TRAININGS IN FINANCIAL CULTURE

A comparative analysis (2016-2020)

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ABSTRACT

The aim of the research is to assess whether any progress has been made in developing financial awareness in Hungary since 2016. The study presents the changes in the state's role in the development of financial culture, in the framework of a questionnaire survey, it examines what kind of organisations provide trainings in the form of non-public education, to whom such programmes are provided and what syllabus they are based on, as well as it evaluates the quality assurance of the programmes. Between 2016 and 2020, there was an increasing focus on developing financial culture, while most courses are still aimed at the most accessible group of school-aged children. The National Core Curriculum identified economic and financial education as a goal for schools. However, apart from secondary vocational schools, other schools do not teach such subjects as compulsory subjects. In 2017, the Government adopted a strategy to improve the financial awareness of the population, and the first accredited financial literacy textbooks were published. The results of the non-public educational organisations show that the number of training programmes and participants has tripled. The average duration of trainings has become longer. In particular, multi-day courses provided mainly to adults have appeared. The focus of knowledge transfer continues to be on individual savings and financial awareness, financial self-knowledge, attitude and behaviour. Four-fifths of the courses have a curriculum and a syllabus, but most of them are not accredited and are not publicly available. About 40% of the courses measure effectiveness.

JEL codes: A13, D03, D12, I22

Keywords: financial literacy, trainings, comparative analysis

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1 INTRODUCTION: AIM, RELEVANCE AND KEY QUESTIONS OF THE RESEARCH

Following the outbreak of the financial crisis in 2008, most countries realised that the development and financing of financial literacy must be achieved through the coordinated, transparent, quality-assured activities of the government, the national bank and the public sector organizations (Jakovác, 2016). The development of a financial literacy is in the common interest of economic actors, the implementation of which requires the cooperation of the state, credit institutions and enterprises.

In 2016, the State Audit Office of Hungary (ÁSZ) assessed the situation of initiatives related to financial literacy in Hungary for the first time. According to the results of the aforementioned survey, a significant proportion of students in public education received training aimed at developing financial literacy, typically provided by non-profit organizations, but these courses were very short, lasted only for a few hours. Their effectiveness was not backtested - and, failing this, the trainings were not properly adapted. There was also a risk that the syllabuses and curricula of the trainings were typically not available or not publicly available (*Németh*, 2017).

Since the research conducted in 2016, the infrastructure of financial literacy in Hungary has advanced in many respects. A number of state initiatives have been launched and implemented. In 2017, the Government adopted a strategy to improve the financial awareness of the population. The first accredited financial literacy textbook was published, followed by several new textbooks, workbooks and electronic materials. By 2020, a report presenting the results of the action plan for the first two years (2018–2019) of the seven-year strategy was also completed.

Based on the above, it is reasonable for the ÁSZ to re-assess the current situation of financial literacy development. The aim of our research is to provide a comprehensive picture of the training infrastructures supporting the situation of public finances in Hungary. We intend to assess whether any progress has been made in the development of financial awareness, in the teaching of financial and economic skills, and in the related training in Hungary since 2016. Our research also focuses on the involvement of financially vulnerable groups, as well as the inclusion of entrepreneurial skills and a retirement strategy in the individual courses.

2 STATE INVOLVEMENT IN THE DEVELOPMENT OF FINANCIAL LITERACY

2.1 Setting up the strategic foundations

Since 2017, Hungary has had a national strategy to improve the financial awareness of the population. The government decided to create the strategy in the fall of 2016, then a document entitled "Be smart with money!" was adopted in December 2017².

The target group of the strategy is the general population; however, in the first period (based on the action plan for 2018–2019) the school-age group is given emphasis. The successive action programmes, which cover a period of 7 years, from 2017 to 2023, are broken down into specific tasks, sub-tasks, deadlines, target groups and those responsible for their implementation. Relevant indicators suitable for back-testing the achieved results at regular intervals have been assigned to each target. The implementation of the strategy was expected to improve the level of financial awareness of the population and increase their responsibility in the field of managing their finances. In-depth financial knowledge can help the public make more informed and confident financial decisions. Raising the level of the financial awareness of the population will ensure long-term economic and social stability (Strategy, 2017).

The first action plan contains the seven main goals set out in the strategy, in particular, the foundation of financial awareness, the steps and tasks related to the creation, strengthening and dissemination of real financial education within the public education system. The measures were determined on the basis of the research results of a questionnaire-based OECD survey conducted in 2015. According to the action plan, the development of financial knowledge and behaviour, i.e. awareness, is based on school education as part of the national core curriculum. An important step towards achieving the goals was that in the autumn of 2017, the teaching of financial and entrepreneurial skills began in secondary vocational schools.

2.1.1 Establishment of the legal framework

Prior to 2016, the state already established a legal framework to ensure the organization and transparency of financial literacy and financial awareness development.

² Government Decree No. 1919/2017. (XII. 8.) on the adoption of a strategy aimed at the development of the financial awareness of the population.

- Pursuant to the provisions of the Consumer Protection Act, a commissioner for financial rights has been active since 2012 in order to promote the enforcement of consumer rights related to financial services and to develop financial literacy³.
- Pursuant to the act defining its operation and activities⁴, the National Bank
 of Hungary has been participating in the strengthening and dissemination of
 financial literacy since 2013. Furthermore, the National Bank of Hungary shall
 spend a part of its revenue arising from fines on the strengthening and dissemination of financial literacy, the development of financial awareness and
 the promotion of the aforementioned goals, in particular those related to the
 development of education and research infrastructure.
- A key area of the social responsibility of the State Audit Office of Hungary is the development of financial literacy, which was recognized and supported by a resolution of the National Assembly in 2013.⁵

Since 2017, the Secretary of State for Finance of the Ministry of Finance has been in charge of the development of government policy related to the strengthening of financial literacy.⁶

The government decree⁷ introducing the National Core Curriculum has already prescribed as of 2013 that "The growing generation shall have usable knowledge about the economic and financial institutions, as well as the processes that determine the life of the world economy, the national economy, businesses and households".

The legislation specified economic and financial education among the key competencies and areas to be developed, and among the educational goals. The decree set out to "make students aware of their own responsibility in the field of value-creating work, rational management of goods, as well as in the world of money and consumption." However, in addition to emphasizing the importance of teaching the subject, it did not deal comprehensively with economic and financial

³ In accordance with Section 41 of Act CLV of 1997 on Consumer Protection.

⁴ The provision is specified in Subsection (3) of Section 44 and in Point c) of Subsection (3) of Section 170 of Act CXXXIX of 2013 on the National Bank of Hungary.

⁵ Based on Resolution No. 41/2014. (XI. 13.) of the National Assembly on the adoption of the Summary Report on the Professional Activity and Operation of the State Audit Office of Hungary in 2013.

⁶ The task is specified in Point s) of Subsection (1) of Section 23 of the Government Regulation 1/2015 (I. 21.) of the Minister of the National Economy on rules and operation of the Ministry of the National Economy, effective as of 12 January 2017.

⁷ Government Decree No. 110/2010. (VI. 4.) on the issue, introduction and application of the National Core Curriculum

education in terms of the individual fields of education or among the compulsory framework curricula (Németh, 2017).

The government decision to adopt the Strategy in December 2017⁸ called on the Minister of Human Resources to take into account the objectives of the strategy when developing a unified, scientifically based professional proposal for the reform of the National Core Curriculum, and to enforce them in a coherent and modern curriculum system, realising and introducing education that provides usable economic and financial knowledge appropriate to the pupils' prior knowledge. However, the amendments⁹ to the government decree did not address the issue of economic and financial education until February 2020.

In the framework of the February 2020 amendments¹⁰, among other things, the compulsory number of basic hours and the freely planned number of hours for both primary and secondary education were determined for each field of study and education. According to the regulation, subjects which have a framework curriculum published by the minister for education, such as finances and entrepreneurship, may be part of the freely planned classes. Two classes per week shall be freely planned in grades 1-8 of primary education and in grades 9-10 of secondary education, while four classes per week for grade 11, and five classes per week for grade 12. However, this freely designable lesson frame shall be used for several subjects by educational institutions: e.g. for defence studies, or, in grades 5-8, for teaching the compulsory subject called "our homeland and its people" one hour a week, as well as for increasing the teaching of the subjects included in the basic timetable according to the local curriculum. Although the action plan states that a general financial literacy should be established at school age and that, in principle, school-based financial education can guarantee that the next generation acquires practical financial knowledge and skills, financial education is not compulsory in public education institutions other than in secondary vocational schools. No data are available on the actual number of children studying financial and economic subjects as electives in public education.

In the course of the amendment of the legislation, the elements of economic and financial education were defined within certain fields of education as a comprehensive goal and as a result of development and learning, which serve to further develop financial awareness and to understand economic and financial sustain-

⁸ The call is laid down in Point 2 of Government Decree No. 1919/2017. (XII. 8.) on the adoption of a strategy aimed at the development of the financial awareness of the population.

⁹ The government decree was amended four times before 2020, most recently with effect from 1 January 2018.

¹⁰ Government Decree No. 5/2020 (I. 31.) on the amendment of Government Decree No. 110/2012. (VI. 4.) on the issue, introduction and application of the National Core Curriculum

ability. Such fields of education include mathematics, history and civics, geography, technics and design.

Under the amendment, schools had to review their pedagogical programme by the end of April 2020. The revised pedagogical programme can be applied in teaching in a linear upward system as of the school year 2020/2021 (firstly in the first, fifth and ninth grades).

2.1.2 Accredited curricula

There has been significant progress in public education in terms of accredited curricula and their availability. As a result of a development of the Money Compass Foundation, students can meet the Foundation's materials (textbooks, workbooks, examples library, etc.)11 supporting the development of financial awareness in all grades, from grade 3 of the primary school to graduation. In 2019, the Money Compass Foundation, with the support of the National Bank of Hungary, sent a total of 385,000 copies of the *History and Finances* Workbook, which covers the economic and financial topics of the school leaving examination in history, and the example collection entitled Calculate with Investments, which can be part of the financial education integrated in mathematics classes. In 2020, all students starting the 9th grade are to receive the math example collection free of charge, while twelfth graders and their teachers preparing for graduation are to receive the history workbook. In addition, in 2020 the schools ordered 50,000 copies of the Foundation's free, accredited books, the textbook and workbook Missions in the World of Money for primary school students, as well as A Compass for Finances, a financial education textbook for secondary school students. From September 2020, the environment and math workbooks used in grades 3 and 4 have also included financial knowledge that is understandable to pupils. The primary schools ordered a total of 220,000 copies of math and environment workbooks for grades 3-8 for the school year of 2020/2021.

2.2 A professional literature review

2.2.1 The concept of financial literacy

The articles and publications on the subject, as well as the Strategy, are based on the definition of the Organization for Economic Co-operation and Development (OECD), according to which "financial awareness is the ability to increase, monitor and use financial resources efficiently in order to contribute to the well-being

¹¹ https://penziranytu.hu/ingyenes-tankonyvvel-segiti-penzugyi-nevelest-az-iskolakban-penziranytu-alapitvany-o.

and economic security of individuals, their families and their businesses" (Strategy, 2017; Kovács–Terták, 2019).

According to the State Audit Office of Hungary and its partners, financial literacy is "a level of financial knowledge and skills that enables individuals to identify the basic financial information needed to make informed and prudent decisions, interpret the acquired information and make decisions based on it, considering future financial and other consequences."

Amagir et al. (2020) identified three components of financial literacy:

- 1. Knowledge and discretion. Being able to identify, which financial behaviour is needed, based on the appropriate information.
- 2. Abilities and behaviour. Possessing appropriate operational skills and abilities to change behaviour.
- 3. Attitude and self-confidence. Applying the acquired knowledge outside familiar situations, motivation and self-efficacy.

Béres and Huzdik (2012) define financial literacy not as a term but primarily as a concept that includes financial know-how, knowledge, proficiency and experience in finances, financial skills and awareness which influence making financial decisions.

2.2.2 Assessment and evaluation of knowledge transfer

Pieces of research on the purpose, participants, quality and effectiveness of financial education courses are of primary importance regarding our topic. Among international surveys, the 2013 research on financial literacy initiatives, which supported the Australian government's strategy-making, is outstanding. The methodology and questions of this survey were also utilized by the research conducted by the State Audit Office of Hungary¹².

Czeglédi et al. (2016) examined the means of knowledge transfer related to entrepreneurship in Hungarian higher education. In the study of sample curricula, a total of 101 subjects which were in some way related to entrepreneurial knowledge were identified.

¹² Australian Securities and Investments Commission (2013): National Financial Literacy Stocktake Survey 2013, http://www.financialliteracy.gov.au/media/528627/report-375_nfls-stocktakesurvey-2013.pdf.

2.2.3 The impact of the courses on financial literacy

One of the basic questions of research examining trainings that develop financial literacy is whether the training programmes are effective and have a demonstrable effect on the financial literacy and behaviour of individuals and groups. Maybe formal education is much less decisive than we think and the influence of demographic conditions and social situation is more decisive? In view of the above, is it worth investing significant social resources in courses which shape financial literacy?

The results of international and national research show an extremely diverse picture.

Several studies establish a strong relationship between the level of financial literacy, participation in prior financial education, and financial behaviour. Those who received financial training during their studies are more likely to save, plan for retirement, and ask for less money to borrow (*Bernheim*, *Garrett* and *Maki*, 2001; Bernheim and Garrett, 2003; *Lusardi* and *Mitchell*, 2006; 2007a; *Hilgert*, *Hogarth* and *Beverly*, 2003; *Stango* and *Zinman*, 2007; *Van Rooij* et al., 2011).

The results of the ÁSZ's research on financial literacy of students in higher education (Béres et al., 2013; Luksander et al. 2014) show that the financial literacy of those who have received financial and economic education in secondary school is not more developed than that of those who have not received such education. At the same time, a number of socio-demographic factors (age, sex, level and field of education, and the students' life situation) are significantly related to the level of financial literacy. This highlights the low effectiveness of high school education. All of this is in line with the American experience (Willis, 2009).

A study by Amagir et al. (2018) synthesized research findings on the relationship between financial education and financial behaviour. According to the authors, the research data show that school-based financial education has the potential to improve the financial knowledge and attitude of children and adolescents. Research on the financial intentions of young people based on self-monitoring and self-reporting of financial behaviour shows the positive effects of training. However, research examining the relationship between actual financial behaviour and education is less common, and research using such methods shows little of the positive impact of financial education.

Carlson (2020) examined the relationship between actual financial knowledge and financial training provided by public education among Americans aged 18–24 years. According to his results, demographic background factors (ethnicity, sex) were more important in terms of financial literacy than whether they received financial education in high school. The study concludes that out-of-classroom de-

mographic factors need to be considered for the provision of effective financial education.

Similar conclusions were drawn by Van Rooij et al. (2011). With regard to the relationship between financial literacy and social background variables, the study pointed out that since most research suggests that the level of financial literacy is highly dependent on sex, age and education, those financial literacy courses which target certain groups of the population individually and take into account their special needs may be effective.

The aforementioned pieces of research highlight that financial education is not always effective, so examining effectiveness or the determinants thereof is of paramount importance.

3 METHODS

3.1 Creating the questionnaire

The questionnaire consists of two thematic units (parts *A* and *B*) and 27 questions. Part *A* asks about the data of the organization or individual that provides the training and the number of the training programme (4 questions). Part *B* examines factors related to the training, such as e.g. the purpose, target group, funding, duration, topics, methods, syllabus, curriculum, teachers, the evaluation of the effectiveness of the training and the organization of the competition (23 questions). The respondents completed the questionnaire for each training programme. They had the opportunity to present a maximum of 5 training programmes. Programmes with a separate syllabus had to be considered as different courses. The questionnaire was completed in the summer of 2020.

3.2 Processing of questionnaires, examination of research questions

Processing and analysis were performed using the programmes IBM SPSS Statistics and MS Excel. Descriptive and inferential statistical methods were used in the analysis, e.g. distribution, correlation calculation. A significance level of 5% was chosen for the evaluation of the questionnaires in each case.

3.3 Respondents, sample

When defining the database, our goal was to fully cover those involved in the development of financial literacy. To this end, we created a 110-item database, on the one hand, from the organizations included in the database compiled for the

previous financial literacy development research in 2016, the institutions on the National Bank of Hungary's list of financial institutions, the organizations supported by the National Bank of Hungary and the Ministry of Finance through tenders for the development of financial literacy, on the other hand, based on publicly available information on the Internet and information received from the ÁSZ's partners taking part in financial literacy cooperation. The developed database of respondents included 47 organizations which were not in the scope of the 2016 research.

Out of the 110 organizations surveyed, 63 completed the questionnaire. Out of the 63 respondents, 52 answered that they had an activity aimed at developing financial literacy. Such activities could be training programmes, surveys, competitions or other initiatives. Thus, based on the responses received, we processed a total of 122 training programmes.

4 RESULTS

4.1 The volume of training

In the 2016 survey, 35 organizations providing training programmes completed the questionnaire, and, in the 2020 survey, 52 respondents providing training programmes participated, which is an increase of nearly 40%. Four aggregated categories were developed from the respondents. Accordingly, out of the 52 respondents providing a training programme, 10 were identified as organizations with a significant reach, 5 as financial institutions, 29 as non-profit organizations and 8 as other businesses.

- The examination of the sample also outlined a category of respondents in the
 case of the 2020 survey, which included the most important actors in the development of financial literacy.
- The group of "THOSE WITH A SIGNIFICANT REACH" included respondents, regardless of their organizational form, who reached more than 10,000 people with their programmes.

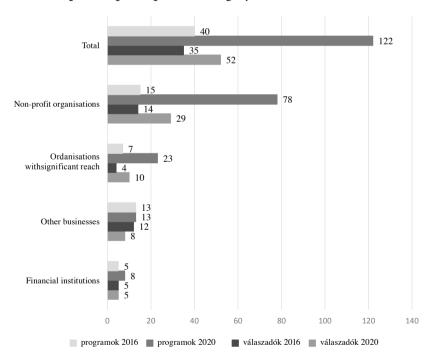
Those reaching less than 10,000 individuals were divided into the following groups.

¹³ The OTP Fáy Foundation, one of the largest players in the development of the Hungarian financial culture, did not return the questionnaire. As without our data on the activities of the organization, our survey would have been incomplete, we supplemented our data on the training programmes of the OTP Fáy Foundation, on the basis of publicly available information.

- Credit institutions, financial undertakings, payment institutions and their branch offices were included in the category of FINANCIAL INSTITUTIONS.
- NON-PROFIT ORGANIZATIONS consisted of civil and non-profit organizations, budgetary bodies, and church-run institutions.
- Companies and higher education institution(s) were included in the OTHER category.

In nominal terms, the most significant change (increase) occurred in the category of foundations, associations and non-profit organizations, whereas, there was a two-and-a-half-fold increase in the number of the responding organizations with a significant reach, as well. In the case of these organizations, growth is also of particular importance because the number of people reached by them through training also increased significantly (*Figure 1*).

Figure 1
The number of respondents providing training programmes and the sample size per respondent category (2016; 2020)



Source: own editing based on the data of own questionnaire survey

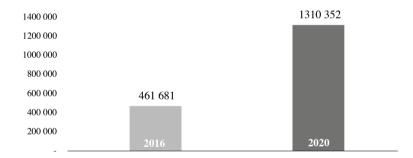
4.1.1 How has the number of training programs changed?

The number of training programmes has also increased significantly. The number of training programmes provided by non-profit organizations was more than five times higher than in the 2016 research, while the number of programmes provided by organisations with a significant reach was more than three times higher than in 2016 (see *Figure 1*).

4.1.2 How did the number of participants in the training change?

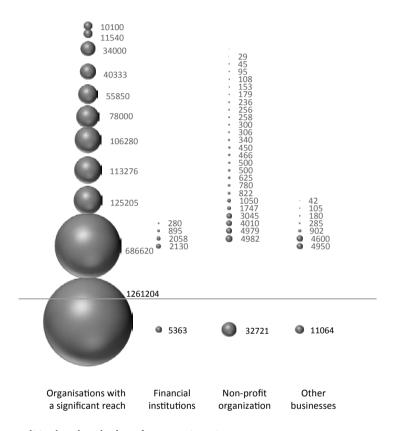
In the questionnaire, the respondents indicated which target groups and how many people they reached with each training. According to the 2020 survey, the training organizations reached about three times more people with their training programmes than the respective respondents in 2016. While according to the 2020 survey, trainings developing financial literacy were held for 1,310,352 people between 2016 and 2019, based on the 2016 survey, 461,681 people were reached by the programmes provided by the respondents between 2012 and 2015 (*Figure 2*).

Figure 2
The number of people reached by the trainings (2016; 2020) (people)



Source: own editing based on the data of own questionnaire survey

Figure 3
The number of people reached by the organisations, organisation types and their trainings (people)



The number of people reached by the trainings is significantly higher in the case of organisations with a significant reach than in the case of other training organizations. The 43 financial institutions, non-profit organizations and other enterprises together reached only 59,248 people, which is only 9% of the reach of the 9 organisations with the most significant reaches. The 6 organisations with the most significant reaches were the following:

- 1. Hungarian Banking Association (686,620 people)14,
- 2. PontVelem Nonprofit Kft. (125,205 people);
- 3. Econventio Roundtable Non-Profit Association (113,276 people);
- 4. Junior Achievement Hungary Education and Business Organisation Foundation (106,280 people);
- 5. OTP Fáy András Foundation (78,000 people)
- 6. National Bank of Hungary (55,850 people)

4.2 Funding of the trainings

The questionnaire also asked about the sources of funding for the training programmes (own resources, participants' contributions, funds provided by the state or the EU). The respondents could indicate several types of sources in the case of each training. The questionnaire did not examine the proportion and value of sources.

In 2020, 44% of the courses used public money (27% state funding and 17% EU funding). Among the funding sources of the training programmes, own resource was mentioned by the respondents most frequently (48%). In 2016 the order of the sources was similar. Participant contributions appear in barely a third of the trainings, while other sources¹⁵ and funding from other financial institutions were mentioned by almost 20% (*Figure 4*).

¹⁴ A programme, which reached a large number of participants, was an event called Money7, which was implemented in cooperation with the institutional and professional partners of the Hungarian Banking Association.

¹⁵ In the course of the analysis, some respondents included the aids provided by the National Bank of Hungary through tenders in the category of other sources.

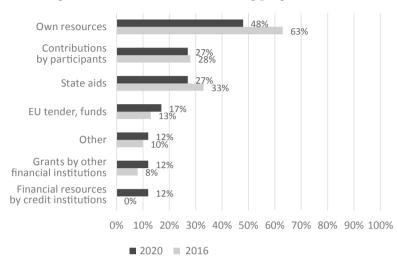
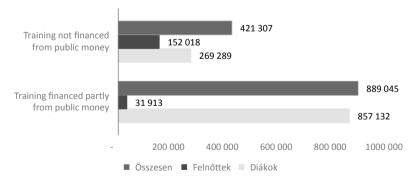


Figure 4
What funding sources were used for the training programmes?

We also examined how many participants were reached through the trainings financed from public funds and through those not financed from public funds (participants' contributions, own resources, other sources) (*Figure 5*).





Source: own editing based on the data of own questionnaire survey

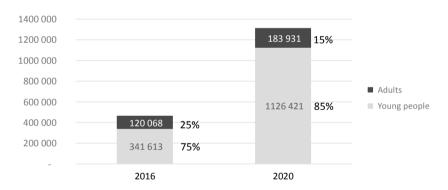
A significant part of the trainings is financed from budgetary, state and EU funds The majority of the participants (mainly young people, school-age children) took part in trainings that were implemented from public funds to some extent. Both the Pearson's chi-squared test and the Fisher's exact test performed confirmed the correlation at a significance level of 5%.¹⁶

4.3 Who's the target audience of trainings aiming at the development of financial literacy?

4.3.1 Age composition of those qualified

The results of the 2016 survey showed that the majority of the groups targeted by the trainings are young. Respondents indicated whether the participants in the courses studied in the junior or senior section of primary school, secondary school or higher education. Students in public and higher education (most often 6–25 years old) and adults over 25 years of age were considered young age groups.

Figure 6 Number of students in the age groups and percentage of the age groups reached by the trainings (2016, 2020)



Source: own editing based on the data of own questionnaire survey

The percentage of those reached by the trainings was similar to that based on the 2016 data, and the percentage of young people has increased further since then (*Figure 8*). On average, trainings aimed at students in public education reached more than 40,000 people, while trainings aimed exclusively at other groups

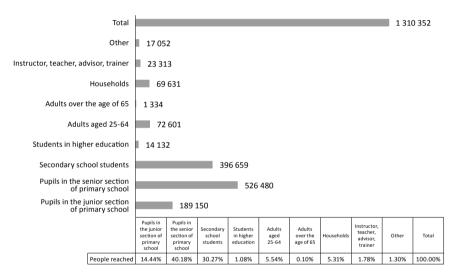
¹⁶ The p-value of Pearson's chi-squared test was o and the p-value of Fisher's exact test was 0.00000018.

reached an average of 8,600 people.¹⁷ This difference is considered significant when performing analysis of variance (the significance of the test is 0.013), the category means are not the same.

4.3.2 Social representation of the reached groups

To determine the distribution of each target group within the population, we used the data of the Hungarian Central Statistical Office.¹⁸

Figure 7
Distribution of target groups within the population (people)



Source: own editing based on the data of KSH.

Regarding the total population, according to the Hungarian Central Statistical Office's data, young people (6–25 years old) make up less than a quarter of the population aged over 5 years old, and adults (over 25 years old) make up almost 75% of the population. The proportion of students (aged 6–25) among those reached by the training programmes is more than 4 times higher than their proportion in the population, while the proportion of adults in their training programmes is about one-fifth of their proportion in the population (Figure 7). Based on the above, it

¹⁷ In this case, we counted a total of 114 trainings, 39 of which had students as a target group. In 8 cases, no data are available. As missing data, they will not be included in the statistics).

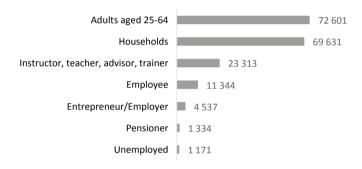
¹⁸ https://www.ksh.hu/interaktiv/korfak/terulet.html

can be stated that, similarly to the results of 2016, in addition to the numerical ratio of young people in the population, adults were significantly underrepresented among the participants of the trainings.

4.3.3 Target groups of trainings aimed at adults

The questionnaire also examined the backgrounds, life situations, occupational groups and labour market situations of the adults participating in the trainings. Accordingly, we distinguished: employers, the unemployed, entrepreneurs, pensioners, educators and trainers, as well as households. The participants of the trainings could belong to several groups at the same time, in addition, the respondents could indicate several target groups per training (*Figure 8*).

Figure 8
Individual groups of adults taking part in training (people)



Source: own editing based on the data of own questionnaire survey

Among the target groups of adult education, the adult groups with special educational needs, that is entrepreneurs, pensioners and the unemployed are underrepresented. Compared to this, social groups who are wage and salary earners participate in a higher number and proportion. As in 2016, the target group of educators and trainers is still significant.

4.4 The main objectives and the focus of the trainings

Respondents were given the choice of 12 training objectives, with more than one objective for each training course, and a total of 13 possible training topics were included in the questionnaire.

Financial knowledge transfer Development of financial literacy Preparation and support of responsible financial Learning about financial risk Improving financial self-knowledge Other Development of knowledge related to consumer Teaching calculations related to financial products Information on the financial sector and the activities of Improving the situation of financially vulnerable groups Entrepreneurial knowledge Presentation of specific financial product(s)/investment 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 2020 2016

Figure 9
Objectives of the training programmes (2016, 2020)

Similarly to the 2016 research results, the order of the most typical goals of the training programmes is essentially unchanged. "Financial knowledge transfer", "Development of financial literacy of target groups", "Support of responsible financial decisions", "Learning about financial risks" and "Improving financial self-knowledge" remain the most common training goals. At the same time, the share of these most popular training goals in training decreased slightly compared to 2016, while the proportion of training aimed at "improving the situation of financially vulnerable groups" increased (*Figure 9*).

We also assessed the topics covered by the training programmes and their weight in training. The questionnaire included 13 training topics, and the respondents were able to give four answers ("the topic was not included", "the topic was touched on", "the topic was dealt with moderately" and "the topic was dealt with significantly") regarding the weight of the topics within the training. In order to evaluate the responses, numerical values were assigned to them ("the topic was not included" = 0, "the topic was touched on" = 1, "the topic was dealt with moderately" = 2, and "the topic was dealt with significantly" = 3). The ordinal measurement level variable was transformed into a variable measurable with averages, and non-respondents were filtered out in the case of averaging calculations.

¹⁹ The 2016 research questionnaire did not include the goal "transfer of entrepreneurial knowledge".

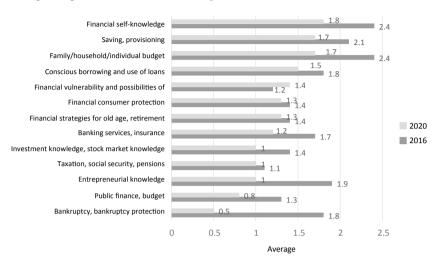


Figure 10 Average weights for the individual topics (2016, 2020)

Similarly to the previous survey, financial self-knowledge, saving and budgeting appeared most frequently. Compared to 2016, a significant shift is the fallback of knowledge related to bankruptcy to the background and the decrease in the weight of entrepreneurial knowledge. At the same time, the importance of knowledge relevant to financial vulnerability slightly increased. The order of importance of the weight of the topics also points out that knowledge related to income generation, including investment knowledge, business knowledge, stock market-related information, are still less prominent elements of the trainings (*Figure 10*). The two-sample t-test, at a significance level of 5 percent, confirms that among the training topics, teaching about bankruptcy is in decline, while knowledge about financial vulnerability is given more emphasis.

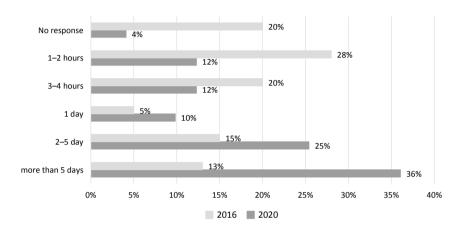
4.5 Duration of the trainings

4.5.1 How has the duration of the trainings changed?

The research assessed the average duration of the trainings. The results of the research show that, compared to 2016, the proportion of trainings with a duration of 2-5 days and of more than 5 days has increased. Compared to the trainings be-

fore 2016, it is clear that longer trainings are more typical (*Figure 11*). Fisher's exact test shows a significant correlation at the 5% significance level.²⁰

Figure 11
Distribution of the duration of training programmes in 2016 and 2020



Source: own editing based on the data of own questionnaire survey

4.5.2 How many participants attend the trainings of different duration?

Nearly sixty percent of all trainees participated in 3-4 hour long trainings (*Figure 12*). With trainings lasting for 2–5 days and more than 5 days, 35% of the participants are reached, despite the fact that the number of trainings launched in these categories is more than 60%.

²⁰ The p value of Fischer's exact test is 0.0020

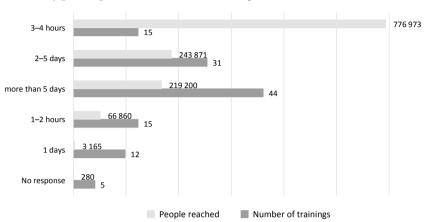


Figure 12 How many participants attended the trainings of different duration in 2020?

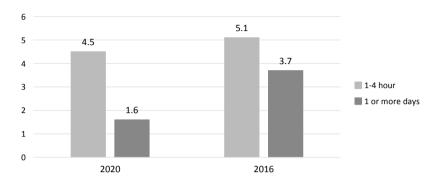
Statistically, the duration of the trainings influences the change in the number of participants by 37.37%, so there is a medium-strength relationship between the duration of the trainings and the number of participants (standard deviation ratio: 0.6113).

We examined whether there was a correlation between the duration of trainings for students in public education and the duration of trainings exclusively for other target groups. Trainings for students in public education are shorter, more frequently lasting 1-4 hours, than trainings for groups outside public education (*Figure 12*). The p-value of Pearson's chi-square (0.006) and the p-value of Fisher's exact test (0.008) are also correlated at a significance level of 5%. This correlation already existed before 2016.

4.5.3 Is there a correlation between the number of topics and the length of training?

The results of the 2016 research showed that shorter courses covered more topics on average. In view if the above, we examined again whether there was a correlation between the duration of the trainings and the number of topics covered by the individual trainings.

Figure 13 Average number of topics covered in trainings lasting 1–4 hours and longer in 2016 and 2020



The results of the research repeatedly highlighted the contradiction that shorter-term courses cover almost three times as many topics as longer ones. At the same time, the number of topics dealt with decreased for both longer and shorter courses. There is a moderately strong relationship between the time spent on training and the number of topics taught, i.e. the shorter the training, the more topics the course covers (ratio of standard deviation is 0.5099).

4.6 Methodologies used in the training

As in 2016, we also collected information on the training methods used in the transfer of knowledge by training organizations in the 2020 survey. Respondents were able to choose the teaching and training methods they used in each training course from five possible answers. Several methods could be identified per training.

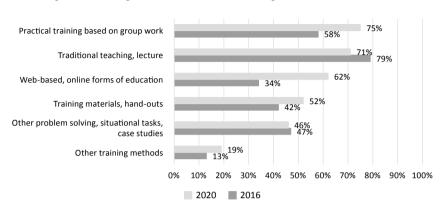


Figure 14
Percentage of teaching methods used in trainings in 2016 and 2020

The two most widely used methods in the course of trainings are traditional teaching and practical training based on group work, supplemented by situational tasks and / or case studies. Compared to 2016, the popularity of the interactive method based on group work and the use of web-based, online forms of education had increased significantly. At the same time, traditional, "classroom" teaching methods were used by a lower percentage of responding organizations than before.

4.7 Syllabuses and curricula

4.7.1 The availability and accessibility of syllabuses

Research in 2016 found that, despite the fact that a significant proportion of training-related topics and curricula are available, it is not publicly accessible.

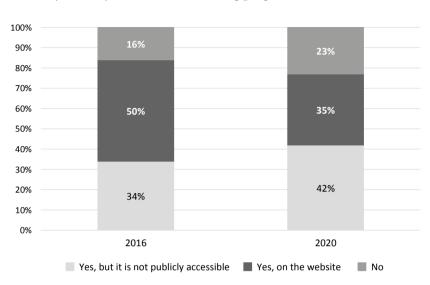


Figure 15 Availability of the syllabuses of the training programmes (2016, 2020)

According to the survey conducted in 2020, most training programmes have syllabuses, but most of them are not publicly accessible (*Figure 15*). The proportion of trainings with available but publicly not accessible syllabuses has increased, while the number of trainings without any syllabus has increased, also.

4.7.2 The availability and accessibility of curricula

The 2016 research report pointed out that although most training programmes had a curriculum, the accessibility thereof was even lower than that of syllabuses.

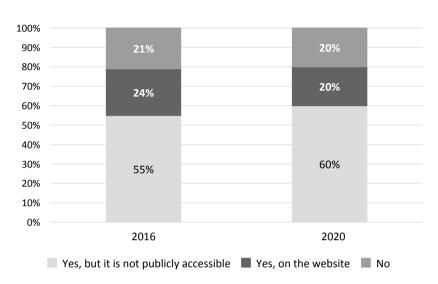


Figure 16 Availability of curricula related to training programmes in 2016 and 2020

The results show that the curricula related to the training programmes are available in the case of eighty percent of the trainings, but three-quarters of these are not publicly accessible. The existence of the curriculum has not changed since 2016. However, compared to 2016, the accessibility of the curricula has slightly deteriorated (*Figure 16*).

4.8 Qualification of the trainers

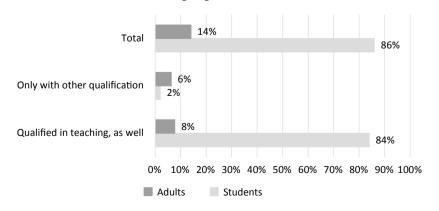
The 2016 research report found that the majority of the trainings were taught by professionals with a degree in economics and finance, and in two-fifths there-of professionals qualified as teacher or trainer teach classes. Based on this, we formed the following hypothesis of the study.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% a specialist qualified in economics and finance pedagogue trainer 35% 39% lawyer psychologist 0ther 13% 23% 13% 23%

Figure 17
Qualification of the trainers holding the trainings (2016 and 2020)

Similarly to the data of the previous survey, the trainers holding the trainings are predominantly economists. Compared to the 2016 survey, the proportion of teachers with a degree in economics and finance increased by 9%, the proportion of teachers with a degree in pedagogy by 4%, the number of teachers with a degree in law by 5% and the number of other teachers by 10%. Compared to the 2016 data, only the proportion of trainers and those in other categories decreased (*Figure 17*). We also examined whether the students were trained by trainers with a teaching degree.

Figure 18
Who did trainers with a teaching degree teach? (2020)



Source: own editing based on the data of own questionnaire survey

Among the target groups of the trainings, the students in public education were significantly over-represented, more than 80% of them were educated in financial literacy by pedagogues, qualified in teaching (*Figure 18*).

4.9 Training of the trainers

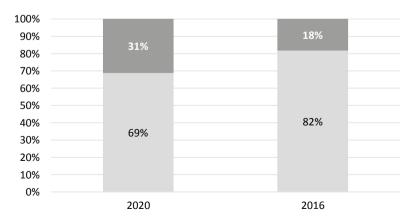
The research conducted in 2016 found that more educators holding training programmes for students in public education were trained than those in training programmes for students in non-public education. In 2020, we examined again which of the training organizations were preparing the trainers. The results showed a decrease in the proportion of organizations which help their trainers prepare through training.

While in 2016, the majority of the educators (52%) received preliminary training, by 2020, this proportion dropped by 7 percentage points to 45%.

4.10 Assessment of the needs of the participants

The research in 2016 found that in the vast majority of trainings (82%) the needs and training demands of the target group were assessed during the development of the programmes. Based on the responses received, more than two-thirds of the responding organizations assessed the needs and training demands of the target group during the elaboration of the programmes, which was a decrease of 13 percentage points compared to the 2016 data (*Figure 19*).

Figure 19 Assessment of the needs and demands of target groups (2016; 2020)

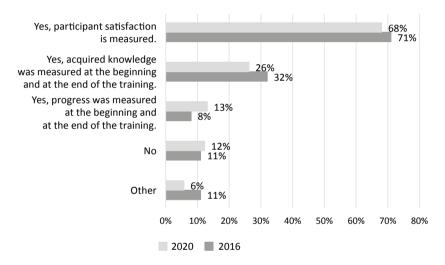


Source: own editing based on the data of own questionnaire survey

4.11 Measuring the effectiveness of trainings

The research conducted in 2016 found that the effectiveness of trainings was measured in the vast majority of cases; however, monitoring the progress of the participants at the beginning and at the end of the training was not typical. In the case of the question about the measurement of the effectiveness and efficiency of the trainings, it was possible to mark several answers (it is measured at the beginning or at the end of the trainings, or only student satisfaction is measured).

Figure 20 Is the effectiveness and efficiency of the trainings measured and how?



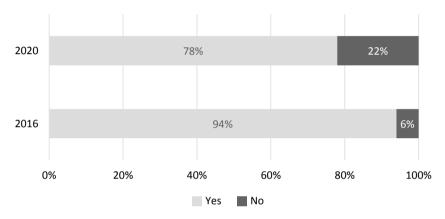
Source: own editing based on the data of own questionnaire survey

In about 40% of the trainings, the results are measured. There was no change between the two surveys in this area. At the same time, the results show that 13% of the trainings measure the acquired knowledge, i.e. the development resulting from the training, at the beginning and at the end of the training. This was an increase of 5 percentage points compared to the 2016 data. At the end of the trainings, the measurement of acquired knowledge was a practice in a quarter of the trainings. There was a decrease of 6 percentage points in this indicator. Overall, two-thirds of the trainings still measured only the satisfaction of the participants, which was a decrease of 3 percentage points compared to the 2016 data (*Figure 20*).

4.12 Use of the experience

According to the results of the 2016 research, the experience of the trainings was utilized in a very high proportion (94%). In 2020, we re-examined whether the experience of training programmes was used by the organizers and incorporated into the curricula.

Figure 21 Is the experience gained during the training programmes used? (2016; 2020)



Source: own editing based on the data of own questionnaire survey

The results show that although a high proportion (78%) of the training experience is utilized, this represents a decrease of 16 percentage points compared to the 2016 data. The change is significant.

5 CONCLUSIONS

The 2016 survey served as a source of information in the development of the national strategy for the development of financial literacy and in the preparation of operational plans. Partly as a result of the research, a number of government initiatives have been launched or implemented. In addition, several non-governmental organizations dealing with financial literacy development indicated that they had redesigned their training based on the results and recommendations of the research.

The results of the research show that the volume of trainings held by non-public educational organisations, the number of training programmes and the number of participants have considerably increased since 2016. A significant positive

change is that three times as many people have received financial literacy development training in the past four years than before. However, the significant overrepresentation of school-age students has not changed.

Among the organizations providing training, the so-called organizations with a significant reach teach the vast majority of participants, within that the greatest proportion of students (more than one million) in public education. Their trainings are short, lasting for 3–4 hours. The trainings organized by financial institutions are short and reach a negligible number of participants. Banking services are emphasized in their trainings. The trainings held by non-profit organizations are mostly for adults, last for 2–5 days, and are usually funded from funded from public money. Their main profile is to develop financial awareness. In the case of trainings held by other companies, participant payment prevails. Their trainings are long. Their curricula include the topic of financial vulnerability and protection. However, the trainings are mainly financed by the participants themselves, and they do not reach the most deprived social groups.

It is also a step forward that the average duration of the trainings has increased. Multi-day trainings are organised mainly for adults. Knowledge transfer still focuses on the development of individual savings and financial awareness, financial self-knowledge, attitude and behaviour, which is reasonable, as less financial awareness and more financial knowledge and calculation tasks can be taught within the subjects. The prevalence of teaching retirement-age saving strategies shows that the training organizations have recognized to the importance thereof, resulting from demographic processes. However, teaching investment and entrepreneurship is still not a priority.

The target groups of the training were the financially vulnerable groups. However, most of the trainings for adults do not take into account the income situation and social background of the target groups, therefore few of the unemployed, pensioners and entrepreneurs have access to financial literacy development education specially designed for them.

According to the results of the research, in addition to traditional teaching methods, online and web solutions have appeared, and practical trainings based on group work are becoming more and more popular. With the rise of technological innovations, and certainly, partly due to the pandemic situation, the proportion of trainings using online and digital knowledge dissemination has almost doubled since the last survey. In addition to the use of traditional educational methods, educational solutions based on situational tasks and situational exercises came to the fore in 2020. The latter form of education is especially suitable for not only communicating knowledge, but also for shaping mentality, attitude, and financial personality.

It is particularly important that trainings are based on accessible, quality-assured curricula. The research found that the majority of trainings have a syllabus and a curriculum, but their accessibility has slightly deteriorated in comparison to 2016. The use of qualified, peer-reviewed or accredited curricula is typical of slightly more than a third of the trainings, despite the fact that since 2016 several accredited curricula, textbooks, workbooks, quality-assured and electronically accessible, usable tasks, games, quizzes, etc. have been published. The widespread use of these materials could make the trainings more transparent and effective.

Most of the trainings assess the needs of the participants in advance, but this proportion has decreased by 2020. Respondent organizations also stated that they typically used previous experience to further develop their trainings.

The measurement of effectiveness did not improve significantly compared to 2016. The majority of trainings still measure the participants' satisfaction, with barely 40% assessing whether the training goals have been met. At the same time, without measuring the effectiveness of training, the acquisition and use of experience can be limited.

While there was an increasing focus on developing a financial literacy between 2016 and 2020, the vast majority of the trainings still reach the most accessible school age group. Training programmes should pay more attention to improving the financial awareness of adults, especially those who are financially vulnerable, particularly in the case of publicly funded trainings.

The results of the research draw attention to the need to further strengthen the professional guarantees that ensure the quality of the trainings. In the case of organizations which also use public funds, the public body participating in the funding should be responsible for checking the existence of these professional guarantees, concerning both the control of the tendering procedures and the implementation of the programmes.

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