

LIFELONG LEARNING IN ACTION: INNOVATIVE NON-FORMAL EDUCATION PRACTICES FROM SLOVENIA

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Abstract

Non-formal education plays a key role in adult education and lifelong learning, providing flexible, accessible and personalised forms of education and learning that respond to the needs of adults in a rapidly changing world.

An analysis of the Labour Force Survey data reveals that adult participation in formal education in Slovenia is relatively low, whereas participation in non-formal education is more prevalent. Non-formal education responds to the specific needs of individuals for knowledge, training and personal development.

This paper presents two examples of innovative non-formal education practices in Slovenia: study circles and publicly recognised adult education programmes, with Understanding Health – The Pathway to a Healthy Lifestyle serving as an example.

A study circle is a form of non-formal education in which a small group of individuals voluntarily come together to learn, conduct research or address a specific topic of shared interest. Originally a Swedish concept, study circles have been adapted to suit local needs in Slovenia. Slovenian study circles pursue two main objectives: an educational goal focused on acquiring new knowledge and skills, and an action-oriented goal aimed at applying what has been learned within the local community.

Publicly recognised programmes represent another form of non-formal learning. This paper introduces a newly developed publicly recognised programme titled Understanding Health – The Pathway to a Healthy Lifestyle, which aims to improve health literacy and, in turn, the overall health of the Slovenian population. The paper outlines the key approach to the programme's implementation, specifically the innovative use of a developmental e-portfolio as a tool for the self-regulation of health and the promotion of a critical perspective on health-related content.

Keywords: *non-formal education, case studies, study circles, publicly recognised non-formal programme, health literacy, formative assessment*

1. INTRODUCTION

1.1. Lifelong Learning

In today's society, characterised by rapid and often unpredictable social, technological, and economic changes, lifelong learning has emerged as a crucial element for personal, professional, and social development. It extends beyond adult education; it is a complex concept encompassing various forms and contexts of learning, from early childhood to old age, including formal, non-formal, and informal learning practices, and covering personal, professional, and social dimensions of knowledge. As Jelenc [1] notes, various authors have emphasised different aspects of lifelong learning, defining it from both theoretical and practical perspectives. Lengrand [2] described "lifelong education" as "permanent education", viewing it as a holistic concept in which all parts of the educational process are interconnected and interdependent. Krajnc [3] defined lifelong learning as a new social relationship linking upbringing, education, work, culture, politics, and society, representing a synthesis of economic, sociological, psychological, pedagogical, and andragogical aspects. Jarvis [4] highlighted that learning is not necessarily tied to formal institutions; education is part of a broader social experience, and the state must ensure access to learning for all individuals throughout their lives.

Rubenson [5] argued that lifelong learning, understood as a process that occurs lifelong (throughout life) and life-wide (across different life contexts), should also be seen as a cultural and political phenomenon. Rooted in the humanistic tradition, it aims to enable personal development, better self-image, self-realisation, equality, and contribute to a better society and quality of life.

A significant contribution to the modern understanding of lifelong learning is Faure's report *Learning to Be* [6], which foregrounds the concept of a "learning society". This encompasses all forms of learning, both formal and non-formal, and extends beyond schools, emphasising learning as a lifelong, social process.

At the political level, the Organisation for Economic Co-operation and Development (OECD) Ministerial Conference in Paris defined lifelong learning as a vision encompassing individual and social development in all types and forms – formal, non-formal and informal – with a particular emphasis on early childhood inclusion and continued education and learning throughout life [7].

Billett [8] has recently stressed the significance of workplace and personal learning. His research illustrates that learning is deeply embedded in everyday practices, mentoring, and social contexts. He views learning as practical, situated, and culturally conditioned.

Jelenc [1] defines lifelong learning as: "an activity and process that encompasses all forms of learning – formal, non-formal, and informal, whether accidental or incidental. It takes place in various learning contexts, from birth and early childhood through adulthood to the end of life, aiming to improve an individual's knowledge and skills. Through learning, we also acquire interests, character traits, values, attitudes towards ourselves and others, and other personality characteristics."

At the European level, Holford, Riddell and Weedon [9] note that the understanding of lifelong learning is well captured by the Council of Europe's 2002 Resolution, which states:

"Lifelong learning should cover learning from pre-school to post-retirement years, including the full spectrum of formal, non-formal, and informal learning. Furthermore, lifelong learning should be understood as all activities undertaken throughout life to improve knowledge, skills, and competences from a personal, civic, social, and employment-related perspective" [10].

For research purposes, Egglestone, Gray and Marren [11] define lifelong learning as any education or training undertaken after completing full-time education. The definition is intentionally broad, given the diversity of adult learning programmes. This includes work-based and work-related training, career-related education undertaken during leisure time, employment interventions with education as a main component, and training unrelated to work.

Lifelong learning is no longer associated solely with adult education or continuing professional training. In today's context, it represents a comprehensive approach to learning, embedded throughout life, in various settings and modalities. Recent definitions reflect the increasing complexity of modern society, rapid technological change, and the growing need for adaptability.

One of the most holistic and current definitions comes from the United Nations Educational, Scientific and Cultural Organization [12] (UNESCO 2024), which describes lifelong learning as "rooted in the integration of learning and living, covering learning activities for people of all ages, in all life-wide contexts and through a variety of modalities". This definition is particularly significant as it underscores the concept of "lifelong, life-wide, and life-deep learning" occurring not only in formal settings but also in workplaces, families, communities, and through digital platforms.

The body of research confirms that lifelong learning is a multidimensional concept, linking personal growth, social inclusion, educational policy, and the sustainable development of society. Although the contributing authors come from diverse theoretical traditions – humanism, constructivism, and critical theory – they all agree that learning must be continuous, accessible, inclusive, and adapted to the individual's life circumstances. On this basis, the paper continues by examining concrete examples of non-formal education practices and innovative approaches in Slovenia.

1.2. Non-formal Education – A Key Form of Lifelong Learning

Several authors [1, 13] emphasise that within the concept of lifelong learning, different forms of learning must be recognised and valued according to an individual's life stage. While formal education plays a crucial role in the early stages of life, that is, during childhood and adolescence when individuals enter the education system and acquire basic knowledge and competences, non-formal education and informal learning become particularly significant in adulthood. Similarly, Jelenc [1] argues that non-formal and informal forms of education and learning enable adults to grow personally, integrate socially, and develop professionally.

Non-formal education and informal learning are vital in adult education as they provide more flexible, accessible, and tailored forms of education that respond to the needs of adults in a rapidly changing world.

Coombs and Ahmed [14] offer a much-cited definition of non-formal education: “any organized, systematic, educational activity carried on outside the framework of formal system to provide selected types of learning to particular subgroups in the population, adults as well as children.” In their analysis of various definitions, Johnson and Majewska [15] summarise the core characteristics of non-formal learning: it may or may not have structure; it is often stimulated by the teacher's non-directive behaviour; the learner recognises it; motivation is intrinsic; it frequently contains an element of voluntariness; it may occur within institutions; it is not necessarily certified through qualifications; it does not necessarily focus on propositional knowledge; it encompasses cognitive, emotional, social, and behavioural dimensions; the curriculum may not be formally written; it is learner-centred and based on participants' needs, it can complement formal curricula; and it is not necessarily linked to socialisation.

As the empirical section relies on data from the Labour Force Survey [16], reflecting on the definition used in this context is essential. Here, non-formal education is described as structured, planned educational activities (such as workshops or private lessons) undertaken outside the formal schooling system, deliberately pursued within the previous four weeks, but excluding on-the-job training.

1.3. Lifelong Learning in Slovenia

In Slovenia, lifelong learning represents a significant concept, with its objectives, activities, resources, and performance indicators defined in the *Resolution on the Adult Education Master Plan in the Republic of Slovenia for the 2022–2030 period* [17]. A key indicator of the effectiveness of national policy is the monitoring of adult participation in education activities through two international instruments: the Labour Force Survey [16] and the Adult Education Survey [18].

In 2019 and the preceding years, the adult participation rate in education stood at approximately 11%, aligning closely with the European Union (EU) average. However, in 2020, this rate declined by four percentage points. A notable increase occurred in 2021, when participation rose sharply to 18.9%, exceeding the EU average by around nine percentage points. Various scholars have sought to explain this significant rise, attributing it to factors related to the post-COVID-19 context. Mirčeva [19] posits that a substantial number of individuals, placed on mandatory leave during nationwide lockdowns, engaged in distance learning. Sotošek [20] highlights that this trend was supported by a favourable legal framework implemented by the state. Additionally, job displacement prompted many individuals to pursue upskilling and reskilling opportunities. These dynamics have continued to shape adult education participation through 2022 and into the present.

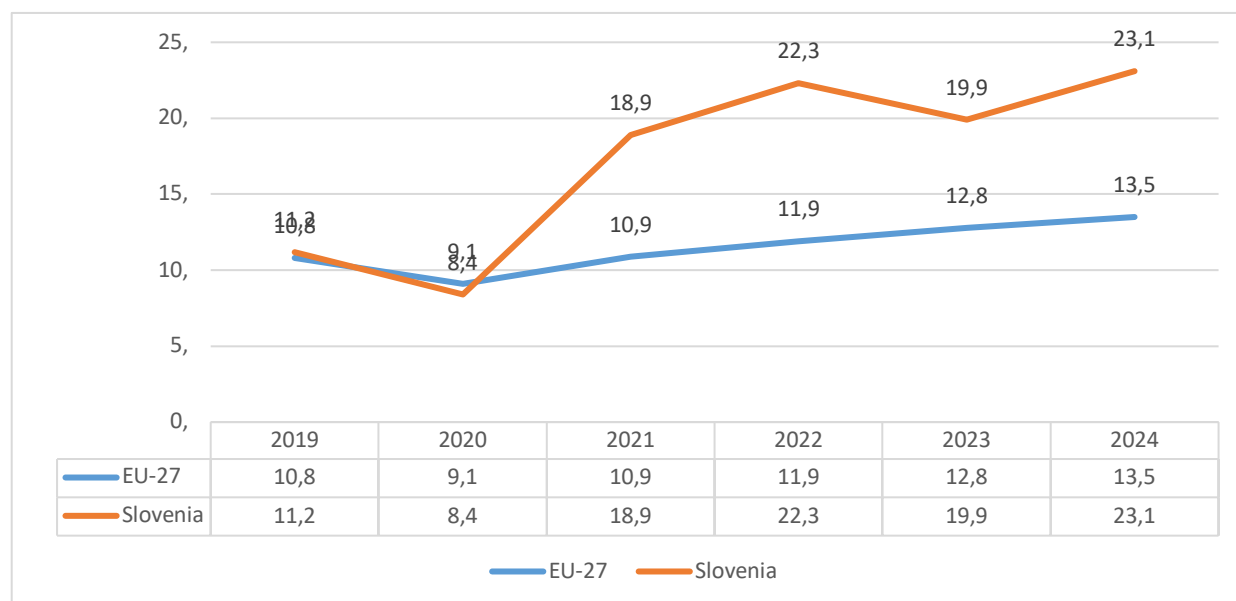


Figure 1: Participation in education among the adult population aged 25–64 in Slovenia (2019–2024), compared to the EU average (27 countries) (Source: Eurostat 2025)

When considering the type of education, an interesting finding emerges. The participation rate in adult formal education and training (FET) has remained equivalent to the EU average in recent years. The difference is primarily driven by participation in non-formal education and training (NFET) [16].

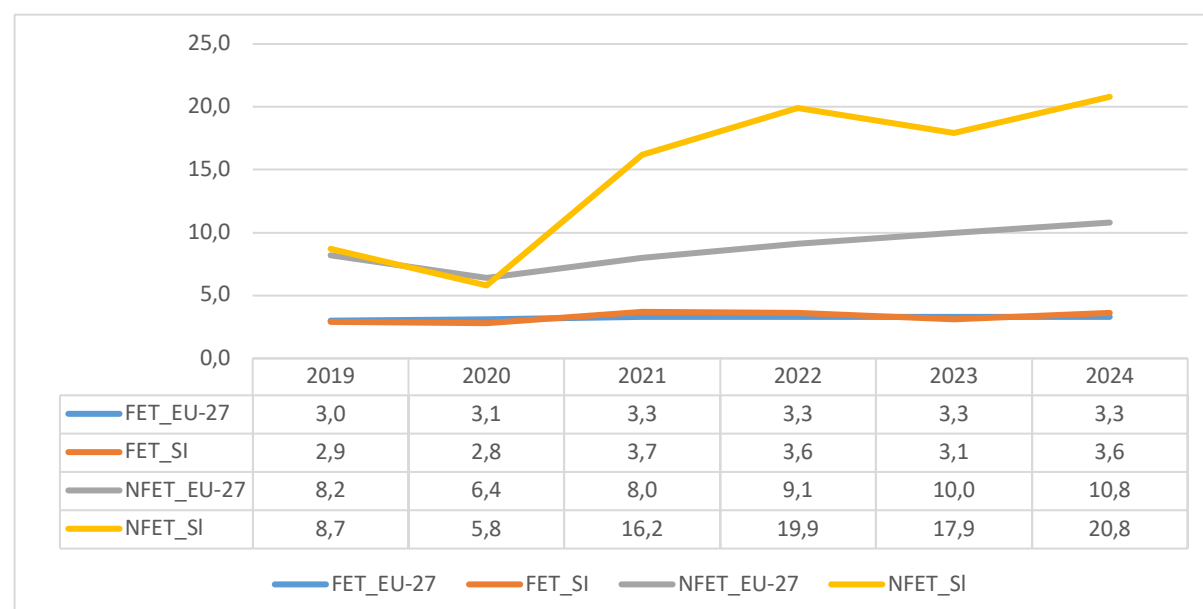


Figure 2: Participation in formal (FET) and non-formal (NFET) education among adults aged 25–64 in Slovenia (2019–2024), compared to EU-27 averages (Source: Eurostat 2025)

Further analysis of participation in two categories of non-formal education – job-related and non-job-related learning – reveals a marked predominance of the former. In 2024, the participation rate in job-related non-formal education stood at 15.2%, while non-job-related non-formal education accounted for only 5.6% of adult learners [21].

In light of these findings, the Slovenian Institute for Adult Education has strategically emphasised the development of non-formal educational formats and learning programmes that are engaging and thematically relevant, with a particular focus on non-job-related content. These initiatives aim to appeal to a broader segment of the adult population by prioritising general education and the development of basic skills, rather than focusing exclusively on vocational upskilling or reskilling.

This paper introduces two innovative non-formal adult education programmes that have substantially contributed to promoting lifelong learning in Slovenia. The first initiative, *study circles*, is adapted from a concept initially developed in Sweden. In the Slovenian context, however, it has undergone significant localisation, resulting in a model with distinctive national characteristics. The second programme, *Understanding Health – The Pathway to a Healthy Lifestyle* [22], is a recent initiative developed in Slovenia.

In presenting these two examples of good practice – *the study circles and Understanding Health – The Pathway to a Healthy Lifestyle* programme – we have chosen the case study method as our primary approach. This qualitative method enables us to explore each programme in depth, capturing not only what was done but also how and why these initiatives proved effective in their specific contexts.

By focusing closely on these two cases, we provide a contextualised understanding of the practices, implementation processes, and outcomes. Each programme operates within a distinct framework, yet both offer valuable insights into inclusive, learner-centred approaches.

This method supports a holistic analysis of each case by drawing on various data sources (such as interviews, participant feedback, and programme documentation). It allows us to uncover the underlying factors that contributed to the success of these programmes, such as collaboration, adaptability, and responsiveness to community needs.

Ultimately, the case study approach supports a deeper understanding of how innovative and participatory practices can contribute to lifelong learning. By examining concrete examples, we can better appreciate how adult education initiatives foster personal development, active citizenship, and social inclusion throughout life.

2. RESULTS

This section presents two examples of best practices in Slovenia, both characterised by high evaluations from participants and educators: *study circles* and the programme *Understanding Health – The Pathway to a Healthy Lifestyle*, the latter serving as a representative case of publicly recognised non-formal education initiatives.

Study circles represent a model of non-formal education and learning that is particularly well-established in the Slovenian context. This educational approach focuses on fostering the development of local communities and is closely linked to the community members' personal and social growth. The overall quality of life within a community is closely associated with its residents' knowledge, values, and active engagement. Community-based education involves collaborative efforts among individuals, groups, educators, and various organisations, and relies on systematically identifying local needs. It includes the strategic planning of educational initiatives and the practical application of acquired knowledge to address specific community challenges [23]. Since the goals of study circles align with the public interest, participation is free of charge. Each study circle is facilitated by a trained mentor, who receives professional guidance and structured support from a national coordination body, which ensures monitoring, development, connections with similar international projects, and public promotion of the initiative [24].

Publicly recognised programmes also constitute a form of state-funded non-formal education in Slovenia. Although they do not lead to formal educational qualifications, these programmes are delivered in structured formats outside the formal education system. Their quality is assured by the Expert Council for Adult Education, and implementation is carried out by institutions specialising in adult education. Prior to 2024, there were no formally recognised programmes within the non-formal

educational initiatives aimed at enhancing adults' general knowledge. In 2024, however, the Slovenian Institute for Adult Education introduced the first two publicly accredited programmes targeting the improvement of general educational competences within the adult population: *Understanding Health – The Pathway to a Healthy Lifestyle* [22] and *Discovering the Power of Nature – Developing Knowledge and Skills about the Environment and Sustainability* [25].

2.1. Study Circles: A Grassroots Model of Lifelong Learning

One of Slovenia's most prominent forms of non-formal education is the study circle, which plays a vital role in lifelong learning, especially in adulthood. As a form of non-formal education, study circles enable voluntary, lifelong, and community-oriented learning, and thus, significantly contribute to individuals' personal development and social inclusion. In Slovenia, they are recognised as general educational forms of group-based, voluntary adult learning, conducted non-hierarchically and typically concluding with a group event. A group usually consists of five to twelve individuals who meet with the aim of structured learning. Relationships within the group are equal, relaxed, and friendly, while the work itself is designed to be creative, collaborative, and thoughtful. Although a mentor guides each circle, participants independently decide on the content, location, method, and pace of learning, and the learning process continues as long and as profoundly as the participants wish [26].

Study circles, as a democratic form of adult education, date back to the late 19th and early 20th centuries, emerging in the United States, Sweden, and the United Kingdom. The most enduring tradition has been preserved in Sweden, where study circles constitute an integral part of the adult education system [27]. Oskar Olson, known as the *father of study circles*, was guided by the idea that the quality of a population's life could be improved through the transformation of the individual, which subsequently became the foundation for the democratisation of society. Today, study circles are widespread in Sweden, with more than a quarter of the population participating annually. With their extensive and systematically organised networks of non-formal education, Scandinavian countries achieve outstanding results in functional literacy and participation in education [26].

While conceptually rooted in the Swedish tradition – emphasising dialogue, voluntary participation, and collective knowledge construction – Slovenian study circles have evolved to reflect local social, cultural, and educational contexts. Over time, they have incorporated elements tailored to local needs, such as stronger links with local development initiatives, the inclusion of vulnerable groups, and collaboration with municipalities and civil society organisations.

Study circles in Slovenia are based on two primary goals: a learning/educational goal (acquisition of knowledge) and an action-oriented goal (effecting change in the environment). The first highlights participants' development and personal growth, while the second emphasises concrete participation and impact on the local community. As a methodological framework, socio-cultural animation enables the inclusion of diverse social groups, thereby reducing exclusion and enhancing social cohesion – an essential foundation for a functioning local democracy. On this basis, study circles are widespread in both urban and rural environments.

The aims and focus of study circles have evolved. In the early period, particularly around 1993, the emphasis was on expanding adult learning opportunities and promoting societal democratisation. In the following decade, additional goals included improving access for less-educated and vulnerable social groups and encouraging their participation. These goals remain relevant today, with increasing emphasis on the intergenerational structure of study circles and transformative learning as a response to climate and social changes [24].

The learning and implementation process in study circles follows a clearly defined andragogical cycle (Conceptual Programming Model) which includes the following phases [28]:

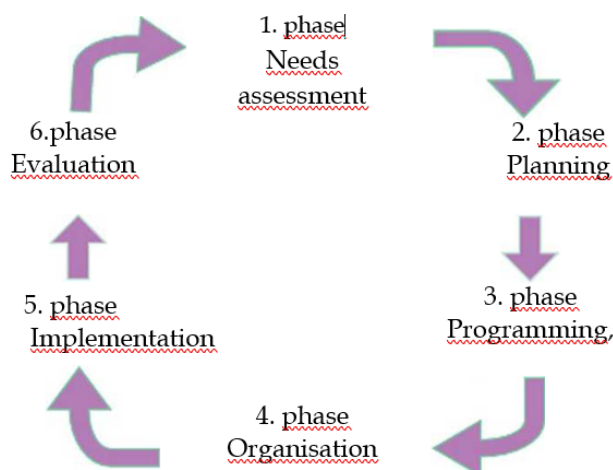


Figure 3: A Conceptual Programming Model (Source: Boone, Safrit, and Jones 2002)

The following example demonstrates the practical application of this model, based on a Slovenian study circle project focused on revitalising an abandoned mine as a tourist attraction.

The study circle began with a clear *needs assessment*, where young men from a rural border village expressed interest in the history and condition of a long-abandoned local mine. During the *planning phase*, learning goals centred around geology, chemistry, and local history, with the mentor employing inquiry-driven methods, documentation, and collaborative exploration. The *programming phase* involved designing activities aligned with participants' interests and previous experiences, integrating academic content with practical engagement such as fieldwork and mineral identification. Initially, the mentor led the *organisational phase*, but it gradually transitioned into a model of shared responsibility, with group members taking on tasks such as media presentations and exhibition planning, thereby empowering them to co-create their learning environment. The *implementation phase* was dynamic and action-oriented, encompassing experiential learning, public engagement, and participation in cultural events. Finally, *evaluation* occurred both informally, through reflection on learning and public feedback, and more broadly, as the project deepened local appreciation for mining heritage and fostered ongoing collaboration with an established researcher, sparking new learning cycles in the community.

Statistical data [29] indicate a growing trend in the number of study circles: in 2010, there were 60 active circles in Slovenia; by 2020, this number had risen to 73, and by 2024, it had reached 92. While 966 mentors have been trained overall, 144 are active, demonstrating consistent growth and the increasing significance of this non-formal education in contemporary society.

Study circles display core characteristics of non-formal education, including learner-centredness, internal motivation, voluntary participation, and flexible structures outside the formal education system [14].

Unlike formal education, which is structured, hierarchical, and oriented towards standardised learning outcomes, study circles function within a non-hierarchical, open, and participatory learning environment that prioritises process-based learning, participant initiative, and integrating knowledge with everyday life.

Below, we outline some key differences between study circles and traditional classroom teaching, as observed by Slovenian researchers during the early development of the model [27]. These findings provide empirical support for the theoretical framework presented by Coombs and Ahmed [14].

Table 1: Differences between study circles and formal education

Aspect	Study Circles	Formal Education
Learning structure	Non-hierarchical, collaborative	Hierarchical, lecture-based
Goal	Personal growth, group cooperation	Attainment of formal qualifications
Learning process	Participants co-create content	Pre-defined curriculum
Role of mentor/teacher	Facilitator, motivator	Lecturer, evaluator
Connection with the environment	Strong, often field-based	Weaker, usually confined to the institution

The analysis showed that the main motives for participation were the desire to introduce innovations in the field of adult education (as expressed by the circle leaders), the need for personal development and learning (highlighted by the mentors), and the effort to acquire new knowledge to implement changes in the local environment (as emphasised by the participants themselves) [30].

Relations within the study circle are equal, relaxed, and friendly [31]. The work is creative, cooperative and carefully planned. It originates from and is driven by the needs and interests of individuals who strive to do their best and are willing to actively participate in the learning process and the functioning of the study circle. The latter is led by a mentor trained to guide the study circle. Although such a learning process presents a considerable challenge, it allows individuals the opportunity to unlock their potential, fostering a sense of freedom and meaning.

Participants in a study circle decide what, where, and how they will learn. They plan their work themselves and continue learning for as long and deeply as they wish. The democratic exchange of knowledge, skills, and experience provides fertile ground for intellectual development, the establishment and strengthening of interpersonal relationships, and significantly contributes to the quality of life within the community.

Upon the conclusion of a study circle, the newly acquired knowledge is presented in various forms: a lecture, exhibition, excursion, literary evening, booklet, regularly issued bulletins, play, or other performance. Such outputs not only reflect the content of the study circle and the creativity of its members but also contribute to the development of the community where a study circle took place [29].

Study circles have been – and continue to be – particularly important in Slovenia for disadvantaged and less-educated individuals, older adults, and residents of smaller settlements with fewer than 1,000 inhabitants, where no other adult education opportunities exist. These individuals often felt excluded from social life and isolated, making participation in the circles especially valuable [32].

The circles appeal to participants and have engaged people across Slovenia, occurring annually in more than 120 locations. They offer opportunities for active community involvement, especially for those who face barriers to accessing learning but do not wish to remain passive. Study circles promote collaborative learning – experiential and co-creative processes in age-diverse groups, where individuals must align their interests, fostering positive interdependence and shared responsibility.

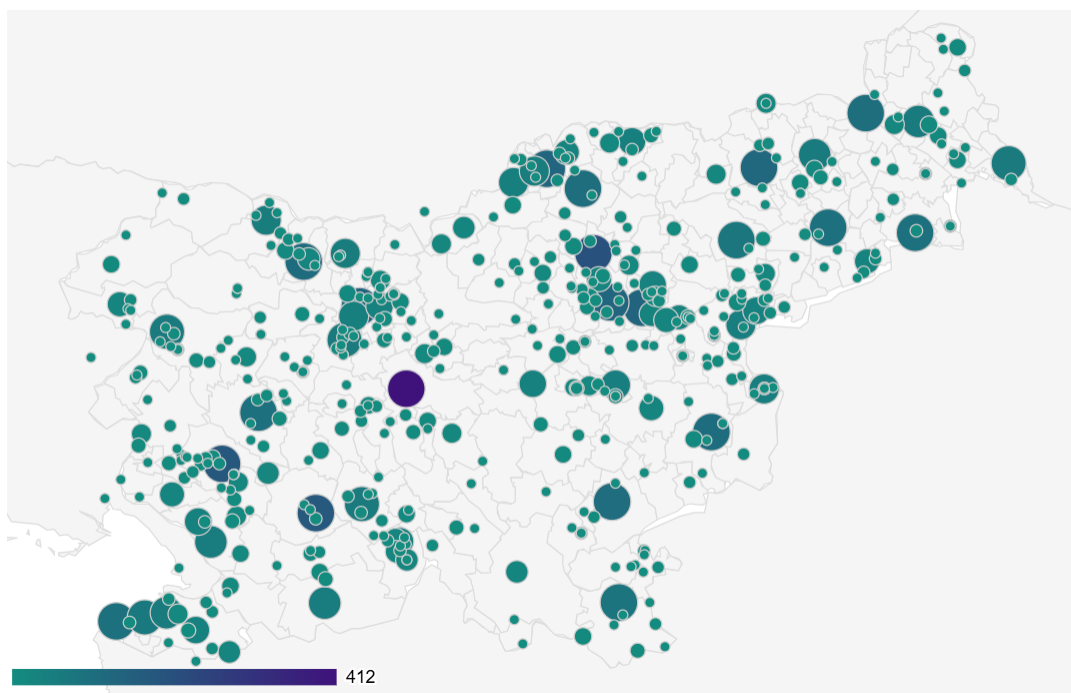


Figure 4: Distribution of study circles in Slovenia (Source: Andragoški center Slovenije, no date)

Study circles in Slovenia have been monitored for over 30 years, reflecting a long-standing commitment to lifelong learning. The current digital tool provides a robust foundation for monitoring and evaluating these circles, enabling data-driven improvements in adult education. Furthermore, recent evaluations highlight promising opportunities for enhancement through targeted updates, demonstrating a proactive approach to adapting the programme to evolving learner needs.

2.2. Publicly Valid Non-formal Educational Programmes: Understanding Health – The Pathway to a Healthy Lifestyle as an example

Two primary categories of publicly recognised non-formal programmes currently exist in Slovenia. The first includes programmes aimed at enhancing basic skills – such as literacy, numeracy, and digital competences – as well as broader basic competences, including language proficiency; science, technology, engineering, and mathematical (STEM) skills; personal and social competences; and other skills aligned with the European Council’s recommendations on key competences for lifelong learning. [33]. These programmes primarily target vulnerable or disadvantaged groups.

The second category comprises programmes designed to raise the general educational level of the adult population. The conceptual framework for developing such programmes anticipates several thematic areas, including personal development, health and well-being, environmental awareness and sustainability, cultural heritage, and related fields [34].

As mentioned above, two programmes designed to enhance general population knowledge were launched in 2024. Both employ innovative pedagogical approaches and are grounded in the theoretical frameworks of transformative learning [35] and formative assessment [36]. This section presents an overview of the programme *Understanding Health – The Pathway to a Healthy Lifestyle* [22], focusing on its content, key theoretical foundations, and implementation guidelines. This is followed by an evaluation of the programme, based on feedback from educators who participated in a 32-hour training course developed to support programme delivery.

The *Understanding Health – The Pathway to a Healthy Lifestyle* programme includes core content aimed at developing an understanding of contemporary physical and mental health conceptions. It

addresses key questions such as: What constitutes health and mental well-being? Which factors contribute to maintaining or improving physical and mental health? How can individuals enhance their well-being or take preventive measures to avoid illness? Where can reliable health information be found, and how can its credibility be assessed? How should one navigate complex health systems?[22]

The programme is structured into four modules: *Nutrition, Health and Prevention, Exercise for Health/Physical Activity*, and *Personal Development/Mental Health*. The first three modules primarily aim to enhance health literacy, defined as “an individual’s ability to acquire, understand, and evaluate health information and to use it appropriately in everyday life or to communicate it to significant others” [37]. In contrast, the *Personal Development* module focuses on fostering social-emotional competences, as outlined in various theoretical models [38, 39, 40, 41, 42, 43].

The *Understanding Health – The Pathway to a Healthy Lifestyle* programme aims to strengthen participants’ health literacy and socio-emotional competencies. Specifically, it seeks to broaden and deepen their knowledge and skills related to physical and mental health. It also shapes their attitudes toward personal well-being, thereby encouraging more responsible health-related decision-making and behaviour [22]. The programme is based on the premise that comprehensive learner engagement increases the likelihood of transforming core beliefs related to personal health. This transformation is considered essential for achieving lasting changes in individuals’ perceptions, behaviours, and lifestyles related to health [44].

The theoretical foundation of the programme is based primarily on Mezirow’s Transformative Learning Theory, which posits that individuals’ meaning perspectives (attitudes) and meaning schemes (frameworks for interpreting experience) can be transformed through critical reflection, as operationalised by Kokkos [45]. A second core framework incorporates the principles of formative assessment, particularly as developed by Black and Wiliam [36] and Wiliam [46], and further applied by Rupnik Vec et al. [44] in their model of the learning cycle.

This learning cycle, promoted in the *Understanding Health – The Pathway to a Healthy Lifestyle* programme, comprises the following seven stages (Figure 5):

1. Raising awareness of prior knowledge relevant to the topic (e.g., health beliefs, attitudes towards physical activity, emotional responses) or assessing current levels of skill development (e.g., critical thinking, collaboration, self-regulation).
2. Formulating clear learning objectives across both content and skill domains.
3. Co-creating success criteria to evaluate the achievement of these objectives.
4. Collaboratively planning the learning pathway.
5. Implementing learning activities within and beyond the instructional context.
6. Obtaining feedback from instructors and/or peers.
7. Engaging in self-monitoring and self-evaluation of performance in relation to the established criteria.

When learning objectives are not fully achieved, the process allows for their redefinition and the initiation of a new learning cycle. This often involves designing additional learning activities and gathering new evidence to demonstrate progress. The teacher or facilitator guides the learner’s thinking and exploration throughout each stage by posing targeted, reflective questions (Figure 5).

A core principle of this approach is the learner’s continuous, active engagement and co-construction of the learning process. In doing so, participants assume control over their learning and take responsibility for the outcomes. This pedagogical model is grounded in key tenets of humanistic psychology, including active adult learner engagement, self-initiative, insight, reflection, and self-assessment [47]. It also reflects foundational principles of adult learning as outlined by Knowles in *The Adult Learner* [48], which emphasise self-direction, interest-driven learning, and relevance to real-life contexts.

A critical instrument supporting formative assessment and self-monitoring in the programme is the learner's *developmental electronic portfolio* (e-portfolio). The term *e-portfolio* encompasses a variety of interpretations. Traditionally, it refers to the compilation of evidence demonstrating learner achievements, competences, and progress, often used for self-presentation in contexts such as career or showcases. However, more recent definitions position the e-portfolio as a dynamic and reflective learning space that documents a person's learning, career progression, experiences, and accomplishments, and supports dialogue and critical reflection to improve the learning trajectory [49].

In the *Understanding Health – The Pathway to a Healthy Lifestyle* programme, the e-portfolio is conceptualised as a personal digital environment in which learners plan, track, and assess their development across multiple dimensions, including both content knowledge and competence acquisition [50]. This highlights the developmental and reflective function of the portfolio, with particular emphasis on promoting self-evaluation, critical thinking, and learner awareness of progress. In this context, the e-portfolio serves as a tool for expanding knowledge and understanding as well as fostering key competences, especially critical thinking about health-related topics and personal well-being.

Within the learning cycle framework, the emphasis on fostering critical thinking in health education implies that instruction begins with the teacher facilitating learners' reflection on their pre-existing beliefs about the selected topic (e.g., dietary supplements, the role of emotions, physical activity in daily life) [51]. This initial phase is followed by the formulation of specific learning objectives, such as: "*I aim to deepen my understanding of the role of dietary supplements in nutrition*", "*I will examine empirical evidence regarding the health effects of dietary supplements*", or "*I will evaluate the suitability of incorporating dietary supplements into my diet and make informed decisions accordingly*".

Subsequently, learners are guided to define criteria for achieving content-related goals (e.g., "*I will gather relevant, credible, and sufficient evidence for or against the use of dietary supplements*"), as well as criteria for developing critical thinking skills (e.g., "*I will analyse the strength and validity of arguments in texts related to dietary supplements and assess their quality*", or "*I will make evidence-based decisions regarding their use*").

During the planning phase, learners outline the necessary activities to meet these objectives, such as sourcing literature, critically analysing information, and evaluating source reliability. These activities are then implemented to gather evidence demonstrating learners' progress – for example, compiling relevant texts on dietary supplements, assessing their argumentative coherence, producing an argumentative essay, or collaborating on the creation of an informational leaflet or educational video. Activities that promote creativity and collaboration are particularly encouraged.

In the subsequent phases of the learning process, learners receive feedback on their outputs. Based on this feedback, they self-assess and determine further actions to support their ongoing learning and development.

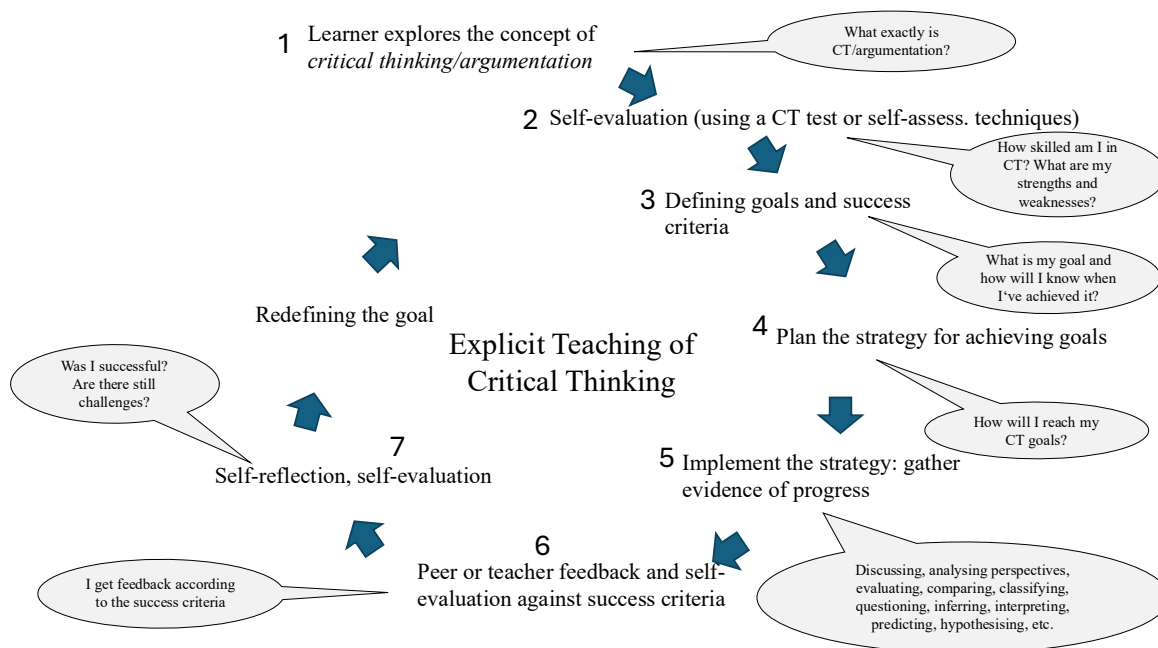


Figure 5: Learning cycle according to the principles of formative assessment in the context of the publicly valid programme Understanding Health – the Pathway to a Healthy Lifestyle (Source: T. Rupnik Vec, personal archive, 2020)

The *Understanding Health – The Pathway to a Healthy Lifestyle* programme received high evaluations from prospective trainers concerning content quality and pedagogical orientation (Table 2). Seminar participants rated each item separately for every 8-hour module using a 5-point Likert scale, where 1 indicated the lowest level of satisfaction and 5 the highest. Each module involved between 14 and 18 participants who provided ratings immediately after completing the module. Although the full educational programme spans 100 hours, the trainers' version was condensed to 32 hours. The ratings reflect a sample of the programme's objectives, conceptual content, and recommended pedagogical strategies.

Table 2: Average ratings of individual aspects of the programme

		Valid (n)	Average	Standard Deviation
Overall satisfaction with the training		64	4.58	0.44
Overall satisfaction with training content		64	4.67	0.59
Satisfaction with working methods		64	4.47	0.55
Satisfaction with learning materials		64	4.45	0.54
Assessment by Individual Modules				
Personal Development	Transformative learning – learning for lasting change	14	4.2	0.70
	Psychological well-being – the fundamental goal of social-emotional learning	14	4.5	0.65
	Self-regulation through mindfulness	14	4.1	0.95

	Stress	14	4.1	1.03
Prevention	The power of prevention: tools for early detection and disease management	15	4.5	0.64
	From habit to health: hygiene as a central aspect of well-being	15	4.5	0.74
	Small tricks to well-being	15	4.7	0.62
	Natural paths to health: traditional wisdom for a modern lifestyle	15	4.7	0.62
Exercise for Health	Active lifestyle: what defines it, and what is my lifestyle?	18	4.7	0.57
	Relaxation as conscious movement: relaxation exercises and techniques	18	4.8	0.38
	Conscious breathing: benefits and techniques	18	4.8	0.43
	Physical activity in everyday life: why it matters and how to integrate it	18	4.8	0.55
Nutrition	Small steps, significant effects: simple dietary changes for better health	17	4.5	0.72
	Balancing calories and nutrients: adapting your diet to your needs	17	4.5	0.72
	A healthy body: synergy between nutrition and physical activity	17	4.5	0.87
	Health on your plate: holistic approaches to vitality and well-being	17	4.5	0.72

In oral interviews, participants highlighted a lack of training to implement education consistently following the principles of formative assessment and to promote the use of a developmental e-portfolio. This indicates a need to plan additional training for trainers to deliver the seminar in line with the programme designers' recommendations.

3. DISCUSSION

Through the analysis of two innovative non-formal education programmes – study circles and the publicly valid programme *Understanding Health – The Pathway to a Healthy Lifestyle* – this paper aims to demonstrate how the concept of lifelong learning is both institutionally supported and practically realised in Slovenia. Though distinct in origin and structure, these two cases illustrate how non-formal education can respond effectively to contemporary social, cultural, and economic challenges. They embody the principles of lifelong learning by promoting accessible, inclusive, and participatory forms of adult education that are adaptable to individual needs and embedded within local communities. In this way, the Slovenian approach reflects a broader European vision of lifelong learning as an ongoing process that spans all stages of life and includes multiple modes of learning – formal, non-formal, and informal.

Study circles in Slovenia represent a vital form of non-formal education that effectively supports lifelong learning goals within the local environment. With their open, accessible, and participatory design, they enable the inclusion of individuals from all generations and backgrounds, thereby strengthening social

cohesion, promoting active citizenship, and developing competences essential for life and work in modern society.

In local communities, where formal learning opportunities are often scarce, study circles help fill gaps in educational provision, thereby reducing the risk of social exclusion. Their significance goes beyond mere knowledge transfer; they also facilitate the co-creation of meaning, the exchange of experiences, and the reinforcement of local identity. As such, they serve as a key mechanism for democratising knowledge, encouraging self-initiative, and promoting sustainable community development.

Study circles represent a typical example of this approach to non-formal education in a local context. A key feature of study circles is their openness and accessibility – anyone can participate, regardless of age, educational background, or social status, which fosters a truly inclusive learning environment. According to Klemenčič [52], study circles contribute to local community development through two fundamental principles: participants engage in learning (achieving educational objectives) while simultaneously transferring newly acquired knowledge and experiences back into the community (the action-oriented goal). Learning and action are thus interwoven in a process of community-focused empowerment.

Study circles embody the core principles of socio-cultural animation as a form of non-formal adult education, aimed at exploring local resources, identifying issues, and encouraging active citizenship within the community. Through reflection and collective action, participants not only develop their own competences but also contribute to changes in the broader local environment, while motivating other community members to get involved [52].

In the future, it will be crucial for this form of education to remain flexible, accessible, and integrated into local developmental strategies and national lifelong learning policies.

Publicly validated programmes provide content and support the development of skills deemed most relevant for citizens from the perspective of national administration, particularly the Ministry of Education. In Slovenia, these competences are aligned with various European policy documents and frameworks, including *Life Skills Competences* [42], *Digital Skills Competences* [53], and *Green Skills Competences* [54].

One of the newly introduced programmes aimed at promoting health literacy in the general population is *Understanding Health – The Pathway to a Healthy Lifestyle*. This programme defines specific modules and content while simultaneously emphasising the importance of teacher flexibility. Educators are encouraged to assess learners' needs and adapt the programme's objectives, content, and teaching strategies to meet the needs of specific participant groups.

Critical thinking – whether in its entirety or part, depending on the definition applied – is identified as a key competency in numerous European frameworks for future skills. Due to its transversal nature, it is considered a fundamental objective in nearly all adult education programmes. Accordingly, the Slovenian Institute for Adult Education has prioritised critical thinking in developing new programmes. It therefore occupies a central role in the programme *Understanding Health – The Pathway to a Healthy Lifestyle*.

Recent studies have shown that the explicit teaching of critical thinking is more effective than implicit approaches [55, 56, 57]. As such, critical thinking should be taught explicitly, with learners actively managing their learning process and monitoring their progress. The e-portfolio, particularly the developmental type promoted in new publicly validated educational programmes in Slovenia, serves as a valuable tool to support this objective, as outlined in the previous section. Evaluation of the pilot implementation indicates that future programme participants will receive these approaches well.

4. CONCLUSION

This analysis suggests that the principal barrier to the broader adoption of educational programmes lies not in the development of pedagogically sound, engaging, and contextually relevant curricula but in the effective dissemination and accessibility of these programmes across diverse population groups. In Slovenia, only 5.6% of individuals participate in non-formal education unrelated to their professional environment (see Figure 2). Despite the high quality of non-formal programmes, such as *study circles* and *Understanding Health – The Pathway to a Healthy Lifestyle*, these initiatives alone are insufficient to ensure high levels of participation across the entire population. Particularly low is the participation of specific vulnerable groups, such as migrants, individuals with low levels of education, the unemployed, incarcerated individuals, etc. The challenges associated with dissemination and programme implementation must be systematically addressed. This requires a comprehensive, inclusive, and multi-faceted strategic framework, for which we propose the following key initiatives:

- *Obtaining and analysing community data to better understand local needs, challenges, and opportunities:* A thorough analysis of their needs and a detailed mapping of community resources are imperative to effectively address the specific requirements, mitigate barriers, and leverage the motivations of varied demographic groups.
- *Tailored educational programmes and adapted communication strategies:* The implementation of education (in terms of educational methods, content, and delivery formats) should be adapted as much as possible to suit adult learners, taking into account their age, educational background, and prior work and life experience. Promotional activities should use language and materials appropriate to each target group.
- *Raising awareness of the importance of socio-cultural animation:* Special attention should be paid to supporting those least motivated and most deprived of educational opportunities. It is necessary to strengthen the network of organisations providing guidance in adult education and offer programmes to improve basic skills and acquire vocational qualifications for the least educated segments of the active population. Interconnection of various stakeholders, which will enable more people to be included in education, is crucial, as well as inter-sectoral and inter-organisational cooperation, as it allows for synergy among educational providers, employers, and social partners.
- *Empowering adult education personnel:* Systematic training for adult education personnel is a key component in effectively implementing adult education measures. It is essential to emphasise that appropriately trained educators play a decisive role in this process. Targeted capacity-building of professionals engaged in adult education represents a strategic intervention that can significantly enhance and accelerate the realisation of the educational objectives. Ongoing research and development efforts are needed to design and deliver training programmes for educators that focus on identifying learners' needs and interests as well as applying contemporary teaching and learning methods.
- *Identifying and promoting best practices in non-formal learning:* Highlighting best practices is essential for demonstrating the transformative potential of education beyond formal institutions. Such examples show how individuals from vulnerable groups – those facing social, economic, or educational disadvantages – can overcome significant life challenges through community-based learning initiatives. In less developed local contexts, non-formal education often serves as a crucial entry point for personal growth, social inclusion, and the development of practical skills. These success stories validate the effectiveness of non-formal learning and inspire similar practices in other contexts. Systematically identifying and disseminating these cases can support policy development and encourage investment in inclusive educational strategies at the local level.
- *Ensuring the state's sustainable and long-term funding for the continuous implementation of non-formal education programmes:* Although many of the aforementioned good practices are supported by public funding, current financial support in Slovenia remains insufficient, inconsistent, and often short-term. In some cases, funding fluctuates significantly from year to year; in others, resources are entirely exhausted. Many programmes heavily depend on European funding mechanisms, which

further contributes to their instability. When such funding ends, programmes tend to collapse, and educators are often forced to redirect their professional efforts elsewhere.

ACKNOWLEDGMENTS

We gratefully acknowledge the financial support provided by the Slovenian Institute for Adult Education and the Ministry of Education, Republic of Slovenia.

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