia College, it has aimed to fill the skills gap in multimedia design. With a student population exceeding 500, IHM College offers diploma and certificate programs recognized for their quality.

Leading industry professionals craft the academic programs at IHM to maintain high standards and relevance. These programs emphasize acquiring knowledge, practical skills, and analytical capabilities essential for careers in the digital industry. The college's management is committed to making IHM a top educational institution by offering high-quality, accessible, and affordable education while striving to enhance its international presence.

Between 2012 and 2016, IHM College experienced a continuous and dynamic increase in enrollment, reflecting a broader national trend. In 2014 alone, the number of new students surged by 64%, totaling 432 enrollments. In 2016, enrollments rose by 69% compared to the previous year. However, the COVID-19 pandemic significantly impacted student numbers. In 2021, enrollment dropped to just 18 students, including no international students, due to management challenges and a need for a robust internationalization strategy.

The college's economic and sustainability challenges worsened during the pandemic, casting doubt on its future direction. Despite these obstacles, 2022 saw a remarkable recovery with 134 enrollments, a 7.5-fold increase from the previous year, and in 2023, the college welcomed 210 new students. The majority of international students currently come from Bangladesh.

Table 4 below presents the enrollment figures for IHM College from 2012 to 2023, including the number of international students.

Table 4. The Number of Enrolment students in IHM College from 2012 to 2023

Year	MALAYSIAN CITIZEN	INTERNATIONAL STUDENTS	TOTAL
2012	94	87	**181**
2013	152	128	**280**
2014	187	245	**432**
2015	98	182	**280**
2016	117	284	**401**
2017	67	53	**120**
2018	14	0	**14**
2019	17	0	**17**
2020	28	0	**28**
2021	18	0	**18**
2022	73	61	**134**
2023	25	185	**210**

Source: (own source)

Erican College

Erican College, situated in the heart of Kuala Lumpur, is a part of the award-winning Erican Education Group, a comprehensive education provider established in 1990. Over the years, Erican Education Group has assisted more than 300,000 students in acquiring tertiary qualifications and language skills. Today, Erican College offers an extensive range of tertiary programs designed to meet the needs of the competitive modern business world.

Erican College, a private institution, has been awarded a MyQuest 5-Star rating by the Ministry of Higher Education, placing it in the top 5% of colleges. The college has also been recognized as the Best Mid-Sized College for four consecutive years (2016-2019) by the National Association of Private Education Institutions. Notably, the college offers a unique dual-award program, allowing graduates to receive diplomas from Erican College and the prestigious City of Oxford College, UK, thus enhancing their academic and employment opportunities. Additionally, it serves as a Certified Examination Center for the University of Cambridge English Language Assessment.

Enrollment trends at Erican College, as depicted in Table 5, show a continuous increase from 2012 to 2015. However, a decline began in 2016, with a dramatic drop in numbers during 2019 and the pandemic year of 2020, when only 26 students enrolled. The suspension of foreign student admissions from 2018 to 2021 significantly impacted total enrollments, leading to considerable economic challenges due to a loss of income.

In 2022, mirroring efforts seen at IHM College, Erican College revitalized its internationalization efforts, resulting in 281 applicants—twice the number from the previous year, with nearly two-thirds being international students.

The year 2023 marked a historic peak in enrollment, with 633 applicants, including an unprecedented 85% proportion of international students. Of these, 283 came from Bangladesh, 151 from Sri Lanka, and 114 from various other nationalities, making enrollment the most successful year in the college's history.

Table 5: The Number of Enrolment in Erican College from 2012 to 2023

Year	MALAYSIAN CITIZEN	INTERNATIONAL STUDENTS	TOTAL
2012	67	126	**193**
2013	143	98	**241**
2014	83	186	**269**
2015	95	204	**299**
2016	124	172	**296**
2017	78	85	**163**
2018	104	0	**104**
2019	41	0	**41**
2020	26	0	**26**
2021	33	0	**33**
2022	92	189	**281**
2023	85	548	**633**

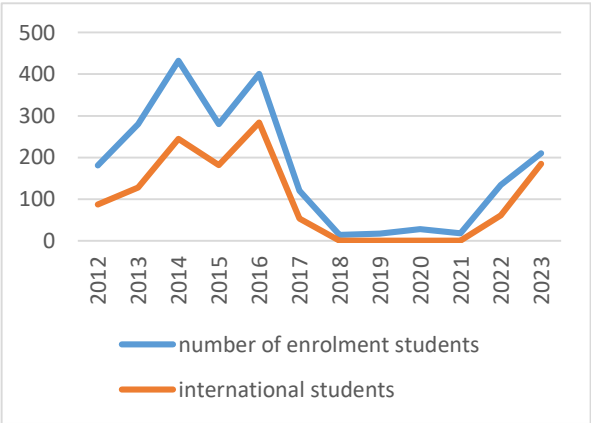
Source: (own source)

Enhancing Sustainability Through Internationalization

Following the prolonged impact of the pandemic, both institutions have redirected their focus toward the international education market. Central to their new strategies is the enhancement of internationalization processes and marketing. The initiation of several targeted activities has proven successful, evidenced by a significant increase in the enrollment of international students, which has inspired further strengthening of these processes.

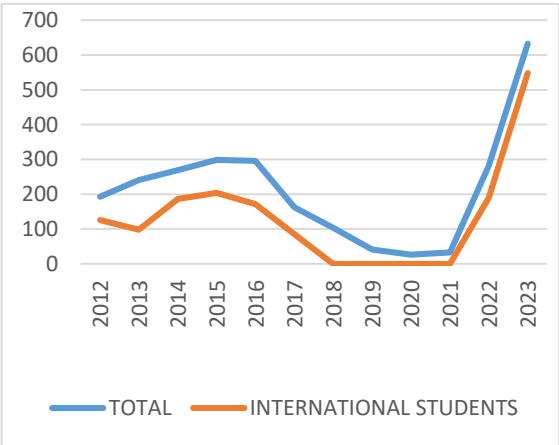
The trends in enrollment, both increasing and decreasing, correspond with the fluctuations in international student numbers. This correlation is depicted in Figure 2 for IHM College and Figure 3 for Erican College.

Figure 2.: The Number of Enrolment in IHM College from 2012 to 2023



Source: (own source)

Figure 3.: The Number of Enrolment in Erican College from 2012 to 2023



Source: (own source)

Activities to Enhance Internationalization at the Institutions Include:

- **Enhanced Recruitment Strategies:** Developing a recruitment strategy that includes active participation in international education fairs, collaboration with international schools and recruiters in crucial target regions, and using current and former students as ambassadors to boost international recruitment.
- **Creation of an International Marketing Office:** Establishment of this office staffed by an international team of experts.
- **Marketing and Branding:** Launch a digital marketing campaign and create high-quality marketing materials that showcase the institution's unique features, such as industry connections and innovative programs. The materials also highlight the success of international alums and the possibilities of obtaining dual degrees at Erican College.
- **Integration Programs:** Implementation of comprehensive orientation and ongoing integration programs for international students, which include language support, mentoring by local students, and cultural exchanges to enhance retention and success rates.
- **Expansion of Networks and Partnerships:** Increasing the attractiveness of the institutions through partnerships with international universities for program development, twinning programs, joint degrees, faculty exchange programs, and research collaborations.
- **Organization of Community Events:** IHM College hosts international conferences, workshops, seminars, and regular community and sports events, such as weekly badminton sessions and study tours. These events enhance the college profile and provide networking opportunities with international experts, contributing to community building and successful integration.

These strategic elements are designed to make IHM College more appealing to the international education community and to foreign students and faculty, thereby enhancing its global reputation and educational quality. The goals and activities aim to bolster Erican College's position in the international market, improving its ability to attract and retain a diverse and talented student body worldwide.

Both institutions benefit from well-equipped infrastructure, accessible and impressive environments, experienced instructors, and diverse interdisciplinary study programs that meet global standards and real market needs. However, they face challenges such as intense international competition, global economic instability, stricter visa regulations, and a diverse student body with varying needs.

While Erican College enjoys greater brand recognition and offers a unique international dual-award program, IHM College, as a smaller institution, is still developing a broader higher education reputation and brand, which can be a barrier to attracting international students.

The strategic goal for both institutions is to strengthen internationalization further, anticipating future success and a more predictable and sustainable operational trajectory through the expansion of partner and exchange relationships and enhanced international visibility.

Conclusion

Malaysia strives to position itself as a developed state within the region by enhancing its economic competitiveness. (MEB,2015) Over recent decades, successive governments have demonstrated a solid commitment to continuously improving the quality of the higher education and research sectors. (MEB, 2015)

This commitment is supported by substantial state resource allocation to education, the establishment of an independent Ministry of Higher Education, ongoing strategic planning, and a well-regulated structural and legal framework complemented by an interoperable, unified qualifications framework (study Malaysia, 2024). These efforts have contributed to the successes in education and internationalization, propelling Malaysia towards developing a world-class education system.

However, despite these remarkable achievements and ambitious targets, the current dynamics of the higher education system are fragile, and it faces numerous challenges (Tan, 2015). A particularly

concerning issue is the sustainability of the private higher education system, which, despite generating significant student numbers and substantial income and being at the forefront of internationalization, has long grappled with sustainability issues—challenges exacerbated by the COVID-19 pandemic. (MEB,2015)

Although small in staff size, the partner institutions of the University of Nyíregyháza display dynamic leadership and have significant future goals. Our case study, based on onsite data collection and firsthand experiences, demonstrates that with effective organization and an expanded and fortified process of internationalization, even private institutions built on solid foundations can achieve stability. Enhancing internationalization could be a viable solution for institutions facing sustainability challenges.

In our study, as specialists in internationalization, we sought to gather and compare exemplary internationalization practices through onsite sampling. Our findings are intended to serve as a model for other smaller educational organizations, illustrating how strategic international engagement can underpin institutional sustainability and growth.

References

- Altbach, P. G., & Knight, J. (2007). The Internationalization of Higher Education: Motivations and Realities. *Journal of Studies in International Education*, 11(3-4), 290-305.
- Chong, P. Y. (2019). *Determinants of international students' perceived value and the effect of satisfaction at private universities in Malaysia.* The National University of Malaysia. Bangi
- Cubillo, J. M. & Sánchez, J. & Cervio, J. (2006). International students' decision-making process. *International Journal of Educational Management,* 101–115 p. URL: https://doi.org/10.1108/09513540610646091 (Last download: 28/04/2024)
- DE WIT, H. (2011). Globalization and Internationalization of Higher Education [introduction to online special issue]. *Journal of University and Society of Knowledge* (RUSC). 8(2) 77-84.
- Education Malaysia Global Services website (EMGS,2024) URL: https://educationmalaysia.gov.my/ (Last download: 28/04/2024)
- Hudzik, J. K. (2011). *Comprehensive internationalization*. Washington, DC: NAFSA, The Association of International Educators.
- Hunter, M. (2020). The collapse of Malaysian private universities: COVID-19 is just the latest problem. *AsiaSentinel* URL: https://www.asiasentinel.com/p/the-collapse-ofmalaysian-private (Last download: 28/04/2024)
- *ICEF Monitor (*2022). Malaysia exceeds target for new international student applications in 2022 (ICEF Monitor, 2022) URL: https://monitor.icef.com/2023/02/malaysia-exceeds-target-for-new-international-student-applications-in-2022/ (Last download: 28/04/2024)
- Knight, J. (2004). Internationalization remodeled: Definition, approaches, and rationales. *Journal of studies in international education*, 8(1), 5-31.
- Lim, B. (2022). Coronavirus disruptions to the private higher education sector in Malaysia In J. S. McKeown, K. Bista, & R. Y. Chan (Eds.), *Global higher education during COVID-19: Policy, society, and technology* (pp. 92-103). STAR Scholars. URL: https://starscholars.org/product/global-education/ (Last download: 28/04/2024)
- *Malaysian Qualification Agency* website (MQA, 2024). URL: https://www.mqa.gov.my/ (Last download: 28/04/2024)
- Marginson, S. (2006). Dynamics of National and Global Competition in Higher Education. *Higher Education*, 52, 1-39.
- Ministry of Education Malaysia, (2015). *Malaysia Education Blueprint 2015-2025 (*MEB, 2015*)* Ismail, Doris (Higher Education*).* Putrajaya URL: https://www.pmo.gov.my/wp-content/uploads/2019/07/Malaysia-Education-Blueprint-2013-2025.pdf (Last download: 28/04/2024)

- Ministry of Higher Education Malaysia,(2007). *The National Higher Education Strategic Plan 2007– 2020.* Putrajaya (MOHE) URL: https://webapps.ilo.org/dyn/youthpol/en/equest.fileutils.dochandle?p_uploaded_file_id=477
- Ministry of Higher Education Malaysia. (MOHE) (2011). *Internationalisation Policy for Higher Education Malaysia 2011*. Putrajaya (MOHE) URL: DOI:10.13140/2.1.4424.4162 (Last download: 28/04/2024)
- Ministry of Higher Education Malaysia website (2022). *Higher Education Statistics 2021.* (MOHE, 2022) *URL:* https://www.mohe.gov.my/en/downloads/statistics/2021-1 (Last download: 28/04/2024)
- Mohd Ismail, A. A. & Doria, A. (2013). Malaysia: Becoming an Education Hub to Serve National Development. In J. Knight (Ed.), *International Education Hubs* (pp. 101–119). Springer, Dordrecht
- Munusamy, M. & Hashim, A. (2019). *Internationalisation Of Higher Education In Malaysia: Insights From Higher Education Administrators*
- MyGovernment (MY.GOV., 2024). URL: https://www.malaysia.gov.my/portal/subcategory/106 (Last download: 28/04/2024)
- Richards, C. K. & Ismail, M. (2013). Malaysia's Twinning Programmes and the Challenge of Achieving (More) Reciprocal 'International Partnerships' in the Emerging Global Higher Education System. In M. Stiasny & T. Gore (Eds.), *Going Global: Identifying trends and drivers of international education* (Issue July 2013, pp. 1–10). Emerald Publishing.
- Studymalaysia.com (2024). https://studymalaysia.com/education/higher-education-in-malaysia/the-malaysian-higher-education-system-an-overview (last download: 11/06/2024)
- Tan, E. (2015) Private universities and branch campuses „technically insolvent" - *University World News*
  URL: https://www.universityworldnews.com/post.php?story=20150415055241381 (Last download: 28/04/2024)
- Tham Y. S. (2013). Internationalizing Higher Education in Malaysia: Government Policies and University's Response October 2013 *Journal of Studies in International Education* 17(5):648-662 URL: https://www.researchgate.net/publication/269599668_Internationalizing_Higher_Education_in_Malaysia_Government_Policies_and_University's_Response (Last download28/04/2024)
- The World Bank Malaysia (2024). URL:https://www.worldbank.org/en/country/malaysia/publication/malaysia-economic-monitor-reports
- UNESCO. (2009). *Global Education Digest 2009: Comparing Education Statistics Across the World*. Montreal: UNESCO Institute for Statistics. https://uis.unesco.org/sites/default/files/documents/global-education-digest-2009-comparing-education-statistics-across-the-world-en_0.pdf, (Last download: 11/06/2024.)
- UN.ORG (2024) https://www.un.org/en/exhibits/page/sdgs-17-goals-transform-world (Last download: 11/06/2024.)
- *WHEC 2022 Higher Education Report: [MALAYSIA] UNESCO National Commission in alliance with [higher education institution (s) or other organisations] Policy Planning and Research Division,* Ministry of Higher Education Malaysia, 2022 (WHEC, 2022) URL: https://whec2022.net/resources/Country%20report%20-%20Malaysia.pdf (Last download: 28/04/2024.).

Moet Myint Lay MOET & Anikó KÁLMÁN

Impact of a Professional Learning Community on the Professional Development of Teacher Educators in Myanmar

Introduction

Establishing a Professional Learning Community (PLC) eliminates teacher isolation, enables instructors to manage their professional development requirements, and encourages collaboration for professional development (Hellner, 2008). It has been proven that teachers gain knowledge by learning from one another as part of their daily practice (Dufour, 2011) while professional development in the classroom is designed to support teachers in learning from one another as part of their everyday teaching practice. Instructional strategies and professional development can be improved by using PLCs (Linder et al., 2012).

A teacher's performance is one of the most important factors affecting student achievement. Teachers' performance is establishing and maintaining a learning environment for their students by applying their knowledge and abilities. Several studies have shown that professional learning communities enhance teachers' and students' academic performance and abilities (Anderson, 2004). Research has demonstrated that professional learning communities improve staff commitment to the school's mission and goals, reduce teachers' tendency to work alone, create shared responsibilities for students' development, and improve the teachers' understanding of their subjects (Vescio. et al. 2008).

In addition, teacher professional development becomes valuable when viewed as a tool for growth integrated into the job and not as a separate in-service (Kruse, 1993; Louis, 2006). This type of professional development is provided by PLCs at work. A thriving learning community develops over time by building professional connections and putting students' needs ahead of personal concerns. A significant and long-lasting school transformation can be achieved by schools that value and support teacher development (Lieberman, 1995a). Educators who place a high value on professional advancement and personal development are at the center of this culture, environment, and collaboration cycle.

Literature Review

DuFour (1998) defines PLC by categorizing each word into its component phrases. For example, a "**professional**" is an "expert". "**Learning**" means "to learn" and "to practice continuously". "**Community**", as described in the quote from the book of McLaughlin and Davidson (1994), means something different for everyone. For some, it is a safe space where they can work together to survive. For others, it is an emotional community with close friends where they can share and be emotionally supported. Some see the community as a place of personal growth.

Successfully implementing and participating in a PLC benefits both teachers and students. Participating in PLCs allows instructors to combat isolation by allowing them to work with peers and concentrate on enhancing student achievement (Lieberman, 1995b). Teachers who participate in PLCs can interact with their peers and enhance their teaching by considering suggestions and observations made by others. Together, teachers can create engaging lessons that hold students to high standards, increase their learning, decrease absences, and reduce achievement gaps in specific subject areas (Hord, 1997). Many academics and professionals (Many, 2009; Louis et al., 1996; Saphier, 2005) who work in schools have contributed to the knowledge about PLCs. PLCs provide a way to improve education, but the work made possible by PLCs leads to teacher professional development and student academic success (Peterson et al., 1996).

The Professional Learning Community (PLCs), a discussion group for educators, aims to support teacher professional development and improve student learning proficiency. The issue with most PLCs is

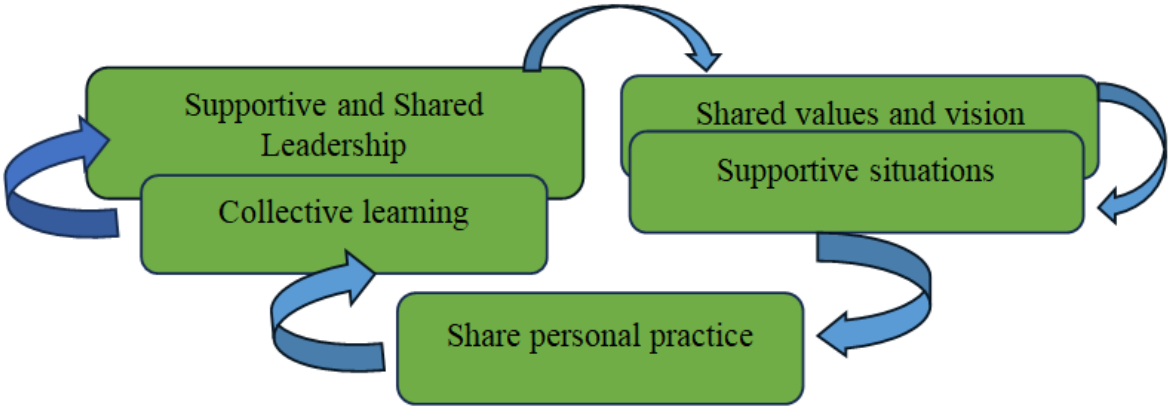
member travel time and distance (Wang et al. (2017), Giglio and Palmieri (2017), Tang & Lam (2014), Lim & Lee (2014)). To co-design lesson plans and professionally evaluate the teaching and learning management outcomes of teachers from local conventions, those working in the field of education have, however, formed groups (Blitz, 2013). Professional Learning Communities (PLCs) are becoming increasingly popular among academic staff at Rajabhat universities across Thailand. These colleges produce and prepare pre-service teachers specifically for the nation's schools. In the next 20 years (2017–2036), they will have incorporated the PLC idea into one of the new university policies for regional community development. The second issue with university policy relates to the growth and effectiveness of teachers (TTC, Phuket Rajabhat University, (2017).

According to DuFour et al. (2010), a PLC is a community engaged in "an ongoing process in which educators work collaboratively in recurring cycles of collective inquiry and action research to achieve better results for the students they serve" (p. 11). Participation in professional learning communities enhances the collective capabilities of educators. Only increasing the capacity of a few teachers will not create systemic school improvement. Teachers must focus on daily, ongoing learning so that every teacher can provide more individualized and precise instruction to students (Fullan et al., 2006).

Theoretical framework

For a learning community to truly build new knowledge, it must discover and learn about that knowledge and apply and share it. This process goes beyond acquiring practical knowledge. As Hord (2004) emphasizes, it is about actively seeking out and reading about new practices and, most importantly, applying them to improve student outcomes. In professional learning communities, teachers and administrators actively participate in continuous learning. They actively engage in their education. They are open to learning new things. Together, they search for new knowledge and ways to apply it to their work. Hord (2004) explored the importance of the community's five professional learning community areas for (1) Supportive and Shared Leadership, (2) shared values and vision, (3) collective learning, (4) supportive situations, and (5) shared personal practice. (Figure 1)

Figure 1. The Five Dimensions of a Professional Learning Community



(author adapted from Hord ,2004)

(1) **Supportive and Shared Leadership:** According to Hargreaves et al. (2006), "professional learning communities do not primarily focus on the quality of distributed leadership" (p. 127). Instead, administrators and teachers discussed teaching challenges, identified issues and worked together to find solutions.

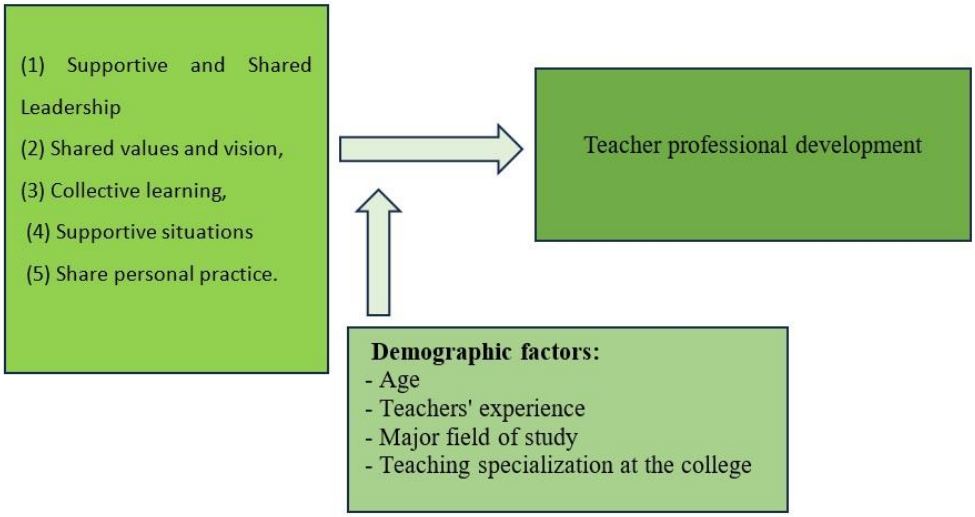
(2) **Shared values and Vision:** Little (1990) underlines the significance of a shared vision among teachers. This shared vision becomes the responsibility of standards-based education and assessment, inspiring teachers to align their efforts with the educational goals of the school community.

(3) **Collective learning:** A professional learning community involves all school staff members learning new skills and applying them to their work. Collaborative learning creates opportunities for problem-solving. It builds trust between principals and teachers, strengthening their commitment to education and development. (Hord, 1997)
(4) **Supportive situations:** Two conditions are necessary to develop professional learning communities. According to Hord (1997), They are structural and supportive conditions.
(5) **Share personal practice**: One aspect of shared personal practice is visiting and observing teachers across the classroom. Hord (1997) examined teachers' classroom behaviors and noted that they should provide feedback and observe other teachers in the classroom. This helps build the individual and the community.

Conceptual Framework of the Study

The study about the PLC practices comprised five main activities that are basic components of PLC and were considered as independent variables. The components consist of (1) supportive and shared leadership, (2) shared values and vision, (3) collective creativity, (4) supportive situations, and (5) shared personal practice. The dependent variable is whether teachers' professional development occurs in the PLC practices. The researcher, on the other hand, took into account demographic factors. In determining teachers' professional development, teachers' experience in a significant field of study or a teaching program are essential factors, as well as their age and current teaching specification subjects at the College. The College's optional fields of study and teaching specialization serve as intervention variables. A relationship between both dependent and independent variables would be established.

Figure 2. Conceptual Framework of the Study



Problem Statement of the Study

Myanmar is Southeast Asia's largest nation, strategically located between China, India, and ASEAN. In 1948, Myanmar had one of the highest adult literacy rates in the region, at almost 60% (UNESCO, 2006). As a result of the 1962 military coup, the education system has declined over time. Myanmar ranks last in the countries' league table regarding educational outcomes and investment (Ministry of Education, 2015; UNESCO, 2015). Building a high-quality education system is a process that takes time. Myanmar is working on several short-term and long-term initiatives to improve the educational landscape.

In 2001, the Government of Myanmar demonstrated its commitment to education reform by adopting the 30-Year Basic Education Plan (2001-2031, Fiscal Year 2001-02-31). This comprehensive roadmap outlines the country's long-term vision for its education system, instilling confidence in its strategic

planning and commitment to improvement. The MSDP (Myanmar et al. Plan) of 2018-2030 recognizes that the education system plays an essential role in the development of the economy. The role of an education system in shaping the human resources of a country cannot be overstated. In the case of Myanmar, it is not just a matter of educational development but a crucial factor in the country's economic growth. The urgency and significance of this issue must be addressed (MSDP-2018-2030).

To achieve this, the commitments in the NESP (National et al. Plan) of 2016-2021 are focused on promoting more equitable access to education and improving the quality of students' outcomes. As mentioned above, the MOE has initiated improving teacher education and management to enhance student learning outcomes in Myanmar's schools and educational institutions. It includes having enough qualified teachers in each school to meet the MOE's minimum teacher-to-student ratio and qualification standards. MOE needs help deploying qualified teachers, especially in remote rural areas (MOE, 2015).

Teachers have reported various logistical problems, including insufficient teachers, overpopulation of students (not enough student-teacher ratios), limited space, a lack of teaching materials, and a lack of time. Additionally, they have reported a need for more compatibility between the Child-centered approach (CCA) and the examination system (Lall et al., 2013, p. 1). Lwin and Ye (2021) examined a professional learning community for private teachers at Inspiration Academic Center, a private boarding school in Myanmar. They found that teachers who are less willing to accept other teachers' ideas but have strong leadership skills in sharing learning and practice are more successful in collective learning. Therefore, teachers need to develop good relationships with other teachers and accept suggestions from others. In addition, principals need to create professional learning environments and support teachers. Research on professional learning communities in colleges of education in Myanmar needs to be conducted. However, more research needs to be done on teacher education communities in Myanmar as well. This study is important not only for teachers' professional development but also for Myanmar's educational development.

Research Aims and Questions

This study aims to assess the level of teacher comprehension of the PLC in Myanmar related to their professional development. The purpose of the PLC study is to support the continuous professional development of the teachers in Myanmar and to enhance their teaching abilities.

The main questions of the study are:

- What are teacher educators' perceptions of PLCs' influence on their professional development?
- Are there any variations in the teacher educator's professional development in professional learning communities regarding their personal factors?
- Is there any significant relationship between professional learning communities and the professional development of teacher educators?

Methodology

Population and Sample

A rigorous process led to the selection of seven colleges from the 25 esteemed education colleges in Myanmar as our representative samples. Among the 25 education colleges in Myanmar, 70 teacher educators (male teacher educators = 20, female teacher educators = 50) from four education colleges in Upper Myanmar and three education colleges in Lower Myanmar were included in this study. Utilizing a simple random sampling method, 70 teachers were chosen to form the desired sample size for this quantitative study, ensuring the study's validity and reliability.

Instrumentation

Questionnaires were used as a research instrument to conduct this study. This research will be based on a quantitative analysis using the Olivier, Hiff, and Huffman (2010) Professional Learning Community Assessment, revised as a critical research tool for data collection. The quantitative survey consists of two sections. Items in Part 1 of the survey will gather background information (demographic data) on participants. Part 2 of the survey will include a 5-point Likert-type scale to rate their practices in professional learning communities (PLCs). A literature review identified the benefit of PLCs for the professional development questionnaires. The questionnaire was translated from English to Myanmar so that the participants could better understand the questionnaires given to them. Therefore, the questionnaire was cross-checked by two experienced experts who translated it into Myanmar language. The questionnaire was divided into three parts.

The first part of the questionnaire consists of 8 items for demographic data. The second part of the questionnaire included (37) items with five dimensions related to PLCs. These items were rated on five-point Likert scales ranging from 1 to 5 (1=Strongly Disagree, 2=Disagree, 3=neutral, 4=Agree, 5=Strongly Agree). The second part of the questionnaire for PLC on professional development included ten items rated on a five-point Likert scale ranging from 1 to 5 (1=Always, 2=Often, 3=sometimes. 4=Rarely, 5=Never). In this study, the researcher used the professional learning method.

The primary tool used in this study was community assessment, as mentioned in Olivier, Hiff, and Huffman (2010). The reliability coefficients (Cronbach α) were 0.90 for professional learning communities and 0.89 for teachers' collective efficacy. The questionnaires used in this study were considered very reliable. This survey is sufficient to be used in this study. The following Table 1. displays the Cronbach's alpha value of this study:

Table 1. Current Cronbach's Alpha Values of the Instrument in this study

Instrument	Cronbach's Alpha-	Items No
PLCs	.928	37
Benefit of PLC for CPD	.822	10

The professional learning community assessment questionnaires and efficacy of professional development had reliability values .928 and .822, respectively, as indicated in Table (1). Consequently, these questionnaires are considered reliable.

Table 2. Result of the factor analysis of this study

KMO and Bartlett's Test (EFA)		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.903
Bartlett's Test of Sphericity	Approx. Chi-Square	451.357
	df	91
	Sig.	<.001

The researcher utilized EFA for significant correlation of the data in order to assess the data's suitability for factor analysis. The data has a significant relationship if the KMO value is .903 and Bartlett's test significance level is less than 0.05. Therefore, it can be seen that there is a correlation between the variable and other variables. Bartlett's Test of Sphericity and KMO value are appropriate in this study.

Procedure

First, the relevant literature was studied, the necessary information was obtained, and the tool was carried out under the supervisor's guidance. After that, advice and guidance were obtained from 2 education experts in Myanmar. The questionnaire was distributed to the teachers of the selected education colleges. All questionnaires were collected two weeks later, and the response rate was 100%.

Data Analysis

The collected data were analyzed using Descriptive statistics, One-way ANOVA, and Pearson Product Moment correlation by SPSS statistical software (version 28) for the perceptions of teacher educators in their professional learning communities.

Findings

Research Question One

One research question aims to identify teachers' perceptions of PLC's influence on their professional development at Education College in Myanmar. A five-point Likert scale was used to evaluate the participants' perceptions. For question one, teachers were asked to provide their views based on five PLC dimensions.

Table 3. Mean and Standard Deviations of Professional Learning Community (n=70)

No	Professional learning community	Mean	SD	Interpretation
1	Shared and supportive Leadership	3.98	0.28	High
2	Shared Value and Vision	4.11	0.32	High
3	Collective Learning	4.34	0.37	Very High
4	Shared Personal Practice	3.10	0.30	Moderate
5	Supportive Conditions	2.69	0.25	Moderate
Total		**3.64**	**0.30**	High

Scoring Direction: 1.00-1.80=Very Low, 1.81-2.60=Low, 2.61-3.40=Moderate, 3.41-4.20=High, 4.21-5.00=Very High

Table 3. shows the results of teachers' perceptions of the professional learning community. The total mean scores of teachers' perceptions towards the professional learning community were (3.64), in the range of 3.41-4.20, and were interpreted as high according to data interpretation criteria. The five dimensions ranked from the highest to the lowest mean score were collective creativity (4.34), shared values and vision (4.11), shared supportive Conditions (3.98), shared personal Practice (3.10), and supportive conditions got the lowest mean score of 2.69.

Research Questions Two

Research question two is to study the variations in teacher educators' professional development in professional learning communities regarding their factors at an education college in Myanmar. The participants' factors were evaluated on eight questions. The respondents' demographic information, such as their age, significant areas of their study, details of their current teaching activities, and respondents' teaching experiences, is involved.

Table 4. Mean Values and Standard Deviations of Teachers professional development on PLCs rated by their Age

Variables	Age	N	Mean	SD	Interpretation
Teacher professional development on PLC	21-30 years	24	4.60	0.51	Very High
	31-40 years	27	4.14	0.52	High
	41-50 years	15	3.52	0.64	High
	51-60 years	9	3.02	0.61	Moderate

Scoring Direction: 1.00-1.80=Very Low, 1.81-2.60=Low, 2.61-3.40=Moderate, 3.41-4.20=High, 4.21-5.00=Very High

Table 4 indicated that teacher educators of all ages practiced their professional development on PLCs at a generally high level. The following tables present the findings for the research question (2).

Table 5. ANOVA Results of the Level of Efficacy Among Teachers Based on Their Age

Variables		Sum of Squares	*df*	Mean Square	F	Sig.
Teacher professional development on PLC	Between Groups	10.065	3	3.355	10.938	.000***
	In the Group	20.196	66	.306		
	Total	30.261	69			

*p<.05, **p<.01, ***p<0.001, ns= no significance

Table 5 shows a significant difference in teacher **professional Development on PLC** (F (3,66) =10.938, p=.000).

Table 6. Mean Values and Standard Deviations of Teachers professional development on PLCs rated by teaching experiences

Variables	Experience	N	Mean	SD	Interpretation
Teacher professional development on PLC	less than 1 year	5	3.14	0.43	Moderate
	1-2 years	10	3.41	0.50	High
	3-5 years	12	4.11	0.53	High
	6-10 years	9	4.23	0.64	Very High
	11-15 years	12	4.09	0.57	High
	16-20 years	14	4.21	0.61	Very High
	More than 20 years	8	4.26	0.55	Very High

Scoring Direction: 1.00-1.80=Very Low, 1.81-2.60=Low, 2.61-3.40=Moderate, 3.41-4.20=High, 4.21-5.00=Very High

Table 6. revealed that teachers in all years of teaching service practiced PLCs at a high level, and among them, teachers with 6–10 years of teaching experience and more than 20 years of teaching service had the highest mean value.

Table 7. ANOVA Results of the Level of Efficacy Among Teachers Based on their teaching experiences

Variables		Sum of Squares	df	Mean Square	F	Sig.
Teacher professional Development on PLC	Between Groups	4484.344	6	80.724	2.267	.041 *
	In the Group	2242.989	63	35.603		
	Total	6727.333	69			

*p<.05, **p<.01, ***p<0.001, ns= no significance

According to Table 7, it was found that there were significant differences based on their teaching experience of teacher **professional development on PLC** (F(6,63)=2.267, p=.041)

Table 8. Mean Values and Standard Deviations of Teachers professional development on PLCs rated by their position

Variables	Position	N	Mean	SD	Interpretation
Teacher professional development on PLC	Tutor	18	4.22	0.51	Very High
	Lecture	30	3.78	0.52	High
	Associate professor	15	3.11	0.64	Moderate
	Professor	7	3.88	0.61	High

Scoring Direction: 1.00-1.80=Very Low, 1.81-2.60=Low, 2.61-3.40=Moderate, 3.41-4.20=High, 4.21-5.00=Very High

Table 8 indicates that tutors with a high level of professional development in PLCs, as well as lecturers and professors, practiced PLCs at a high level. Then, the moderate level of professional development in PLCs is associate professor.

Table 9. ANOVA Results of the Level of Efficacy Among Teachers Based on their position

Variables		Sum of Squares	df	Mean Square	F	Sig.
Teacher professional development on PLC	Between Groups	1.101	3	.367	2.428	.049*
	In the Group	735.966	66	11.151		
	Total	737.067	69			

*p<.05, **p<.01, ***p<0.001, ns= no significance

According to Table 9., there were significant differences based on their position in teacher **professional Development on PLC** (F(3,66)=2.428, p=.049).

Table 10. Mean Values and Standard Deviations of Teachers professional development on PLCs rated by their fields

Variables	Field/Qualificaiton	N	Mean	SD	Interpretation
Teacher professional development on PLC	BA, BSc, MA, MSc	11	3.84	0.50	High
	BEd, MEd	45	4.17	0.58	High
	PhD	14	3.41	0.51	High

Scoring Direction: 1.00-1.80=Very Low, 1.81-2.60=Low, 2.61-3.40=Moderate, 3.41-4.20=High, 4.21-5.00=Very High

According to Table 10, the mean values of BA, BSc, MA, and MSc degree holders, BEd and MEd degree holders in PLC practices, and PhD holders indicated that all the teachers practised PLCs for their professional development at a high level.

Table 11. ANOVA Results of the Level of Efficacy Among Teachers Based on their qualifications

Variables		Sum of Squares	df	Mean Square	F	Sig.
Teacher professional development on PLC	Between Groups	5.801	2	2.900	7.493	.001**
	In the Group	25.929	67	.387		
	Total	31.730	69			

*p<.05, **p<.01, ***p<0.001, ns= no significance

Table 11 shows that PLC (F (2,67) = 7.493, p=.001) is statistically significant based on their qualifications in teacher professional development.

Research Question Three

The third research question is to determine the relationship between the professional learning community and their professional development at education colleges in Myanmar. The data was analysed according to the nominated variables using a statistical software. The correlation between PLCs and professional development was analysed using the Pearson Product Moment Correlation Coefficient. The results of the Pearson product correlation are presented below, which illustrates this point.

Table 12. Result of Pearson Product Moment Correlation (n= 70)

Professional learning community PLCs	Pearson CorrelationSig. (2-tailed) N	0 .459** <.001 70	Moderate positive relationship
Professional development	Pearson Correlation Sig. (2-tailed) N	0 .459** <.001 70	

**. Correlation is significant at the 0.01 level (2-tailed).

According to the data presented in Table 8, the result showed that professional learning communities and teachers' educators' professional development at Education Colleges in Myanmar were positively moderately correlated (r =. 459**, p <.001).

Discussion

Teacher educators from Education College in Myanmar applied the five domains of the professional learning community with a mean value of 3.60. The teachers' responses about the test items indicate that collective learning and the application of collective learning are practiced at a very high level**. Collaborative learning** activities can improve student achievement and develop problem-solving and interpersonal communication skills. The survey highlights teachers' perceptions of the importance of preparing them for future academic and professional development.

There was a high level of **shared and supportive leadership**. Most teacher educators think that leadership is an essential factor in professional development. Based on data analysis and research findings, most teacher educators believe that leadership is shared with them. The researchers found that specialized subject leaders discussed with experienced and novice teachers and shared power and authority for their respective activities. Their leadership skills were enhanced and nurtured in their school.

Furthermore, educators engaged in the **practice of shared values** and perspectives to a high level. In this study, the principals focused on teachers' academic achievement, supporting decision-making about the instructional process in education college, and supporting the requirement of the teaching-learning process. The responses to the questionnaire indicated that they shared ministry and departmental guidelines and co-created the vision and mission of the education college. However, the principal and teacher educators' interest in allowing them to attend professional training that enhances their teaching is low, according to the requirements of the teachers.

Teacher educators in this study practiced **shared personal practice**, which is 3.10 at moderate levels. Data analysis of the findings from this study revealed that teachers actively participate in professional development activities, share the results of their teaching practices, and provide positive feedback related to teaching practices. However, some teachers could be more vital in cooperating due to a lack of time and willingness to accept other teachers' comments and suggestions among colleagues. Therefore, school principals should schedule sufficient time to visit and review each teacher's classroom behavior effectively and encourage cooperation to improve the College's functioning.

In designing PLCs, the extent of the enabling **supportive conditions** is also essential. According to research findings argue that most teachers have positive, caring relationships with their school community. They believe that if a good relationship between principal and teachers, teacher and teacher, teachers and students, they can build a good community of mutual respect and trust and overcome difficulties together. PLC activities can be more beneficial to teachers if school leaders understand and support them.

Evidence from the Professional Learning Community Literature using a qualitative case study, primary school teachers' perceptions of PLC's effectiveness and professional growth and development were examined from previous literature. Effective PLCs occur through collaboration, where the primary goal is for students to learn through continuous teacher learning (Van Driel & Berry, 2012). Although the literature reveals the academic implications of this practice for students (DuFour et al., 2008), few studies show that participating in PLCs leads to professional development for teachers and improved collaboration among teachers (Van Driel & Berry, 2012).

Many researchers and scholars in schools (Many, 2009; Louis et al., 1996; Saphier, 2005) have contributed to the body of knowledge about PLCs and generally agree that PLCs are an effective way to improve teacher and student performance. PLCs, with their collaborative nature, provide a vehicle for developing instructions. Teacher professional growth, school development, and student achievement result from implementing PLC (Peterson et al., 1996).

In the study of differences in **teachers' personal factors** on the professional development of teachers in PLCs, according to the research results, the age of 21-30 years obtained a very high value of 4.60. As they get older, they think their teaching experience is enough and become less interested in continuing to learn. However, it's crucial to emphasize the importance of continuous learning to keep educators motivated and inspired to keep improving.

In addition, if one looks at the teaching experience, the more the teaching experience, the more successful teaching and learning are than with participants with less teaching experience. In comparison with the position opportunity, it is seen that to be more successful in teaching in any position, they need to improve their skills. The degree qualification of the teachers is also necessary for academic success and professional development.

A teacher's educational level, significant areas of study, and teaching experience are the most critical factors in determining the quality of teachers. Thus, it influences the level of effectiveness of a teacher educator. As mentioned above, most researchers agree that age, experience, qualifications, and skills are essential for developing the teaching-learning process. According to the results, Practical knowledge and actions are necessary in determining the teacher's professional development effectiveness.

Thus, Goodwin (1999) identified teaching experiences as one of the crucial foundational skills in an effective teaching process and professional development. The most significant factors in determining the quality of teachers and their teaching are teacher education and professional training.

According to Tschannen-Moran and Hoy (2001), teachers' experiences with achieving achievements will increase the effectiveness of teaching and learning activities. On the other hand, due to the negative aspects of teachers' teaching abilities, there may be instances of teachers' ineffectiveness. The findings of the Tschannen-Moran study indicate that experienced teachers (having teaching experience for more than five years) had higher grades than junior teachers (having teaching experience for less than five years). Furthermore, it is consistent with Stoll. El's (2003) perspective is that teaching experience can influence the effectiveness of professional development.

In this study, the Pearson Product Moment Correlation Coefficient was used to find a relationship between teachers' practices in professional learning communities and their professional development in teaching and learning in Myanmar. This research showed a moderate relationship between the professional learning community and improved teacher learning quality in our education college in

Myanmar. Professional learning community practices should be used to enhance the teacher educator's collective efficacy and professional development for better student achievement results.

The previous study by Goddard et al. (2004) stated that a professional learning community may positively affect numerous teachers' professional development and increase student achievement. This study highlighted implementing professional learning community practices for College of education teachers to develop the students' improvement and involve the professional learning community to encourage attention to improve their academic achievement and professional development. Schools that value and nurture teacher expertise are catalysts for rational and sustainable school reform.

Conclusions

The study's findings helped better understand the relationship between the level of PLC practice and teachers' effectiveness in the teaching and learning process in form six dimensions and Myanmar's teacher education system. Teacher educator's performance was identified as one of the critical factors in the success and excellence of each College. It has also been proven that other factors that affect the success of College, such as the College's leadership, peer relationships, classroom environment and classroom management, teaching and learning supervision, and teacher training, must be addressed. The findings will be helpful as a guide in formulating plans and strategies to improve the education college's capacity further. Studies have found that best practices must be shared to spread the benefits of excellence. The findings are also consistent with PLC practices that should be in place in all education colleges, as well as the openness and transparency of school communities. The findings support the findings of Louis and Kruse (1995), who stated that teacher collaboration and self-evaluation are standard practices in PLC. Thus, PLC practices are not a formal evaluation process but a regular effort by colleagues to help each other. It is a cherished practice based on the knowledge that any progress towards quality education requires the collaboration of the professional learning community.

Limitation of the Study

This study attempted to study the practices of the professional learning community of teacher educators from the College of Education. The researcher used only seven education colleges in Myanmar. Therefore, the result cannot only cover all education colleges in Myanmar. This study should be conducted extensively and with in-depth sampling. In addition, research on how professional learning communities' impact instructional practices and the conceptualization of the relationship between student learning and professional learning communities and teachers' well-being is needed. To strengthen the concept of PLC among teachers, it becomes imperative for all administrators to clearly explain the methods and objectives of implementing PLC, especially among principals and teachers. The noble values contained in the concept of PLC need to be embedded in all levels of the teaching and learning environment in Myanmar so that it would become a well-received culture.

References

- Anderson, L.W. (2004). *Increasing Teacher Effectiveness*. Second Edition. Paris; UNESCO: International Institute for Educational Planning.
- Blitz, C. L. (2013). Can Online Learning Communities Achieve the Goals of Traditional Professional Learning Communities? What Literature Says. REL 2013-003. *Regional Educational Laboratory Mid-Atlantic*.
- DuFour, R. & Eaker, R. (1998). *Professional communities at work: Best practices for enhancing student achievement.* Solution Tree Press.
- Dufour, R. & Dufour, R., & Eaker, R. (2008*). Revisiting professional learning communities at work: New insights for improving schools.* Bloomington, IL: Solution Tree Press.

- DuFour, R. & DuFour, R. & Eaker, R. & Many, T. (2010). *Learning by doing: A handbook for professional learning communities at work (*2nd ed.). Bloomington, IN: Solution Tree Press.
- Dufour, R. (2011). Work together: But only if you want to. *Phi Delta Kappan*, *92*(5), 57– 61. https://**doi**.org/**10.1177/003172171109200513**
- Fullan, F. & Hill, P. & Crevola, C. (2006). Breakthrough. in *Corwin Press* Thousand Oaks, CA.
- Giglio, C. & Palmieri, R. (2017). Analyzing Informal Learning Patterns in Facebook Communities of International Conferences. *Procedia-Social and Behavioral Sciences*, 237, 223–229. https://doi.org/10.1016 /j.sbspro.2017.02.067
- Goodwin, B. (1999). *Improving teaching quality*: Issues & policies. Policy Brief. Washington DC, Office of Educational Research and Improvement.
- Goddard, R. D. & LoGerfo, L. & Hoy, W. K. (2004). High school accountability: The role of perceived collective efficacy. *Educational Policy*, *18*(3), 403–425.
- Hargreaves, A. & Fink, D. (2006). *Sustainable Leadership*. San Francisco: Jossey-Bass.
- Hellner, J. (2008). The professional learning community: A fulcrum of change. *Kairaranga, 9*(1), 50–53. Retrieved from http://files.eric.ed.gov/fulltext/EJ908176.pdf
- Hord, S. (1997). *Professional learning communities: Communities of continuous inquiry and improvement.* Southwest Educational Development Laboratory, Austin, TX. Retrieved from https://eric.ed.gov/?id=ED410659
- Hord, S. M. (1998). Creating a professional learning community: Cottonwood Creek School. *Issues about change*, *6*(2), n2.
- Hord, S. M. (Ed.). (2004). Learning together, leading together: Changing schools through professional learning communities*. Teachers College Press*.
- Kruse, S. D. & Louis, K. S. (1993). *Developing professional community in new and restructuring urban schools.* Madison, WI: Wisconsin Center for Educational Research. (ERIC document Reproduction Service No. ED366676). Retrieved from http://eric.ed.gov/PDFS/ED366676.pdf
- Lee, D. H. L., & Lee, W. O. (2018). Transformational Change in Instruction with Professional Learning Communities? The Influence of Teacher Cultural Disposition in High Power Distance Contexts. *Journal of Educational Change, 19(4*), 463–488. DOI:10.1007/s10833-018-9328-1
- Lall, M. & San, T. S. & San, N. N. & Myat, T. T. & Khaing, L. T. T. (2013). *Teachers' voice: What education reforms does Myanmar need.* Myanmar Egress.
- Lieberman, A. (Ed.). (1995a). *Practices that support teacher development: Transforming conceptions of professional learning.*
- Lieberman, A. (ed.). (1995b). The work of restructuring schools: Building from the ground up. New York: *Teachers College Press*.
- Linder, R. A. & Post, G. & Calabrese, K. (2012). Professional learning communities: Practices for successful implementation. *Delta Kappa Gamma Bulletin, 78*(3), 13–22.
- Little, J. W. (1990). The persistence of privacy: Autonomy and initiatives in teachers' professional relations. *Teachers College Record,* 509–536.
- Louis K. S. & Kruse, S. D. (1995). *Professionalism and community: Perspectives on reform in urban schools*. Thousand Oaks, CA: Corwin Press.
- Lwin, P. K. K. & Ye, Y. (2021). A study of the relationship between teachers' perceptions towards school climate and the professional learning community at a private school, Myanmar. *Scholar: Human Sciences, 13*(1), 1–14., ISSN 2586-9388.
- Many, T. (2009). A rose by any other name: Professional learning communities. *TEPSA News*, *12*(2), 7–15.
- Ministry of Education (MOE) (2015). *Myanmar National Education Strategic Plan (2016-2021).*
- Ministry of Planning and Finance (2018). *Myanmar Sustainable Development Plan* (2018-2030) (MSDP).
- Peterson, P. L. & McCartney, S. J. & Elmore, R. F. (1996). Learning from school restructuring. *American Educational Research Journal*, *33*(1), 119–153.

- Saphier, J. (2005). Masters of motivation. In R. DuFour, R. Eaker, & R. DuFour (Eds.), *On common ground: The power of professional learning communities* (pp. 85–113). Bloomington, IN: Solution Tree Press.
- Stoll, L. & Earl, L. (2003). Making it last: Building capacity for sustainability. In B. Davies & J. West-Burham (Eds.), *Handbook of educational leadership and management.* Pearson Education.
- Tangkitvanich, S. & Junvith, P. & Lathapipat, D. & Siriprapanukul, P. & Tongliemnak, P., & Wongkitrungrueng, W. & Sasiwuttiwat, S. (2013). *The Creation of Basic Educational Reform to Create Responsibility* (Research report). Bangkok: Thailand Development Research Institute. Retrieved from https://tdri.or.th/wpcontent/uploads/2014/03/Final-Paper.pdf
- Teacher Training Center, Phuket Rajabhat University. (2017). *Teacher Training Manual: Internship 1.* Phuket: Teacher Training Center, Faculty of Education, Phuket Rajabhat University.
- Tschannen-Moran, M. & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and teacher education.* 17(7), 783–805.
- UNESCO. (2005). *Literacy for life: EFA global monitoring report 2006*.
- Van Driel, J. H. & Berry, A. (2012). Teacher professional development focusing on pedagogical content knowledge. *Educational Researcher, 41(1*), 26–28. https://doi.org/10.3102/0013189X11431010
- Vescio, V. & Ross, D. & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and teacher education*, *24*(1), 80–91.
- Wang, D. & Wang, J. & Li, H. & Li, L. (2017). School Context and Instructional Capacity: A Comparative Study of Professional Learning Communities in Rural and Urban Schools in China. *International Journal of Educational Development, 52*, 1–9. DOI:10.1016/j.ijedudev.2016.10.009.

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Individual Learning Account: modelling the impacts of possible policy interventions

In order to improve the quality of adult learning and to increase the number of participants in adult learning, new financing concepts need to be developed, among other things. One of these new EU adult learning financing concepts is the ***Individual Learning Account*** (ILA), for which the Recommendation of 16 June 2022 described the framework but left the details of implementation to national competence. Accordingly, Member States can adjust the eligibility and funding parameters to activate groups with traditionally low participation in adult learning and reduce the risk of deadweight losses. The specific target group will depend on the specific objective: increasing overall participation, increasing participation in training that meets labour market needs, integration of immigrants, parents returning after childcare, involving elderly etc. When setting the level of public contribution, it should be borne in mind that differentiating the level of contribution according to the demographic characteristics of participants may lead to administrative complexity and thus create barriers to participation for groups with low participation rates in adult learning. The co-financing of activities (employer and individual contributions) and the definition of the learning content supported may vary from one Member State to another. All this shows that when implementing ILA, many aspects need to be considered together to detail the policy measure.

In the framework of our Erasmus+ international partnership project, we explored the concept of ILA from a data perspective. The cooperation of experts from the Visegrad Four countries created the D-ILA data model to predict the possible impact of different policy concepts. It is important to note that throughout the project, we worked with realistic but not real data created by the expert team through editing. In the baseline version, the expert team determined to the best of their knowledge which individuals and training should be included in the model, and they also determined which training should be assigned to which individuals (training database). In simple terms, modelling seeks to answer questions of the "what if..." type, which in our case meant changing the input data along different policy concepts and then comparing the original (baseline) version with the output generated with the changed input data. The method of analysing the impact of different policy interventions and the differences between them allowed us to test the D-ILA data model. The model is therefore methodologically tested, but the D-ILA data model needs to be populated with real data in order to make real use of the resulting figures.

Due to the call for proposals (Erasmus+ KA2 Adult Education), in this data model we have described learners and training courses using competency frameworks describing transferable skills (CEFRL, DigComp, FinComp, EntreComp, LifeComp), and we have also tried to imagine training courses that develop skills belonging to several different frameworks at the same time (e.g. digital and green competence).The amount of funding (€400.000) did not allow for AI development, we were only able to demonstrate the relevance of modelling using existing solutions. By presenting professional concepts developed and tested by an international team of experts, we aim to highlight the usefulness of the D-ILA data model.

Some of the professional concepts tested were aimed at providing additional resources for the participation of a selected target group in adult learning. The D-ILA data model allowed the target group to be defined in several ways:

- by the competences preferred by the participants,
- by highest level of education,
- by participants' life situation category.

The D-ILA data model was able to support targeting according to the interests of the learners. A good example of this is the significant increase in the public contribution for participants who wanted to participate in green skills training. As no other parameters were changed, the results obtained after running the AI showed the impact of the professional concept.

A similar approach was taken when our policy concept was that the state preferred to develop digital competences rather than green competences. (It is important to note that in the D-ILA data model, a strong emphasis is placed on training that develops several competences - for example green and digital competences - within one training.) Our policy approach of allocating additional public resources to the development of digital competences also differs from the previous one in that we have incorporated a significant increase in employer contributions for digital competence development. This is based on the premise that while green skills development is less relevant for an employer, digital skills development is in the employers' core interest - i.e. employers, not just the state, want to actively participate in the financing of digital skills training.

In another policy concept we have tried, public resources have been spent in a more focused way. Only and exclusively those who aimed to develop digital competences received public funding. At the same time, the policy concept did not exclude non-digital skills training from the system, as it did not eliminate financial contributions from employers and individuals.

Target groups can also be formed by differentiation according to the highest level of education. Compared to the baseline, the D-ILA data model has been used to test the case where those with tertiary education are not subsidised by the state - assuming that they have the resources to participate in adult learning without state support. In this case, our professional approach did not imply a resource extraction, as the public resources taken away from those with tertiary education were fully distributed among those without tertiary education.

The third way of creating a target group – provided to users by the D-ILA data model – was based on the classification of participants into life situation categories. In this professional concept, the training of NEET young people is financed by other means outside the ILA framework, and the public support initially signed for them was therefore distributed among the unemployed participants and the effectiveness of the support was tested this way.

The D-ILA data model was also tested in a case where significant additional public resources were allocated to the most deprived compared to the baseline, i.e. here the focus was not on reallocating public resources. Here too, we assessed the need according to the living situation category of the participants.

In addition to policy concepts based on target group differentiation, we also tested economic cost-benefit policy concepts using the D-ILA data model. One of these was to make it a condition of state aid that the learner should also contribute to the financing of their own training – and this was compulsory. In other words, the condition for state aid was an individual contribution. After various considerations and lengthy discussions, it was decided that the compulsory contribution should be 20%. In another case, we tested the effects of a compulsory contribution not only from the individual but also from the employer. And there was also a policy concept where we waived the compulsory co-payment for participants in certain target groups (in previous versions we gave additional state support on a means-tested basis, in which case the cost reduction was for the most deprived).

The policy concepts presented are based on different guidelines. However, the applicability of the D-ILA data model is further enhanced by the fact that a policy concept can be tested with different parameters. By not only modelling the 20% co-payment in the policy concept described above, but also calculating the result with different % ratios, we can compare the different impacts and, if necessary, make a better decision using the D-ILA data model.

The EU concept of ILA assumes that funding is also an incentive. This was also tested using the D-ILA data model: only participants who did not have personal learning objectives received public funding. The other "motivated" participants could only use individual or employer resources.

The policy concept of giving accredited training a greater role in the D-ILA data model is intended to improve the quality of optional training. This has been achieved by reducing the price of accredited training, partly departing from the ILA concept, thereby increasing the likelihood that cheaper training will be offered to a greater number of participants in the D-ILA data model.

This example illustrates that even an unconventional approach can produce good results – it is just that this should be verified by modelling prior to implementation. (The D-ILA data model is of course not a complete modelling system in its current form and further development is needed to apply it in real-life contexts.)

Another interesting approach is the policy concept that favours the provision of a particularly broad range of training. In this case, we have examined the effects of expanding the supply of training by offering training that is relatively inexpensive and can be relevant to a wide range of trainees.

The next policy concept intervened in the supply of training by modularising courses and analysing its effects. This aimed to halve the time spent on learning, reduce costs and reduce the number of competences that the course develops. The feasibility study carried out earlier in the project confirmed the validity of this concept, as there is a growing demand for short and focused modular adult learning courses to replace traditional adult learning courses.

One group of policy concepts created by our team of experts focused on the fact that state aid was not linked to a target group or any other condition, but was essentially treated as a benefit as a citizen's right. Thus, the policy concept set a baseline where all participants, without exception, received the same amount of public assistance, while the amount of employer subsidies and individual contributions remained unchanged.

In the next step of the modelling, we made changes to the input data such that the ILA concept was reduced to exclusive state support, i.e. all employer and participant financial contributions were set to 0 in the D-ILA data model. With this occupational concept, we modelled the effects of a significant resource withdrawal. Within the impacts, we have paid particular attention to how these impacts are felt by the NEET and the low-skilled. We also tried a less severe version of the resource extraction, where we "only" reduced the contribution of participants to 0, while imposing a mandatory contribution for employers.

The issue of the quality of training has been raised several times in the policy concepts. In addition to state funding as a citizen's right, we have also tried out the option whereby the same amount of state funding for all can only be spent on accredited training. This is a significant conceptual change, since in the basic version state funding was still freely spendable, whereas in this case the funding provider's constraints are also reflected in the D-ILA data model.

During the testing of the D-ILA data model, we also encountered some limitations that did not allow for the analysis of a certain type of policy concept. Typical cases are those where the logical sequence of input data setup – AI run – output data generation and analysis is changed. This occurs, for example, when we want to determine the level of financial support in the policy concept depending on the training chosen.

In summary, the D-ILA data model has been shown to predict the impacts of a wide range of policy approaches, helping to inform policy decisions. We are convinced that this approach could be of interest in many areas of education and training – and if so, targeted AI development and improvements in data quality could lead to an even more accurate model.

For more information on the project, please visit https://kifu.gov.hu/d-ila/.

István Lükő

About György Molnár's book: Pedagogy, innovation, technology, digital culture

The above-titled book was published by Typotex Publisher in 2022, with the subtitle ***New Directions of Digitalization***. Important parameters: The book is 124 pages long and is divided into five main chapters. The second organizes the contents in 2 and the third in 3 subsections. The number of sources and references is impressive, as we find 94 books and journals and 14 Internet sources at the end of the book. Many of them are written in foreign languages and by non-Hungarian authors. It also shows the principle-theoretical soundness of this critical topic and its scientific-professional embeddedness.

The author and his professional background are also worth mentioning because this highlights the organic connection of the connective tissue behind the title, which comprises many acronyms.

György Molnár is a habilitated doctor, certified electrical engineer, engineering teacher, and biomedical engineer. He obtained his diplomas from the Faculty of Electrical Engineering and Economics and Social Sciences of the BME. In Eger, the author obtained rehabilitation in educational science at the EKKE. Based on his work performance as a professional, scientific instructor, he was appointed as a university professor in 2023 to his second job at the Faculty of Electrical Engineering of Óbuda University, where he performs the duties of dean of the faculty.

The "cradle" of the teacher-researcher work was the BME Department of Technical Pedagogy, where he carried out his work related to the use of ICT with the support of Professor András Benedek on several research topics also covered in this book. The department, which is regarded as a workshop of true innovation, developed numerous models and methods related to digital pedagogy and was the first to introduce independent subject education in Hungarian higher education. He wrote books and made it an independent subject in the final exam.

As a reviewer, István Szökül writes in the *Foreword*: "The novelty of György Molnár's work lies in the fact that he captures the changes that are currently taking place globally in the field of pedagogy and didactics with excellent sensitivity."

In the *Introductory Thoughts* chapter, the author lists the technological areas of the main directions: mobile communication devices and the new form of the Internet, the countless variations of digital platforms, the spread of artificial intelligence, the spread of embedded systems, and access to open-source services. Right here, at the beginning of the book, he draws attention to the need for radical changes in socialization and education.

In the chapter "*Educational challenges of sustainability today*," he discusses the UN's sustainable development goals, the EU Commission's index system (DESI) developed to monitor development, and the relationship between ICT and the information society. Livingston emphasizes that the use of ICT in

school "brings together" traditionally separate media and thus expands the range of possible times and places of learning.

In chapter 2 of *Digital Companies, Digital Economy*, he approaches the topics from several sides because this complex approach extends from the essence of the new concept of the digital economy based on "hyper-connection" to the transformation of work forms (telework) of the digital transformation to Internet businesses. He seriously states that the spread of sensors and decreased prices have brought about the "dominion" of software.

We can read the true genesis of the history of the origin of the concepts of Industry 4.0, the Fourth Industrial Revolution, on page 39, where it describes how the industrial-economic development program was timed for the Hannover Fair in 2011 and where the name revolution was not considered auspicious.

In Chapter 2.2, we can read about the concepts of individual, group, intergroup, organizational, and network learning, and we can see a model of this in Figure 4. The critical inclusion of many domestic and international references can also be highlighted here.

We can read about significant social extensions in chapter 3, entitled "*The Role of Digitization, digital citizenship and lifestyle*", because it describes the conceptual interpretations and good examples of countless countries and areas (law, public administration). Economic activity and private space merged, and the "shared economy" was created. It presents the possibilities of digital citizenship gov, government strategy, and organization development.

In the chapter entitled *Digital Education - Digital Learning and its Lessons*, we can first read about the principle-theoretical connections, from which I will now highlight the impact on schools and actors (students, teachers, leaders), which is divided into three categories. One is the positive social constructivist approach, the other is social pessimism (the superficialization of people and their knowledge), and the third is biological optimism. It also details the characteristics of digital learning and its specific development during the coronavirus.

In this chapter, he presents his own empirical research, which he conducted with an online questionnaire survey on a sample of 775 students within the framework of teaching the subject "I will be an engineer,". The results are shown in Figures 7-10, illustrated through the diagrams of figures. In this study, the central issue was the measurement of attitudes related to good practices and elements of experiential pedagogy.

Figure 12 in chapter 3.3, which depicts the innovation performance of EU countries, is noteworthy.

The fourth but important topic is covered in a relatively short chapter because it concerns the future impact of robotics and artificial intelligence. His 13th diagram, edited by himself, shows the evolution of the Web, which is based on Rubens' findings and collects the operational activities of extraction, interpretation, analysis, and structuring in the Web3 section.

Chapter 5, which is the longest, about 40 pages, explains five areas in the subchapters that are decisive regarding digital pedagogy's practical significance and methodology. The role of the new learning environment and the role of visuality (AR-VR-based solutions) are all about many new methodology-technology application solutions, which the author also incorporated into his own teaching and research work. In chapter 5.4, he also presents his investigation of using virtual and digital tools on 100 people.

With his photos, he illustrates the use of the devices with a QR code, VR glasses, and a screenshot of a four-stroke engine.

Chapter 5.1 is significant, in which he writes about the change of dominance in educational science. Building on József Nagy's three-stage change of dominance: "In my opinion, a fourth change of dominance is beginning today, which can also be called the dominance of mobile learning and digital pedagogy." (page 76)

In his concise and correct summary, he emphasizes that optimization and efficiency issues of fully electronic educational solutions require more complex infrastructural conditions.

György Molnár managed to write a book that, despite the appearance of mosaicism, summarizes the situation of digitization very sincerely and succinctly. At the same time, he explores it with great professional and scientific sophistication and identifies new directions. In his work, which is based on the incorporation of extensive domestic and international literary sources, we find a combination of several disciplines and approaches supported by three of his research.

The author has significantly more studies and development models in space and time, which we expect him to organize and add longitudinally to a more extensive monograph. It could be one of the directions for continuation.

It would also be particularly desirable to have a work that summarizes and systematizes the diverse principles and design tools of the most important ICT technologies and digital platforms for those with multiple levels of competence interested in the topic.

The reviewer also heartily recommends it to anyone interested in the topic, similar to what was written by the author and the professional reviewer.