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FINANCIAL LITERACY IN THE CONTEXT OF THE EDUCATION SYSTEM IN THE PART RELATED TO ADULT EDUCATION

Abstract: *The Ministry of Science, Education and Youth, along with educational institutions, is responsible for the development of educational policy systems and programs. The Republic of Croatia adopted the National Development Strategy of the Republic of Croatia until 2030 in order to positively influence the financial literacy of citizens of the Republic of Croatia due to the devastating results conducted by the OECD in 2023. Therefore, the aim of this research is to analyse and determine the representation of financial literacy content in the Register of the Croatian Qualifications Framework and to propose an educational program as a response to the possible improvement of citizens' financial literacy. A comparative analysis was used to compare two adult education programs, the results of which are presented in this research. The projections of the conducted analysis show that the newly proposed adult education program has all the prerequisites for improving citizens' financial literacy.*

Keywords: *educational system; Agency for Vocational Education and Training and Adult Education; adult education; financial literacy*

1. The education system of the Republic of Croatia and financial literacy

Education is considered the starting point of pedagogy (Bognar & Matijević, 2005), that is, education represents an interpersonal relationship in which an individual satisfies his basic human needs (in the affective sense). On the other hand, education is a process of organized learning of cognitive and psychomotor characteristics of personality, and the result of the process is developed abilities and acquired knowledge and skills (Paustuović, 1999). Bognar and Matijević (2005) state in the literature that physical, emotional and intellectual abilities are developed through education, as well as that education is a function of self-actualization. Therefore, it can be said that upbringing is connected with education and that the mentioned terms are interconnected (Cindrić et al., 2010). As education is planned, meaningful and organized, there is (with regard to the methods and conditions of the organization of upbringing and education): (1) formal (recognized levels of education, takes place in educational institutions), (2) informal (outside the regular school system, takes place outside regular education) and (3) informal (self-education and self-education) education (Cindrić et al., 2010; Miljković et al., 2019; Mušanović & Lukaš, 2011). Formal education is carried out in authorized educational institutions (secondary schools, adult education institutions

and higher education institutions) and follows an approved curriculum, which leads to the acquisition of knowledge, skills and necessary competencies (Cindrić et al., 2010). In other words, formal education is based on the legislative framework, norms, curricula, educational programs and methodology (Dib, 1988). The Croatian education system provides educational services at the levels of preschool, primary, secondary and higher education, as well as adult education, to each student/attendee in order to develop their potential (personal development), enable entry into the labour market and prepare them for lifelong learning. Also, it is important to emphasize that education is available to everyone, under equal conditions, and in accordance with one's abilities (Eurydice, 2025). The Croatian education system is mainly a centralized system where all levels of education are managed by the competent ministry (now: Ministry of Science, Education and Youth) and other institutions that are responsible for the implementation of education policy, monitoring, evaluation, system development and program development of various aspects of the Croatian education system: Agency for Education and Training (AZOO), Agency for Vocational Education and Training and Adult Education (ASOO), Agency for Science and Higher Education (AZVO), Agency for Mobility and Programs of the European Union (AMPEU), National Centre for External Evaluation (NCVVO) and Croatian Academic and research net-



work (CARNET). The early and preschool education system has been a decentralized system since 1993, when fundamental rights were transferred to local and regional self-government units, while all other systems are centralized (Eurydice, 2025). Primary school education (classroom and subject teaching) in the Republic of Croatia is compulsory, lasts 8 years and prepares students for continuing education in secondary schools. High school education enables the acquisition of knowledge and skills necessary for work or further education. It is not mandatory, but most students attend it. Higher education is not mandatory, and upon completion of education, a university or professional higher level of education is acquired. Adult education enables all participants to acquire the knowledge, skills and competences of primary or secondary school education (requalification or acquisition of the first qualification) as well as specific competences (micro-qualifications) needed for a particular profession with the aim of professional development or personal development (Eurydice, 2025).

Adult education is regulated by the Act on Adult Education (Official Gazette, 2021a), the Act on Education in Primary and Secondary Schools (Official Gazette, 2023), the Act on the Croatian Qualification Framework (Official Gazette, 2021b), numerous ordinances, by-laws, but also by the Constitution of the Republic of Croatia as the fundamental act of the state with which all the aforementioned regulations must be harmonized.

The Agency for Vocational Education and Training and Adult Education, as the competent agency for adult education, issues expert opinions for formal adult education programs based on the request of the educational institution (Agency for Vocational Education and Training and Adult Education, 2025), and the Ministry of Science, Education and Youth, based on the Agency's positive expert opinion, issues a decision on the implementation of the requested program (Ministry of Science, Education and Youth, 2025).

In the area of further vocational education and training, adult learners usually cover the costs of the education programmes they attend (Eurydice, 2025), with the exception of primary education programmes which are free for all learners under the Constitution of the Republic of Croatia (Official Gazette, 2014). The Employment Service, as part of an active labour market policy, covers the costs of education for the unemployed, while a large number of adult education programmes related to the green and digital components are financed by the newly established voucher system envisaged

in the Croatian National Recovery and Resilience Plan 2021-2026 by the Ministry of Labour, Pension System, Family and Social Policy (Eurydice, 2025).

The participation and number of participants attending adult education programs are shown in the National Education System Development Plan for the period up to 2027. The Republic of Croatia records one of the lowest rates of participation in adult education programs in the European Union, i.e. 3.2 %, while the European Union average is 9.2 % (Ministry of Science, Education and Youth, 2023). Among other things, due to the above-mentioned disappointing results, the Republic of Croatia adopted the National Development Strategy of the Republic of Croatia until 2030 in order to positively influence and achieve strategic objective 2. "educated and employed people" (Official Gazette, 2021c) through the personal development of the individual. Also, financial literacy refers to the personal development of an individual as well as to the assessment of decision-making in the form of financial investments through attending various adult education programs. Given that part of the strategic objective 2. "Education and employed people" is to develop digital and entrepreneurial competencies (as core competencies) that are part of citizens' financial literacy (Official Gazette, 2021c), it is necessary to show the results of citizens' financial literacy. The results of the internationally coordinated survey on the level of financial literacy in the Republic of Croatia, which was conducted during 2022 and 2023 according to the OECD methodology, show that the Republic of Croatia achieved an above-average overall financial literacy score of 62 points out of a total of 100 possible points. That is, 62% (which is above the average of all countries that participated in this research cycle - 60%), and slightly below the average financial literacy of OECD countries, which is 63% (Croatian National Bank, 2023). The mentioned research also shows that the citizens of the Republic of Croatia have knowledge in the field of financial literacy, i.e. 70 %, which is above the average of the overall results. In terms of financial behaviour and attitude towards money, we are below the average according to the OECD survey (Ministry of Finance, 2023). Numerous studies conducted on this topic indicate similar results, which is a low level of knowledge in the area of financial literacy, which indicates insufficient formal education of citizens in the matter of financial literacy (Lončar & Golemac, 2015; Lusardi et al., 2009; Walstad & Rebeck, 2012). The presented research is closely related to making everyday life decisions where the citizens of the Republic of Croatia face spe-



cific financial problems (Palac et al., 2017), which primarily relate to pension, health and life insurance, savings, loans and daily financial investment in the future through short-term or long-term investments or the consumption of own financial resources. For this reason, nowadays, an increasing emphasis is placed on the importance of making optimal and complex financial decisions (Hung et al., 2009). A deeper understanding of the importance of citizens' financial literacy, according to Barbić and Lučić (2018), appeared after the global economic crisis in 2008, which began in the United States. According to Chlouba et al. (2011), precisely the lack of financial literacy of citizens was one of the causes of that crisis. The need for additional financial literacy of citizens appeared in all countries of the world (Vehovec, 2011), because this would create positive effects for improving financial knowledge, application and attitude towards money (Carlin & Robinson, 2010; Danes et al., 2013; Gellman & Laux, 2011; Walstad et al., 2010). Although there is no single definition of financial literacy, the most often cited in the works is the one offered by the International Network of Financial Education (2011), English INFE, hereinafter referred to as OECD, defining financial literacy as a combination of awareness, knowledge, skills, attitudes and behaviour necessary to make reasonable financial decisions for the purpose of achieving individual financial well-being. And precisely because of the very importance of the OECD research, there was a need to think about how the education system can help in the literacy of the citizens of the Republic of Croatia. The OECD has been continuously working on the Financial Competence Framework for Adults in the European Union, in addition to surveying citizens of the European Union. The framework emphasizes different forms of money and currency, income, prices, payments and purchases, and the importance of financial records and contracts. That is, the OECD's goal was to determine and identify the competencies needed to understand the different characteristics of money, how to obtain it as income, how to exchange it for goods and services, and the importance of tracking and keeping records of how it is acquired. The key competencies that every citizen of a particular country should know is managing their own budget and implementing digital payments, which is related to personal finances (European Union/OECD, 2022). The Agency for Vocational Education and Training and Adult Education is an educational institution that implements the educational policies of the European Commission and the OECD and can create adult education programs that can influence the financial literacy of citizens. There-

fore, the Agency for Vocational Education and Adult Education is making great efforts to positively influence the financial literacy of citizens through curricula/educational programs.

2. Objective, problems and research questions

The aim of this research is to analyse and determine the representation of financial literacy content in the Register of the Croatian Qualifications Framework and to propose an education program as a response to the possible improvement of citizens' financial literacy. In addition, the quantity of adult education programs taken over by adult education institutions will be analysed, namely the Education Program for obtaining the partial qualification of Accountant and the newly developed Education Program for obtaining the micro-qualification management of personal finances. The mentioned newly created education program was created with the aim of increasing the financial literacy of citizens. Based on the research objective, the following research problems were formed:

1. To analyse the representation of content from the field of financial literacy in the sets of learning outcomes in the Register of the Croatian Qualification Framework.
2. To analyse the Education Program for acquiring the partial qualification of Accountant.
3. To analyse the Education Program for acquiring the micro-qualification management of personal finances.

Based on the formed research problems, the research questions of the work were created.

11 – Is the content of financial literacy represented in all sectors of education in the part that refers to adult education?

12 – Is there a difference in the number of hours and the method of realization of the content of financial literacy in the Education Program for the acquisition of a partial qualification as an Accountant and the Education Program for the acquisition of a micro-qualification management of personal finances?

3. Methods

This research used qualitative methods of content analysis, desk research and comparative methods. The research included 11,548 learning outcome

sets (LOS) at levels 2, 3, 4 and 5, classified into 14 sectors represented in adult education. The listed learning outcome sets are listed in the Register of the Croatian Qualifications Framework. According to the Act on Adult Education, all programs used through formal and non-formal education must be developed using learning outcome sets that have been previously externally evaluated and registered in the Register of the Croatian Qualifications Framework (Official Gazette, 2021a). The analysis was also conducted on two adult education programs - the Education Program for Acquiring a Partial Qualification in Accounting and the Education Program for Acquiring a Micro-Qualification in Personal Financial Management. The selected adult education programs, to a greater or lesser extent, provide competences related to the financial literacy of citizens prescribed by the Financial Competence Framework. The learning outcome sets that are part of both adult education programs have been externally evaluated and entered into the Register of the Croatian Qualifications Framework. The education program for the acquisition of a partial qualification in accounting is a program that has undergone several changes/revisions, the last of which was in January 2025. The education program for the acquisition of a micro-qualification in personal financial management is a program that was developed with the aim of educating citizens of the Republic of Croatia in the field of financial literacy, which is also a response to the strategic goal of the Government of the Republic of Croatia. The educational program was developed by the author in cooperation with the working group on behalf of the Agency for Vocational Education and Adult Education in 2024, and was revised in January 2025. Furthermore, the data collection method used included a search of official documents (educational programs) available on the website of the Agency for Vocational Education and Training and Adult Education. Finally, a comparative analysis was conducted to determine the difference between the representation of financial literacy content, the number of hours and the method of implementation in both educational programs.

4. Results

By harmonizing the Act on Adult Education (Official Gazette, 2021a) and the Act on the Croatian Qualifications Framework (Official Gazette, 2021b), the Agency for Vocational Education and Training and Adult Education created the Methodology for creating adult education programs for the acquisition of micro-qualifications, par-

tial qualifications and complete qualifications financed through vouchers and other sources of funding (2022) (hereinafter: Methodology), which is the basis and guideline for creating education programs according to the new design approach. By harmonizing the aforementioned laws, the concept of creating an adult education program is based on sets of learning outcomes that have been externally evaluated and entered into the Register of the Croatian Qualification Framework (2025). The extent to which the content of financial literacy is represented by sectors is visible in Table 1.

In the Register of the Croatian Qualification Framework there are 14 sectors that contain sets of learning outcomes at levels 2, 3, 4 and 5, and it is possible to create education programs based on them. Of the 14 sectors, only one sector (Geology, Mining, Petroleum and Chemical Technology) does not contain a single set of learning outcomes that contains financial literacy content. All other sectors are represented in the area of financial literacy in the following order in percentage terms: Health (0.30 %), Forestry and Wood technology (0.44 %), Mechanical engineering, shipbuilding and metallurgy (0.59 %), Electrical Engineering and Computer Science (0.64 %), Personal, protection services and other services (0.71 %), Graphic technology and audiovisual technologies (0.86 %), Transport and logistics (0.89 %), Fashion, Textiles and Leather (1.11 %), Civil engineering, geodesy and architecture (1.75 %), Tourism and catering (2.18 %), Agriculture, Food and Veterinary (2.35 %), Law, political science, sociology, state administration and public affairs (8.13 %) and Economics and Trade (18.74 %).

Given that (as well as related) the content of financial literacy primarily belongs to the Economics and Trade sector, the obtained results are expected.

Furthermore, because the largest share of learning outcome sets in the areas of accounting / accountancy and financial literacy are in the Economics and Trade sector, educational programs will be presented and later analysed.

An overview of the Education Program for the Acquisition of a Partial Qualification as an Accountant is shown in Table 2.

An insight into the education program shows that the entire content of the program is related to the field of accounting. The aforementioned content, although it is closely related to financial literacy, also acquires specific competencies. The content is not easy to acquire, so there was a need to

Table 1. Representation of financial literacy in the Register of the Croatian Qualification Framework (Croatian Qualifications Framework Register, 2025)

The number of SIUs analyzed	Total SIU financial literacy / %	Financial literacy	Business and training company	Entrepreneurship	Accounting/ accountancy	SIU level
						2
						3
						4
						5
Sector: Agriculture, Food and Veterinary						
1 020	24 / 2,35 %	/	1	/	/	2
		/	/	/	/	3
		/	14	6	/	4
		/	1	/	2	5
Sector: Forestry and Wood technology						
912	5 / 0,55 %	/	/	/	/	2
		/	/	/	1	3
		/	1	2	1	4
		/	/	/	/	5
Sector: Geology, Mining, Petroleum and Chemical Technology						
233	0 / 0 %	/	/	/	/	2
		/	/	/	/	3
		/	/	/	/	4
		/	/	/	/	5
Sector: Fashion, Textiles and Leather						
1 167	13 / 1,11 %	/	/	/	/	2
		/	/	/	/	3
		/	5	7	1	4
		/	/	/	/	5
Sector: Graphic technology and audiovisual technologies						
462	4 / 0,86 %	/	/	/	/	2
		/	/	/	/	3
		1	1	2	/	4
		/	/	/	/	5
Sector: Mechanical engineering, shipbuilding and metallurgy						
1 521	9 / 0,59 %	/	/	/	/	2
		/	/	/	2	3
		1	1	4	1	4
		/	/	/	/	5
Sector: Electrical Engineering and Computer Science						
1 251	8 / 0,64 %	/	/	/	/	2
		1	/	/	/	3
		1	1	2	/	4
		2	/	/	1	5
Sector: Civil engineering, geodesy and architecture						
969	17 / 1,75 %	/	/	/	/	2
		/	/	/	/	3
		/	/	10	6	4
		/	/	/	1	5



The number of SIUs analyzed	Total SIU financial literacy / %	Financial literacy	Business and training company	Entrepreneurship	Accounting/ accountancy	SIU level
						2
						3
						4
						5
Sector: Transport and logistics						
1 012	9 / 0,89 %	/	/	/	/	2
		/	/	/	/	3
		/	2	3	4	4
		/	/	/	/	5
Sector: Health						
334	1 / 0,30 %	/	/	/	/	2
		/	/	/	/	3
		/	/	/	1	4
		/	/	/	/	5
Sector: Personal, protection services and other services						
422	3 / 0,71 %	/	1	/	/	2
		/	/	/	/	3
		/	/	2	/	4
		/	/	/	/	5
Sector: Law, political science, sociology, state administration and public affairs						
529	43 / 8,13 %	/	/	/	/	2
		1	2	/	5	3
		3	12	2	18	4
		/	/	/	/	5
Sector: Tourism and catering						
825	18 / 2,18 %	/	/	/	/	2
		/	/	/	/	3
		/	7	4	1	4
		/	/	/	6	5
Sector: Economics and Trade						
891	167 / 18,74 %	/	/	/	/	2
		/	4	1	12	3
		4	42	11	91	4
		/	/	/	2	5
Σ 11 548	Σ 320 / 2,80 %	/	2	/	/	2
		2	4	1	20	3
		10	86	55	124	4
		2	1	/	12	5

create an education program that would be more applicable to the wider population and would enable an increase in financial literacy. Therefore, the Education Program for Acquiring Micro-Qualifications management of personal finances was created, the content of which is shown in Table 3.

Since education must be well prepared, implemented and properly evaluated, and the processes of preparation, implementation and evaluation must be interconnected (Paustuović, 1999), the program also contains other components that are interconnected.



Table 2. Education Program for the Acquisition of a Partial Qualification (Agency for Vocational Education and Training and Adult Education, 2025)

Rb.	THE NAME OF THE MODULE	LIST OF SETS OF LEARNING OUTCOMES	Level	Volume CSVET	Number of hours			
					VPU	UTR	SAP	TOTAL
1.	OPENING BUSINESS BOOKS	Basic accounting terms and instruments	4	1	5	10	10	25
		Opening business books and posting opening balances using application software	4	1	5	10	10	25
2.	TECHNIQUES OF ACCOUNTING BUSINESS EVENTS USING APPLICATION SOFTWARE	Recording of financial assets using application software	4	1	5	15	5	25
		Recording of incoming and outgoing invoices using application software	4	1	5	15	5	25
		Calculation of VAT	4	1	5	15	5	25
		Calculation of salaries and benefits for employees	4	1	5	15	5	25
		Recording of short-term material assets using application software	4	1	5	15	5	25
		Recording of long-term intangible and tangible assets and depreciation	4	1	5	15	5	25
3.	CRAFC AND FREE OCCUPATIONS	Recording of business changes and keeping books of crafc and free trades	4	1	5	15	5	25
		Annual accounting of the business of craftsmen and freelancers and submission of tax return	4	1	5	15	5	25
TOTAL:				10	50	140	60	250

Table 3. Education program for acquiring micro-qualifications management of personal finances (Agency for Vocational Education and Training and Adult Education, 2025)

Rb.	THE NAME OF THE MODULE	LIST OF SETS OF LEARNING OUTCOMES	Level	Volume CSVET	Number of hours			
					VPU	UTR	SAP	TOTAL
1.	MANAGEMENT OF PERSONAL FINANCES	Planning and managing personal finances	4	3	25	30	20	75
TOTAL:				3	25	30	20	75

The schedule of adult education programs is shown in Table 4, and it is also part of the Methodology for the development of adult education

programs for the acquisition of micro qualifications, partial qualifications and full qualifications financed through vouchers and other sources of financing.



Table 4. Components of adult education programs (Agency for Vocational Education and Training and Adult Education, 2025)

Set of learning outcomes from SK, volume	Planning and managing personal finances, 3 CSVET*
The learning outcomes **	
1. to identify the significance of responsible consumption for personal financial planning	
2. differentiate the basic financial terms necessary for acquiring financial literacy	
3. identify attainable financial goals for personal financial planning	
4. record receipts and expenditures using the examples of a personal budget	
5. analyze investment methods and types of personal financial resources investment	
6. assess the risks in managing personal finances	
Dominant teaching system and description of the way to realize SIU	
<p>Work-based learning is the dominant teaching system.***</p> <p>Through work situations, participants are enabled to acquire the competencies necessary for analyzing the role of money and the banking system of the Republic of Croatia by distinguishing the types and functions of modern money, monetary surrogates and aggregates, the activities of the central bank and other financial institutions, and the level of payment transactions. During the educational process, the competencies necessary for opening accounts in accordance with banking processes and card operations as well as banking operations related to loans of natural persons are acquired. Through simulation and work-based learning, participants create a task related to creating a personal budget by analyzing the sources of cash receipts and cash expenditures.</p> <p>During the implementation of the project assignment, the participants independently explain the meaning and role of personal financial planning and set financial goals in order to successfully manage personal finances.</p> <p>The teacher demonstrates the application of basic ergonomic principles when arranging office equipment and designing a workplace in the institution's classroom. Demonstrates the correct way to sit at the workplace and exercises to relieve strain when working with a computer. During the implementation of all activities in which they work on the computer, the participants apply ergonomic principles, adapt influences from the work environment to ergonomic principles and apply exercises to relieve strain when working with a computer.</p> <p>If necessary, the teacher helps and directs the student towards a possible solution. During the guided learning and teaching process as well as work-based learning, the teacher provides the student with feedback on the success of the solution. The student's independent activity refers to the preparation of a personal budget on the basis of one year.*****</p> <p>Work-based learning is carried out in specialized classrooms and/or with employers with whom the Institution has a cooperation agreement.****</p>	
Teaching units/topics *****	<ul style="list-style-type: none"> Money Financial institutions and financial products Personal finance planning Bank accounts of citizens and business entities Types of cards and their features Internet and mobile banking Types of bank loans in the Republic of Croatia Risks in credit operations Loan approval procedure Ergonomic principles in office business



Methods and examples of validating a set of learning outcomes *****

The method and example of evaluating a set of learning outcomes is only one of the possible approaches, and teachers are encouraged to apply their knowledge and creativity in the preparation of diverse tasks, forms of work and evaluation methods, taking into account the relevant regulations and the specifics of their work environment and educational group. Examples of evaluation:

Teaching Situational Scenario 1

My personal finances

After completing the education program, Ivana got a job at a marketing agency and started living independently. The student will analyze personal spending habits and create a personal budget on a monthly basis. With the aim of rational use of money, she analyzes income and expenses and records them. It classifies expenses into fixed and variable expenses and allocates money to each item of expenses. In order to follow the trail of money, all expenditure items are controlled and analyzed in relation to the planned and all receipts in relation to the planned. The student calculates the difference between income and expenses. If there is a surplus, the amount of money for savings is determined and investments are planned, and if there is a deficit, methods of borrowing are planned. The student presents the proposed personal budget, savings or borrowing proposals in a table.

Ivana also needs to open an account for current income due to her employment and goes to the bank with the intention of opening her own account. On the basis of publicly available banking offers, he finds information about the conditions for opening an account for citizens and addresses a personal banker who presents the steps for opening a citizen's account and the procedure for obtaining, using, charging and expenses incurred on bank cards.

Teaching Situational Scenario 2

Our daily money

"Banka Croatica" p. l. c. is celebrating its 100th anniversary in the Republic of Croatia. To mark the anniversary, they decided to organize a competition entitled "Money and the Banking System of the Republic of Croatia". Marko is a student of the School of Economics and decided to apply for the competition.

According to the competition documentation, the participant integrates content on the types and functions of modern money and monetary surrogates and aggregates. After that, he compares the characteristics of the Croatian National Bank with other financial institutions in the Republic of Croatia and categorizes the levels of payment transactions within the Croatian banking system.

Evaluation: Using pre-defined criteria for evaluation elements, the teacher scores the tasks. The student conducts a self-evaluation of the research work carried out.

Adaptation of learning experiences for students/persons with disabilities *****

(Create a method and an example of evaluating a set of learning outcomes for students/persons with disabilities, if applicable)

INSTRUCTIONS:

*name of SIU from the Register of the Croatian Qualifications Framework

**belonging outcomes within the downloaded set of learning outcomes from the Register of the Croatian Qualification Framework

***the proposed dominant teaching system, which is used to the greatest extent in the realization of the guided learning and teaching process (VPUP) and work-based learning (UTR), is in accordance with the way of teaching

****described course of activities during the implementation of the module (SIU) and obligations and responsibilities of teachers and participants

*****defined independent activity of the student because he has 20 hours out of a total of 75 hours of independent activity that he achieves outside the classroom

*****proposed teaching topics, units, areas that teachers/facilitators go through with students as part of the program

*****an example of evaluating a set of learning outcomes, the evaluation is designed to include all learning outcomes within one or two examples of evaluation, it is necessary to put the participant in a concrete and real work situation, the example of evaluation should be coordinated with the outcomes, activities in class, the dominant teaching system and proposed topics

*****adaptation of the learning experience for students with disabilities is recorded by the institution

independently if there is a student with certain difficulties, and the program is adjusted depending on the difficulty

5. Discussion

5.1. Analysis of learning outcome sets in the Croatian Qualifications Framework Register

During the research, an analysis of learning outcome sets in the Register of the Croatian Qualifications Framework was first conducted in order to assess the representation of financial literacy content. The results are devastating. That is, out of 14 sectors, financial literacy content is not represented at all in one of them, and in 7 of them the percentage share is less than 1%. These results are also linked to the results conducted by the OECD for the Republic of Croatia, which states that citizens of the Republic of Croatia have theoretical knowledge of financial literacy, but the results in terms of their relationship to money and financial behaviour are devastating. Therefore, emphasis was placed on the economy and trade sector, which contains the largest share of learning outcome sets in the field of financial literacy.

5.2. Analysis of adult education programmes

In order to apply financial literacy to adult education, an education program that has been on the market and offered to educational institutions as well as citizens of the Republic of Croatia for many years was analysed, and it is an accounting education program that, according to the new Methodology (2022), is called the Education Program for Acquiring a Partial Qualification as an Accountant. The analysis conducted indicates that the program only acquires specific competencies in the field of accounting, which is closely related to financial literacy, but it is not enough. Due to the aforementioned issues, a new education program was developed in the second half of 2024, which acquires a wide range of competencies in the field of financial literacy, but with an emphasis on personal finances. The aforementioned program can be enrolled by all citizens, regardless of the school they graduated from, or regardless of the sector. Therefore, citizens who did not graduate from a school that is primarily part of the economics and trade sector, where they could acquire competencies in the field of financial literacy during regular education, can enrol in the aforementioned program and become financially literate.

5.3. Comparative analysis of adult education programs

Furthermore, in order to respond to the research problems on the basis of which the research ques-

tions of the paper were set, a comparative analysis was used to compare the data from the Education Program for the Acquisition of a Partial Qualification as an Accountant and the Education Program for the Acquisition of a Micro-Qualification management of personal finances in Table 5.

The reason for comparing the programs stems from the fact that the program was designed specifically to increase the financial literacy of citizens. The education program for acquiring a micro-qualification management of personal finances is shorter in duration and focuses on personal finances that are more interesting and accessible to all citizens of the Republic of Croatia. The program is simpler, relates to the everyday application of acquired knowledge, skills and competencies, and can be enrolled in by persons who have at least CROQF qualification level 3 (i.e. completed a two-year program or an education program for children with disabilities). This allows the program to reach a larger number of citizens. The content of the program combines knowledge from entrepreneurship, personal finance, investments and the application of finance in everyday life. And the most important thing, teaching is with an emphasis on work-based learning, which is the practical application of acquired knowledge. The potential of this program is visible in Table 6.

The percentage share of the Education Program for the Acquisition of a Partial Qualification as an Accountant taken over by adult education institutions was the highest (3.68 %) in 2022, when it was developed based on the Methodology. In the following years, there was a decline in interest in this program, and the increase in 2024 was due to the development of a revised education program, which was reduced from 14 CSVET points to 10 CSVET points.

The developed Education program for acquiring micro-qualifications management of personal finances in 2024 had a share of 4.49 %, which is the largest of all percentage shares in the observed years, i.e. since the implementation and development of the program based on the new Methodology began.

Given that the above programs are part of formal education and were developed based on the legislative framework with the aim of increasing the financial literacy of citizens of the Republic of Croatia, and that participants finance their attendance from their own financial resources, the results are average. If the level of financial literacy of citizens were to be assessed before the implementation of the Education program for acquiring micro-qualifications management of



Table 5. Comparative analysis of adult education programs (Agency for Vocational Education and Training and Adult Education, 2025)

Name of the program	Education program for acquiring partial qualification as an Accountant	Education program for acquiring micro-qualifications management of personal finances
sector	economics and trade	economics and trade
type of program	program basics	program basics
level of the set of learning outcomes according to the CROQF	level 4	level 4
number of learning outcome sets within the program	10	1
volume in CSVET points	10 CSVET	3 CSVET
program duration	250 hours	75 hours
requirements for enrollment in the program	full qualification of at least level 4.2 CROQF	full qualification of at least level 3 CROQF
share of VPUP in the total hourly wage	50 (20 %)	25 (33 %)
share of UTR in the total hourly rate	140 (56 %)	30 (40 %)
share of SAP in the total hourly rate	60 (24 %)	20 (27 %)
financial literacy related content	accounting	financial planning, personal spending, financial goals, personal spending, personal budget, investment, risks, financial resources
teaching method (dominant teaching system)	work-based learning	work-based learning

Table 6. Downloaded adult education programs (Agency for Vocational Education and Training and Adult Education, 2025)

Education program for acquiring partial qualification as an Accountant		Education program for acquiring micro-qualifications management of personal finances	
2022. year		2022. year	
77 (Σ 2 090)	3,68 %	-	-
2023. year		2023. year	
2 (Σ 229)	0,87 %	-	-
2024. year		2024. year	
12 (Σ 312)	3,85 %	14 (Σ 312)	4,49 %

personal finances and after the implementation of the program, the real picture of the impact of the above program on increasing financial literacy would be determined. Increased interest in the program would also be if it were financed through a voucher system, because the importance of financial literacy is also reflected in the Croatian National Recovery and Resilience Plan 2021-2026 by the Ministry of Labor, Pension System, Family and Social Policy.

5.4. Results of research based on research questions

The first research question asked relates to the representation of the content of financial literacy by sector, and entered in the Register of the Croatian Qualification Framework. An inspection of the Register of the Croatian qualification framework shows that the content of financial literacy is not equally represented in all 14 sectors. In the Geology, Mining, Petroleum and Chemical Tech-



nology sector, there is not a single set of learning outcomes related to the content of financial literacy. In 7 sectors, the content of financial literacy is represented by less than 1 % of the total enrolled sets of learning outcomes in that sector. The largest share of financial literacy content is in the economics and trade sector, which is why further analysis was carried out precisely on the sets of learning outcomes / adult education programs from that sector.

The second research question asked relates to the analysis of two adult education programs. An overview of the Education program for acquiring partial qualification as an Accountant shows that the programme is of longer duration (14 CSVET points, 350 hours of duration) and has a higher proportion of work-based learning (56%). An overview of the Education program for acquiring micro-qualifications management of personal finances shows that the programme is of shorter duration (3 CSVET points, 75 hours of duration) and has a lower proportion of work-based learning (40%). Although the programme is of shorter duration, it provides more specific competences related to financial literacy. That is, the emphasis is on acquiring knowledge in the areas of financial planning, personal spending, financial goals, personal spending, personal budget, investment, risks, financial resources. Due to the greater range of acquisition of various competences related to financial literacy, the Education program for acquiring micro-qualifications management of personal finances is considered more useful. The reason for this is that the competences from the programme are more compatible with the Framework of Financial Competences for Adults in the European Union adopted by the European Commission and the OECD.

6. Research limitations and recommendations for future research

There are several limitations to the research. The research related to the analysis of learning outcome sets in the Croatian Qualifications Framework Register was conducted in May 2025. After the research was conducted, new learning outcome sets were entered in the Croatian Qualifications Framework Register, so the results may be outdated the next day. Also, the conducted analysis of the takeover of adult education pro-

grams by adult education institutions that implement adult education programs may vary from the number written in this paper. The Agency for Vocational Education and Training and Adult Education has data on the number of taken over programs and the number of times positive expert opinions were received for these programs. However, there is no data on how many adult education institutions have requested approval from the Ministry of Science, Education and Youth to implement this program and how many decisions for the aforementioned programs have been issued. Most importantly, the taken over programs did not fully measure how much they are implemented by adult education institutions, and there is no figure on the number of participants who attended and completed the aforementioned education programs. In order for adult education programs to have an effect and achieve their goal, which is to increase the financial literacy of citizens, it is necessary to conduct a survey of participants in adult education institutions. The full result of the impact of the adult education program would be if a survey of participants related to financial literacy was conducted before the start of the program and after the program was implemented. The above is a recommendation for future research related to this topic.

7. Conclusion

Financial literacy is becoming an increasingly important area of interest for all European Union countries, including the Republic of Croatia. The OECD research conducted shows that the citizens of the Republic of Croatia are slightly below the European Union and OECD average in the area of financial literacy, especially in the area of attitudes towards money and financial behavior. Since the education system can contribute to financial literacy in various ways, an education program has been created that can increase the financial literacy of citizens through adult education. The previous results and analysis of the conducted research and projections for the future period indicate that it can have a positive result depending on the prescribed National Development Strategy of the Republic of Croatia until 2030 and the achievement of the strategic goal 2. "educated and employed people", which also refers to the financial literacy of citizens.

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