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NON-FORMAL EDUCATION: THE REVIEW OF CURRENT STUDIES

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Abstract. *Introduction.* Non-formal education is gaining a new impetus in the establishment of a sustainable knowledge society. The article reveals major concerns of non-formal education as an element of life-long learning and adult education policies as well as its effective implementation into the national educational mainstream.

Aim. The aim of the research is to conduct a detailed overview of various current studies, exemplifying the international experience in non-formal education and the case-studies of its adoption along with the mechanisms for its validation in different countries.

Methodology and research methods. The work was based on the methodology of comparative analysis and qualitative content analysis of official UNESCO, CEDEFOP, etc. international statistical and analytical reports, academic and empirical studies. An analytical review shows policy changes towards the development of non-formal education as well as an international and available in individual countries experience of its studying and implementation.

Results. Based on the compatibility scopes principle, three levels of analysis of non-formal education (macro-level/global, meso-level/institutional, micro-level/personal) were identified so that the key issues and trends in its development could be pinpointed at every stage. The conducted research leads to the conclusion that non-formal education practices are acquiring institutional forms. The level of non-formal education development in different countries varies. However, there are general trends towards solving a number of similar social problems by means of non-formal education, such as bridging the supply and demand for competencies in the labour market, social inclusion of different segments of the population, and others.

Scientific novelty and practical significance. The novelty of this study is seen in the resource capacity of non-formal education, the potential of its implementation for the vocational re-skilling, upskilling and further training of various socio-demographic groups, its global development trends and prospects. The practical significance lies in the application of mechanisms for recognising non-formal education outcomes. The highlighted trends and the best international experience can provide non-formal education integration into the educational mainstream, create experimental learning platforms and accelerate practical educational policy measures.

Keywords: Non-formal education, lifelong learning, adult education, education policy, skills and competencies, re-skilling, upskilling, labour market, validation, recognition.

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НЕФОРМАЛЬНОЕ ОБРАЗОВАНИЕ: ОБЗОР СОВРЕМЕННЫХ ИССЛЕДОВАНИЙ

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Аннотация. Введение. Неформальное образование приобретает новый импульс в контексте построения устойчивого и высокотехнологичного общества. Статья раскрывает актуальные проблемы развития неформального образования как элемента системы life-long learning и образования взрослых.

Цель. Целью настоящей работы является проведение аналитического обзора современных исследований, раскрывающих международный опыт изучения неформального образования, практик его применения в разных странах, а также механизмов признания его результатов.

Методология и методы. Работа базировалась на методологии сопоставительного анализа и качественного контент-анализа международных статистических и аналитических отчетов ЮНЕСКО, CEDEFOP и др., академических и эмпирических исследований. В ходе аналитического обзора были рассмотрены изменения политики в отношении развития неформального образования, международный и имеющийся в отдельных странах опыт его изучения и реализации.

Результаты. На основе принципа совмещения масштабов выделены три уровня анализа неформального образования (макроуровень/глобальный, мезоуровень/институциональный, микроуровень/личностный). На каждом из них выявлены и описаны ключевая проблематика и тренды в развитии неформального образования. Проведенное исследование дает основание полагать, что практики неформального образования приобретают институциональные формы. Уровень развития неформального образования в разных странах отличается, однако существуют общие тенденции к решению ряда схожих социальных задач за счет ресурсов неформального образования, таких как синхронизация спроса и предложения на рынке труда, социальная инклюзия разных категорий населения и др.

Научная новизна и практическая значимость. Научная новизна исследования заключается в том, что аналитический обзор раскрывает ресурсный потенциал неформального образования, возможности его применения для переквалификации разных социально-демографических групп населения, глобальные тренды и перспективы его развития.

Практическая значимость состоит в том, что показаны механизмы признания результатов неформального образования. Выявленные тренды и лучший международный опыт можно использовать для интеграции формального и неформального образования, создания экспериментальных площадок обучения, акселерации практических мер образовательной политики.

Ключевые слова: неформальное образование, обучение на протяжении всей жизни, образование взрослых, образовательная политика, навыки и компетенции, переквалификация, повышение квалификации, рынок труда, валидация, признание.

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EDUCACIÓN NO FORMAL: UNA REVISIÓN DE LOS ESTUDIOS MODERNOS

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Abstracto. Introducción. La educación no formal actualmente cobra un nuevo impulso en el contexto de la construcción de una sociedad sostenible y de alta tecnología. El artículo revela los problemas actuales del desarrollo de la educación no formal como elemento del sistema de aprendizaje a lo largo de toda la vida y de la educación de la gente adulta.

Objetivo. El propósito de este trabajo es realizar una revisión analítica de la investigación moderna que expone la experiencia internacional en el estudio de la educación no formal, las prácticas de su aplicación en diferentes países, así como los mecanismos para el reconocimiento de sus resultados.

Metodología, métodos y procesos de investigación. El trabajo se basó en la metodología de análisis comparativo y análisis de contenido cualitativo de informes estadísticos y analíticos internacionales de la UNESCO, CEDEFOP, etc, e investigaciones académicas y empíricas. En el curso de la revisión analítica, se consideraron los cambios en la política en relación al desarrollo de la educación no formal, la experiencia internacional y la existente en países en particular para su estudio e implementación.

Resultados. Basados en el principio de combinación de escalas, se han identificado tres niveles de análisis de la educación no formal (nivel macro/global, nivel meso/institucional, nivel micro/personal). Cada uno de ellos identificó y describió las cuestiones y tendencias clave en el desarrollo de la educación no formal. La investigación realizada da pie a creer que las prácticas de educación no formal están adquiriendo formas institucionales. El nivel de desar-

rollo de la educación no formal en los diferentes países difiere; sin embargo, existen tendencias generales hacia la solución de una serie de problemas sociales similares utilizando los recursos de la educación no formal, tales como la sincronización de la oferta y la demanda en el mercado laboral, inclusión social de diferentes categorías de la población, etc.

Novedad científica y significado práctico. La novedad científica del estudio consiste en que la revisión analítica presenta el potencial de recursos de la educación no formal, las posibilidades de su uso para la recualificación profesional de diferentes grupos sociodemográficos de la población, las tendencias globales y las perspectivas de su desarrollo. El significado práctico radica en que se muestran los mecanismos de reconocimiento de los resultados de la educación no formal. Las tendencias identificadas y la mejor experiencia internacional se pueden utilizar para integrar la educación formal y no formal, crear plataformas de aprendizaje experimental y acelerar las medidas prácticas de política educativa.

Palabras claves: Educación no formal, aprendizaje permanente, educación de adultos, política educativa, habilidades y competencias, recualificación, formación avanzada, mercado laboral, convalidación, reconocimiento.

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Introduction

A new educational paradigm goes hand in hand with a life-long learning (LLL) policy where non-formal education (NFE) plays a crucial role. NFE peculiarities and possible ways of its implementing into the national educational mainstream or vocational training programmes need to be comprehended properly thus it is aimed at social and economic development, professional and personal growth¹ as well as an important factor determining the level of innovation in the economy [1]. A large number of surveys, official international documents and reports on the issue have been accumulated so far. It facilitates better systematisation and assessment of the existing experience in this field along with enhancing best NFE practices.

Research questions are focused on the following aspects:

1. What is the reason for both the increased attention to NFE and the necessity for its implementation into the traditional educational frameworks and adult education?

¹Manifesto for adult learning in the 21st century: The power and joy of learning. European Association for the Education of Adults (EAEA) [Internet]. 2019 [cited 2022 Mar 10]. 24 p. Available from: https://eaea.org/wp-content/uploads/2019/04/eaea_manifesto_final_web_version_290319.pdf

2. What are NFE specifics in different countries, as reflected in the national education policy and implemented in practice?

3. What practical tools and solutions ensure the recognition of NFE outcomes?

The aim of this study is to conduct a systematic overview of the various modern NFE surveys, official international and reports, to track policy changes towards NFE development, the assessment of its implementing, its global development trends and prospects.

This study considers NFE as it is given in the International Standard Classification of Education¹. It means taking short courses, seminars or trainings. As a result of such courses, diplomas or certificates are not necessarily issued. It is alternative and/or additional to formal education in the process of education throughout life.

The hypothesis being examined is the following: NFE is acquiring meta-institutional features due to its intensive dynamics, a rapid expansion of the educational services market through new agents, the involvement of employers in the configuration of new connections, the development of an institute for independent qualifications assessment, which positively affects the socio-economic sustainability of a country's development.

The significance of the study is that the overall analysis reveals the following NFE policy and practice peculiarities: institutional framework in line with changing LLL policy, NFE as a means to meet all the requirements of the employers and the specific needs of the country's economy, best NFE practices in gaining necessary skills, knowledge and competencies, NFE independent assessment tools at the global and national levels.

The authors recognise certain limitations of the study. The overview presents the national experience in NFE of not all countries in the world. Nevertheless, the sample includes countries with different levels of socio-economic development, which allows us to show a wide range of NFE influence and assess the degree of its institutionalisation. The quantitative limitation is that statistical data on adult involvement indicators in NFE are not always comparable due to different methodology for assessing and measuring them (the number of training hours and the number of courses completed). At the same time, they provide an opportunity to trace general trends in adult involvement in NFE.

¹ International Standard Classification of Education [Internet]. ISCED 2011. 2011 [cited 2022 Mar 10]. Available from: <https://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>

Methodology, Materials and Methods

The basis of the research methodology is qualitative content analysis of international documents and studies on NFE. The analytical overview reveals an international and national experience in NFE studying and implementation. Open access publications in Scopus, Web of Science, SageOpen databases, as well as open reports and policy documents of various international organisations form the literature review.

The three groups of sources are examined:

1. The official documents and reports of different international organisations, the LLL development actors (the analytical reports and policy documents of UNESCO, International Labour Organisation (ILO), European Commission (EC), European Centre for the Development of Vocational Training (CEDEFOP).

2. The research articles and reviews, revealing changes in the LLL and NFE policies.

3. The empirical studies, outlining NFE adoption and case-studies in individual countries and for specific social groups.

The time frame for the international organisations documents is twenty years, for empirical research – about ten years.

To fully address the aim, the compatibility scopes principle is used. This methodological technique expands the theoretical framework, thereby making it possible to cover a wider range of concerns in NFE development and focus on key issues. It also provides a deeper understanding of transformation processes in education as well as the theoretical and applied knowledge about the impact of NFE on professionalisation. The combination of data from three groups enables us to identify different levels of their analysis and cluster them in accordance with research issues for each of them.

Results

World Policy towards NFE Development

Education is considered to be one of the key segments for ensuring the sustainable economic and social development of any country [2]. LLL and adult education (AE) policies began to take shape over 20 years ago¹ and are now being given a new impetus in the face of new challenges.

A significant part of the countries are facing a number of highly acute socio-political challenges. The transition to a new technological pattern of the

¹ UNESCO Institute for Lifelong Learning. European Communities: A Memorandum on Lifelong Learning [Internet]. 2000 [cited 2022 Mar 10]. 36 p. Available from: <https://uil.unesco.org/i/doc/lifelong-learning/policies/european-communities-a-memorandum-on-lifelong-learning.pdf>

world economy based on digitalisation requires adults learn something new and update their skills and competencies continuously. To address the most pressing challenges of the 21st century, to enhance social and economic cohesion, to achieve personal growth and self-knowledge, LLL should become the main objective of any country's further socio-economic policy.

NFE is integrated into two key education policies (LLL & AE) and is a meaningful part of the education system as a whole. The renewed interest in NFE is driven, first of all, by economic needs and challenges. Economic crises caused by the technological transformation, the pandemic, etc. have provoked shifts in understanding the AE objectives towards its economic benefits [3]. Therefore, it must be noted that a number of researchers pinpoint the idea that this may have some worrying consequences in terms of limiting democracy and choice [4]. Another constraint is related to the Europeanisation of education and international policy transfer [5, 6]. In addition to this, the lack in certain "21-century skills", mostly in soft and digital skills, such as communication, collaboration, leadership and teamwork skills, self-management, critical thinking, presentation and project skills, programming, etc. is accentuated by many researchers [7]. Simultaneously, as rightly pointed out by Arif Shala & Albulene Grajcevc, the quality of education is declining. The authors mark out three recommendations that will result in completing the missing "21-century skills", strengthen competencies and improve education outcomes. They are the following: applying new technologies in education, enhancing digital competencies and tailoring the education experience [8]. To master relevant skills, to stay competitive and to be able to adapt to economic and social changes, there is a requirement for intensive and ongoing training, providing individualisation and self-directed learning paths in open learning environments [9]. Thus, this determines further NFE development [10]. An urgent need for required skills has led to growing investments in NFE. The statistical data in the AE Report on 28 European countries confirm the fact that such following types of predominant learning providers as Employers and Non-formal Education and Training Institutions play a significant role in a re-skilling and up-skilling drive¹.

Despite some criticism to certain features of the European targeted education policy, it must be said that its overall contribution to the preservation and sustainable development of societies worldwide is viewed as being positive. In the ongoing implementation of this policy NFE has taken the leading place and is playing a crucial role in the agendas of LLL and AE now. The importance of AE in general and NFE in particular is emphasised in the Organisation for

¹Adult learning statistical synthesis report [Internet]. European Commission; 2020 [cited 2022 Mar 15]. 18 p. Available from: <https://ec.europa.eu/social/main.jsp?catId=738&urtherPubs=yes&pubId=8337&langId=en&>

Economic Co-operation and Development documents¹, The European Association for the Education of Adults. In addition, NFE is often regarded through the human capital theory. Thus, the International Labour Organisation highlights its social capacity for enhancing the youth education, the universalist education and employability policies in order to reduce socio-economic inequalities and produce economic development².

Adaptation to various socio-economic needs has resulted in both the growing NFE service market and the increased investments from employers and participants as well as the expansion of the range of providers (Non-formal Education and Training Institutions). NFE makes it possible to solve a number of social, economic and personal problems and promotes democracy, citizenship, social inclusion, equality and justice. Furthermore, it provides for the demanded skills acquisition in the context of a digital economy and serves to alleviate a pressing unemployment problem. Such a targeted AE policy has caused NFE institutionalisation. In other words, the formulation of norms, rules and procedures for recognition NFE outcomes is now emerging. Individual practices are shaping a stable social institution.

National NFE Practices

When viewed alongside common European education, LLL and AE policies, all countries were looking for ways to implement and expand the segment of NFE. The ways of adoption of NFE practices to national socio-economic and cultural development are introduced in both statistical reports and in individual empirical research regarding the unique experience of particular countries and regions.

When overviewing UK research of NFE, we pinpointed the following new trends. Firstly, workplace training programmes have become more effective by shifting from direct knowledge transfer to knowledge recontextualisation [11]. When conducting the cross nation study targeting UK and Canada workers, the authors identified key conditions and factors for successful re-skilling of employees with higher skills and up-skilling of employees with low skills [12]. Secondly, in the UK, NFE is often regarded as a key vehicle to promote active participatory citizenship and social inclusion agendas, to ensure social cohesion, unity, solidarity, socio-economic integration of various targeted groups such as migrants, refugees, unemployed youth, and young people in an unfavourable environment. Furthermore, the findings from four AE programmes in Scotland and England

¹Werquin P. Recognising non-formal and informal learning: Outcomes, policies and practices. OECD; 2010. 92 p. DOI: 10.1787/9789264063853-en

²International Programme on the Elimination of Child Labour (IPEC). World Report on Child Labour 2015: Paving the way to decent work for young people [Internet]. ILO; 2015 [cited 2022 Mar 03]. 112 p. Available from: https://www.ilo.org/ipec/Informationresources/WCMS_358969/lang-en/index.htm

have shown that they respond to a wide range of social challenges, for example, to provide employment skills, to strengthen cooperation and unity within a civil society, to perceive social cohesion and citizenship, to empower communities and citizens [13]. Finally, there is a decrease in state impact and public expenditure on AE. Consequently, personal responsibility for skills development and employability is increasing in the framework of a longer working life.

This trend is evidenced in other countries, for example, in Canada. A growing skills gap jointly with the abovementioned changes in the labour market encourage a person to bridge this gap on his/her own by acquiring the missing skills through NFE [14]. The same can be said for the Czech Republic where individualisation has a significantly high level mainly dependent on the need to integrate in the labour market successfully [15]. On the one hand, it promotes the release of considerable public financial resources; on the other hand, it awakens people to develop their own learning paths.

Individual responsibility for one's further training choices, a demand for knowledge, the involvement of available experience, an internal motivation have become a cornerstone of the scientific approach to AE [16, 17]. While implementing these guidelines, the infrastructure of NFE was forming in the United States. Today, it is a well-developed market segment. There are free online courses introduced by leading universities and international platforms-integrators like Coursera, EdX, Udacity, Carnegie Mellon University courses, MIT OpenCourseWare, Massachusetts Institute of Technology courses, etc. The peer-to-peer learning platform is actively developing. It is worth mentioning that commercial organisations play an important role within this structure, developing and implementing affiliate programmes. That is unique in the American NFE pattern.

Germany also shows a high degree of NFE institutionalisation. The AE tradition is deep-rooted. For more than a hundred years there have been national universities, which are united in the Association of German National Universities and have more than 900 institutions. They take a legal position and public expenditure accounts for no more than 40% in the university budget. The local authorities have led financial responsibility for the delivery of the programmes. This NFE pattern allows them to attract a large number of students and update the contents. In addition, it provides the harmonisation of social relations and integration courses as well as cultural and religious programmes [18, 19].

The success of NFE has resulted in various research aimed at its integration with formal education. For instance, its potential for STEM education [20, 21] and humanities [22] has been identified.

Apart from the individual countries, studies covering all EU countries are conducted. The authors carried out the econometric analysis using tobit regression models. The study uses secondary data from the Eurostat database and

covers 28 EU member states. It shows NFE impact on human capital and a direct link between the type of education and the level of innovation development of the states [23].

Interesting data were obtained from the analysis of 20 countries revealing NFE intensity in workplaces. It has been found that temporary workers are willing to invest in NFE higher mainly due to their early career expectations of gaining a permanent contract. NFE intensity does not replace formal education; however, employees significantly increase the necessary competencies through NFE [24]. Thus, NFE at the workplace ensures the synchrony of both the development of competencies and their use in the economy of a new technological order.

The contribution of NFE is also meaningful in developing countries, whereas its practices have pursued other objectives. In the Pacific region, NFE appears as “an old concept with a new name” and is viewed in three perspectives – structure, system and setting. According to A.Kedrayate, people usually look at it as not only an opportunity to acquire the demanded skills, but also as a cheaper alternative to formal education. Within this context, “many programmes were not successful because parents did not support the concept and perceived it be ‘second class’” to the national educational mainstream [25, p. 12]. In addition, it is also proved by the fact that in less industrialised countries NFE programmes were originally used in order to reduce illiteracy and poverty among the population as well as to respond to the challenges of economic restructuring and the needs of local communities. It still remains relevant, for example, for a number of African countries¹ and Indonesia [26, 27].

Having analysed the data across different countries, we have come to a conclusion that common education policy can not be merely copied into national ones. The stage of socio-economic development, cultural and historical backgrounds set the tone for country-specific priorities in NFE. In other words, it is always a matter of modification within the framework of national development. Thus, in highly industrialised countries NFE is taking institutional characteristics as it allows to upgrade social and professional competence and to ensure social inclusion and occupational mobility. At the same time, it promotes responsible citizenship in issues related to democracy, equality and justice. It is worth mentioning that there are positive relations between NFE and employability. In addition, innovations are developing rapidly there, and competitiveness is increasing as well. All that facilitates a transition to a new technological pattern and digital economy. In less economically developed countries NFE provides a

¹Thompson E. J. D. Successful experiences in non-formal education and alternative approaches to basic education in Africa. Association for the Development of Education in Africa [Internet]. Paris, France; 2001 [cited 2022 Mar 01]. 31 p. Available from: <https://files.eric.ed.gov/fulltext/ED472756.pdf>

general level of literacy, fills the gaps in formal education, tackles social inequality and exclusion and, finally, allows to master necessary basic skills. From all this, it will be clear that in a number of countries NFE is seamlessly integrated into people's lifestyles and has a developed structure. It indicates its high institutionalisation, while in the others institutionalisation is undergoing the stage of its formation.

Hence, despite all the above-mentioned specifics, there are common NFE development processes. First of all, the number of providers, institutions and investments from stakeholders are growing. Then, the range of training programmes and their contents are expanding. Next, their format is changing due to the application of modern teaching-learning technologies. Lastly, and most importantly for this research, in almost all countries there is now a pressing need to recognise the NFE outcomes. This issue will be covered in more detail further.

Validation and Recognition of NFE Outcomes

To begin with, the necessity of NFE recognition is highlighted globally. Many international organisations have been introducing initiatives and practical tools to assess NFE outcomes for a long time. The importance of the recognition of NFE outcomes was widely discussed at the end of the 20th century. Those countries that began to implement procedures for NFE validation and certification into their national education policy have already got a lot of experience with this so far. France can serve as a good example. Since 1985, the system of balance between competences (a system of the bilan de competence) has been introduced in order to support for employees and employers in assessing competencies and to embrace the skills within enterprises as well. Since 1990, a professional aptitude certificate (Certificate d'aptitude professionnelle) has allowed to assess qualifications external to formal institutions. Furthermore, the Chamber of Commerce and Industry has taken an initiative on the independent personnel assessment of skills and competences according to the European norm EN45013 [28]. To date, there is a developed recognition system of skills and competencies in France based on "the validation of practical experience" (Validation des acquis de l'expérience, VAE). An applicant can validate professional skills received throughout life or work experiences and training in different contexts or learn job-ready skills in high-demand fields. The system allows everyone to get 1300 types of qualifications and certified skills that are registered in the National Qualifications Framework. This system is in great demand, especially among workers with low skills¹. Finally, there is another

¹ European inventory on validation of non-formal and informal learning – 2016 update. Executive Summary. CEDEFOP [Internet]. 2016 [cited 2022 Mar 15]. 20 p. Available from: https://pjp-eu.coe.int/documents/42128013/47262208/executive_summary_-_validation_inventory_2016_0.pdf/2ba61653-8f1b-0c9c-f1b9-dc05b08a63bd

resource in France called Personal Training Account (the *Compte Personnel de Formation*, CPF). It gives an opportunity to choose and form an individual learning path. So overall, France can be considered to accept NFE outcomes at the state level.

The module system is also well grounded and recognised among European countries such as Austria, Great Britain, Germany, the Netherlands, etc. It well suits the LLL goal – to provide flexibility and a link between the levels of education by accepting alternative education and taking into account NFE outcomes. This system is aimed at analysing significant changes in the demand for education and the ability to implement them in the existing educational practices at a rapid pace. Furthermore, the emphasis is placed on re-skilling, up-skilling and getting high-demand or specific competencies.

It is sometimes criticised on the ground that it relies on certain components, provides fragmented and incoherent degrees and is characterised by a lack of a specific sequence in learning. Nevertheless, due to modularisation learners can arrange their degrees and learning paths according to their career expectations and goals. Modularisation is thought to be a remarkable change in higher education which has aided to institutionalise NFE validation and allows employers to know what individualised credentials are about [29].

Youthpass can be considered as a tool for NFE recognition. It provides an international recognition of non-formal and informal learning in youth projects, allowing the youth to gain experience, participation in projects of active volunteer services. This experience is counted when getting a job. Youthpass aims to increase recognition of both the learning process and learning outcomes: competencies developed through youth work¹.

In the USA, the recognition of NFE mostly takes place in universities. The main stakeholders are the American Council on Education (ACE), the Council for Adult and Experiential Learning (CAEL), employers and local accreditation commissions. Recognition policy of skills is targeted mainly at the unemployed, part-time workers and the adult learners who have not completed secondary education. The standardised procedure for the assessment of NFE includes testing, which demonstrates the level of academic knowledge of an applicant, comparable to a four-year higher education programme. Applicants over the age of 30 can also use the skills standards system of the AE and Experiential Learning Commission.

In Canada the recognition of NFE is based on Prior Learning Assessment and Recognition (PLAR) procedure. The procedure validates skills for different social groups – older workers, immigrants and marginalised groups.

¹Youthpass [Internet]. Available from: <https://www.youthpass.eu/en/recognition/about-recognition/>

The detailed overview of various research has shown that many countries have developed and implemented their own unique NFE recognition systems, which are closely related to national, economic and cultural characteristics. At the same time, some general trends are manifested in all countries. They are the following: the need to develop a high-quality methodology and assessment procedures, to ensure transparency, availability and reliability for job seekers and employers, commitment and engagement of the third sector of economy in the validation procedures, to bridge the gap between labour market demands and the skills of workers¹.

Discussion

The research questions raised in the article have led us to the following. First of all, having analysed and summarised the results of NFE research in the documents of international organisations and scientific literature at different levels of its implementation, we can conclude that economic and social challenges have led to its significant growth as an integral element of LLL and AE. Special emphasis on NFE as well as on the necessity for its implementation into traditional educational frameworks and adult education is placed due to the fact that NFE has a direct impact on competencies management and human capital development. Ultimately, it ensures sustainability in all areas of life from global issues (successful migration, social inclusion, etc.) to self-development and encouraging personal responsibility for further learning. The results of a targeted NFE policy demonstrate the following positive socio-economic effects: the decline in the unemployment rate, the link between employment and learning, bridging qualification gaps in the labour market, the effective adaptation and integration of migrants, growing social inclusion, trust in social institutions and active citizenship. The market of educational services has expanded significantly, mainly due to NFE providers (Massive Open Online Courses, MOOC; open educational resources, OER), as another benefit of such a policy. There is a growing trend towards the development of educational ecosystems. NFE is being integrated into the mainstream and the interests of various stakeholders (states, employers, the non-profit sector, students) are taken into account there.

The second important finding is related to NFE specifics in different countries, as reflected in the national education policy. The empirical research

¹Hawley-Woodall J. CEDEFOP. European inventory on validation of non-formal and informal learning 2018 update. Thematic report: Bridging the Gap: Validation creating routes and links between sectors [Internet]. 2019 [cited 2022 Mar 15]. 37 p. Available from: http://libserver.cedefop.europa.eu/vetelib/2019/european_inventory_validation_2018_bridging_gap.pdf

and case-studies based on data across different countries reveals a truly unique experience of implementing the global education policy in national contexts and demonstrates different socio-economic effects from eliminating illiteracy and teaching basic skills to the advanced development of territories. It has been established that the national specificity of NFE practices implementation depends on the level of a country's social and technological development. At the same time, all countries are aware of NFE resource potential and are moving towards its maximum use. Overall, this provides human capital development and, therefore, a shift to a high technological knowledge society. International and national institutions and associations are of vital importance in the implementation of NFE policy (EAEA; CEDEFOP; Organisation for Economic Co-operation and Development, OECD; The Canadian Academic English Language (CAEL). They do not only set the strategic guidelines for education policy, but also conduct regular monitoring of adult skills assessments (The Programme for the International Assessment for Adult Competencies, PIAAC). It is important to emphasise that this methodology allows us to estimate the influence of formal, non-formal and informal education on the level of adult competencies. This makes it possible to compare data at the international level and implement evidence-based policies.

The third finding is devoted to practical tools and solutions ensuring the recognition of NFE outcomes. This question is increasingly being discussed in the joint discourse of education and labour market. Methodological and organisational mechanisms are being developed both nationally and internationally to validate and recognise NFE outcomes. The availability and efficiency of these methods such as certification and validation procedures interlinked with national qualifications frameworks, in turn, results in its effectiveness. In this regard, further improving methods for NFE validation and recognition has to take place. There is a trend towards a unified approach to it within an independent qualifications assessment system. Legitimizing the recognition of NFE outcomes is a multidimensional and complex process, requiring both changes in legislation itself and a new typology of certificates and diplomas, which would cover all forms of education as well as professional experience. Despite the complexity and cost of providing this process, it will undoubtedly benefit all stakeholders: government, business, educational organisations, and others.

All the findings are shown in the table below.

Table 1

Key issues and trending topics of NFE development on different levels

Level of analysis	Key issues	Trending topics
Macro/global level	<ol style="list-style-type: none"> 1. Education paradigm shift; 2. International organisations policy towards the NFE development; 3. State/national education policy. 	<ol style="list-style-type: none"> 1. Shift from education for the profession to education for the individual in the interests of a sustainable social development; 2. Commodification and Europeanisation of education; 3. Economically determined need for certain professions and skills; 4. Social inclusion, impact on democracy and choice; 5. Investigating self-directed learning patterns of adults in NFE and emergence of a global market for open educational resources and MOOCs; 6. NFE and Training Institutions segment increase.
Meso/institutional level	<ol style="list-style-type: none"> 1. International education policy adaptation to national contexts; 2. National experience and specifics regarding the NFE outcomes, skills assessment, successful case-studies and programmes. 	<ol style="list-style-type: none"> 1. Analyses of successful programmes for targeted groups (the youth, the elderly, the unemployed, migrants); 2. Integration of AE and active participatory citizenship concepts; 3. Increased role of the third sector of economy in NFE outcomes recognition; 4. Specific interaction configuration and assessment of the main stakeholders investments in NFE (the state, employers, the third sector and workers); 5. Social effect of NFE is determined by the stage of economic development and technological maturity of a country; 6. Developing national systems for NFE outcomes recognition (APL, VAE, RARPA, SCQF, NARIC, PLAR), assessing NFE implementation and integration into FE.

Micro/personal level	<ol style="list-style-type: none"> 1. Motivation to self-development, LLL and to access NFE; 2. Renewed focus on individual learning paths, professional and social inclusion. 	<ol style="list-style-type: none"> 1. Opportunity to choose, structure individual learning paths and self-management; 2. Personal experience and microcredentials recognition; 3. Case-studies of successful practices and learning technologies; 4. Factors forming a positive and negative attitude towards NFE of different social groups representatives (migrants, refugees, the elderly, the unemployed); 5. Using the principles of pedagogy and andragogy for productive learning.
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The findings reveal several important gaps:

1. On the one hand, a shift on focus towards education for individual development and self-sustainability rather than for professional attainments is accentuated by a number of researchers. On the other hand, market logic remains dominant. Among the objectives of educational stakeholders and education policy in general meeting tomorrow's employment needs in skills for the economy of a new technological order, bridging the gap between supply and demand, and ensuring rapid adaptation to the new requirements, economic and social challenges prevail. The issues of personality development and people's possibilities for agency remain poorly articulated in scientific and political discourse and weakly supported by reliable practical solutions.

2. Alongside the global trends in NFE development, individual countries conduct isolated and inert research and case-studies of its implementation. It can be assumed that the institutional inertia of education sector itself, the lack of a clear conceptualisation of NFE integration process, and the absence of active encouraged stakeholders cause such fragmentation. To fully address this issue, we need to explore in detail and understand the category of agency (proactive position) as well as its impact on maintaining and improving learning environments in interaction with external institutions. This goes hand in hand with the question of how to shape a proactive position of learners, businesses, educational institutions, employers in order to accelerate the process of education transformation?

3. Despite the fact, that the skills acquired in NFE are of vital importance nowadays, there is no unified approach to assessing and recognising its outcomes, which often drive the debate. Only a few countries, usually highly tech-

nologically developed, have sustainable patterns and tools for recognising NFE skills. Most countries show passivity or minor attempts to establish a unified system of independent qualifications assessment. Thus, the findings greatly enhance the understanding of international education policy and the role of expert structures in it, as well as lead to the question: “What is the reason for NFE low integration and institutionalisation in social and labour sectors, the internal mismatch of LLL policy as a whole?”.

Conclusion

The compatibility scopes methodology in the analysis of NFE trends provides a deeper understanding of the process of NFE institution development. The analytical review shows that NFE is articulated not just as an institution that fulfills certain social functions, but as an institution that is in continuous development. During this evolution, on the one hand, there is a change in NFE functions both in general and its separate elements particularly. On the other hand, there is a change in the sense of these very functions during historical, socio-economic and technological development of a society. Thus, NFE acquires the features of not just a social institution, but in some countries a meta-institution. It unites different institutions based on shared interests, connections, including a system of independent qualifications assessment. Individual practices are forming stable patterns, a system of norms, rules and procedures, including the methods and tools for recognising NFE outcomes. In highly developed countries this process is faster and ensures synchrony in the demand and supply of competences. Among the results obtained, special attention should be paid to the goal-setting shift in LLL education policy, the expansion of NFE segment and the emergence of new actors, active stakeholders, including employers and Training Institutions. The interpretation of the results shows two vectors in NFE conceptualisation and therefore, its development - learner-oriented conceptualisation (for personal development throughout life) and economic conceptualisation (for managing competencies in the regional economic policy of the OECD and EU countries). The data prove that in almost all countries NFE contributes to positive social and economic sustainability. In developing countries, NFE provides training for marginalised groups of the population, while in highly developed countries it enables advanced training to meet the needs of a changing labour market, including transprofessionalism and smart industrial specialisation through micro-learning.

Within this context, NFE of adults is becoming a necessary prerequisite for successful adaptation to new challenges, rapid socio-economic and technological changes. Knowledge as well as its continuous updating is becoming the “axis”

around which new technologies, innovations, economic growth, employability, democracy, social inclusion, active citizenship, etc. are rotating and developing.

Understanding the internal connection of NFE with the demands of the changing world provides many additional opportunities for the in-depth studies on the current NFE issues and its further development.

Some prospects for further NFE studies based on trending topics are linked with the following issues:

1. The continuity of educational opportunities at the global and national levels; different development paths for the policy of “second” chances; the rethinking of current educational and social patterns to ensure social justice and equality; the preservation of personal and democratic components in the learning economy;

2. The study of international experience and its application in different contexts, especially high income countries practices and case-studies; promoting motivation for NFE teachers and their re-skilling and up-skilling; the creating a positive social NFE assessment; the application of various learning styles approaches and the expansion of the availability of open universities and open educational resources;

3. The opportunities for reengineering of the educational infrastructure, creating of an educational ecosystem that combines the advantages of formal, non-formal and informal learning and integrating the recognition and validation patterns of NFE outcomes into the mainstream;

4. The ways to bridge qualification gaps in the labour market; the potential for advanced learning to meet new challenges (pre-adaptation);

5. The use of modern technologies and practices including peer-to-peer learning platforms, microlearning, adaptive learning etc.; designing open educational resources and MOOCs environments in order to meet learners’ self-regulated needs.

6. The assessment of NFE resource potential in the context of transprofessional education which means continuous development and retraining, including a career change, skills and competencies acquisition in related industries.

The scientific novelty of the study lies in that it identifies global trending topics in NFE development and shows a positive link between NFE and socio-economic sustainability of a country’s development as well as the national peculiarities of NFE recognition including the establishing of the institute for independent qualifications assessment. The study contributes to the global understanding of the transformation processes in education, provides the expansion of a theoretical framework and expands a research focus on the nature of NFE as a source of professional and personal development in the context of the transition to a digital economy.

The results of the study can be used to take social policy measures for bridging the “qualification gap”, to synchronise supply and demand for competencies and to create NFE experimental educational platforms for different social and professional groups. To crown it all, they can contribute to accelerate managerial decisions in order to create educational ecosystems of lifelong learning. The research findings will definitely prove useful for practitioners, instructional designers of educational programmes for adults and other targeted groups, educational and social policy makers, human resource managers, NFE providers and system integrators. All of the above represent the practical significance of the study.

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