



Putting Financial Education into Work

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Abstract

In the aftermath of the global financial crisis it became obvious that many people operating in financial markets didn't understand the functioning and therefore the risks of financial products, which they were dealing with in the past. It is for this reason that Financial Education is by now gaining more and more attention in the public dialogue. [1] Numerous institutions in Europe and throughout are fostering the implementation of financial contents in schools. Beginning in primary schools, easy games should help to convey age-conformed financial topics to the kids. The EU-funded project "Financial Education – Levering the Implementation Efficiency in Schools" is going to foster the implementation of financial contents within existing curricula in selected compulsory schools in Austria, Germany, Belgium and Latvia. Since financial literacy is an ongoing topic within a very challenging economic and financial context nowadays, it must be part of all pupils' education, irrespective of whether they are attending a commercial school or not. [2] [3] This is the reason why the project consortium avoids changing the curricula by implementing a separate subject dealing with financial education. Instead teachers of different subjects are encouraged to include financial topics into their already existing instruction. In order to achieve this goal, an in-depth analysis of the existing curricula is planned in order to get informed about subjects that can be used to integrate financial contents. Furthermore, based on the competence model for financial education, introduced by Kaminski and Friebe [4], related contents in the fields of "use of money", "handling of life risks", "asset and retirement management" and "use of loans" are defined by the project partners for three specific examples, which in a final step should be part of the teacher's instruction in the classroom. The mentioned examples are "purchase of a mobile phone/tablet/PC", "clothes, leisure and vacation" as well as "career and future perspectives". These examples assure that the developed contents fit to the needs and interests of the pupils, which is an important point to be considered in this working field. In addition it can be perfectly combined with the competences, given in the model of Kaminski and Friebe. Within this conference, a poster presentation is planned to address to the audience. The presentation will primarily focus on the developed contents to be taught in the classroom and how these refer to the competences given in the mentioned model. Additionally the presentation will provide information about the status quo of financial education of secondary level pupils in the participating countries of this project. For this reason, the results of an implemented needs and gap analysis are going to be discussed additionally. These two working fields complement each other in a positive manner, as the results of the needs and gap analysis lay the foundation for new, financial-education-related contents to be brought into schools in order to prepare pupils for prospective interactions with the financial market and its ongoing challenges.

1. Introduction

Financial education has become a very important topic in the last years, since the effects of the financial crisis obviously showed that people didn't know enough about the risks of the financial market and its products. Therefore, a lot of public and private organisations focus on providing financial education to pupils in Europe and throughout in order to increase the understanding of the functioning and the risks of financial markets. So does the consortium of the EU-funded project "Financial Education – Levering the Implementation Efficiency in Schools". It is the main aim of this project to improve the implementation efficiency of financial education in general secondary schools. By this way pupils are able to develop financial competences within their school career. Consequently, not pupils are the relevant target group of this undertaking, but teachers, as they are the main converter within educational processes. Pupils and their increasing understanding of financial topics are the results of supporting teachers when implementing financial education in general secondary schools. In the following chapters, the status quo of financial education is discussed. Furthermore, problems about integrating financial education in the classroom are identified. Secondly, the competence model by Friebe and Kaminski, which is used within this project in order to assign financial competences to specific subjects, is explained. In the end, an extract of the results of Work



Package 3, “Needs and Gap Analysis”, is presented. For simplifying reasons, the results described focus on the analysis of the Austrian curricula for general secondary schools, which was implemented by the project leader FH JOANNEUM. In order to use terms correctly, the next chapter gives information about defining financial education properly and provides a classification of financial education within economic education.

2. Dissociation of Terms

Prior to identifying topics and subjects that can be used for financial education instruction, a classification and definition of financial education has to be conducted. The classification of financial education within economic education is relevant with regard to specific contents, as there are also vocational education schools, like higher commercial schools in Austria, which deal with financial contents. This is integrated in the corresponding curricula of those schools and therefore, it is necessary to dissociate financial education within vocational education from financial education within general education. The project consortium focuses on financial education as part of general education in order to prepare general secondary level pupils for the prospective challenges of the financial market and not only those, who specialise on vocational education. The model used to classify financial education was implemented by Reifner in 2003 and is shown as follows:

Figure 1 shows that there is a difference of financial education contents between general and vocational education. Whereas vocational education deals with specific on-the-job topics, e.g. the calculation of a loan's repayment plan, general education focuses on the general understanding of the financial market and its products. Thus, being able to read and understand a loan agreement is an appropriate example within financial education instruction in general secondary schools. Therefore, implementing financial education in general secondary schools doesn't aim to duplicate contents from

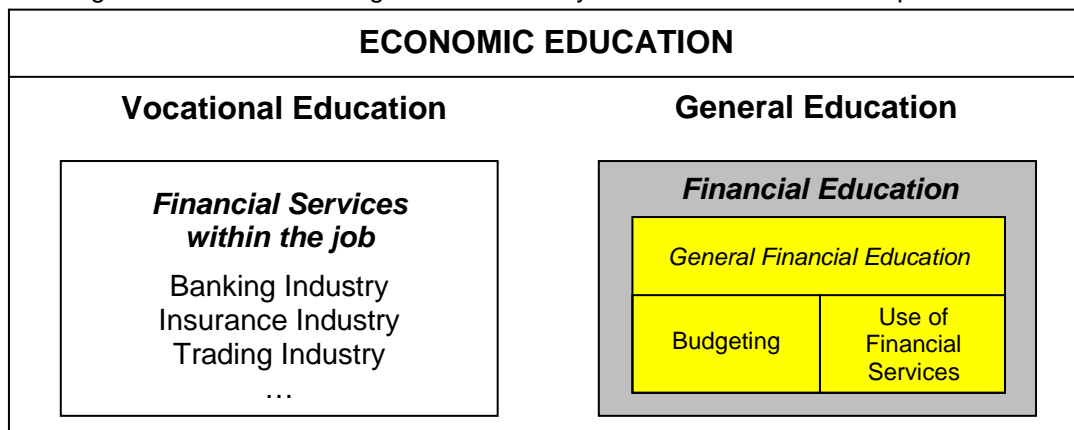
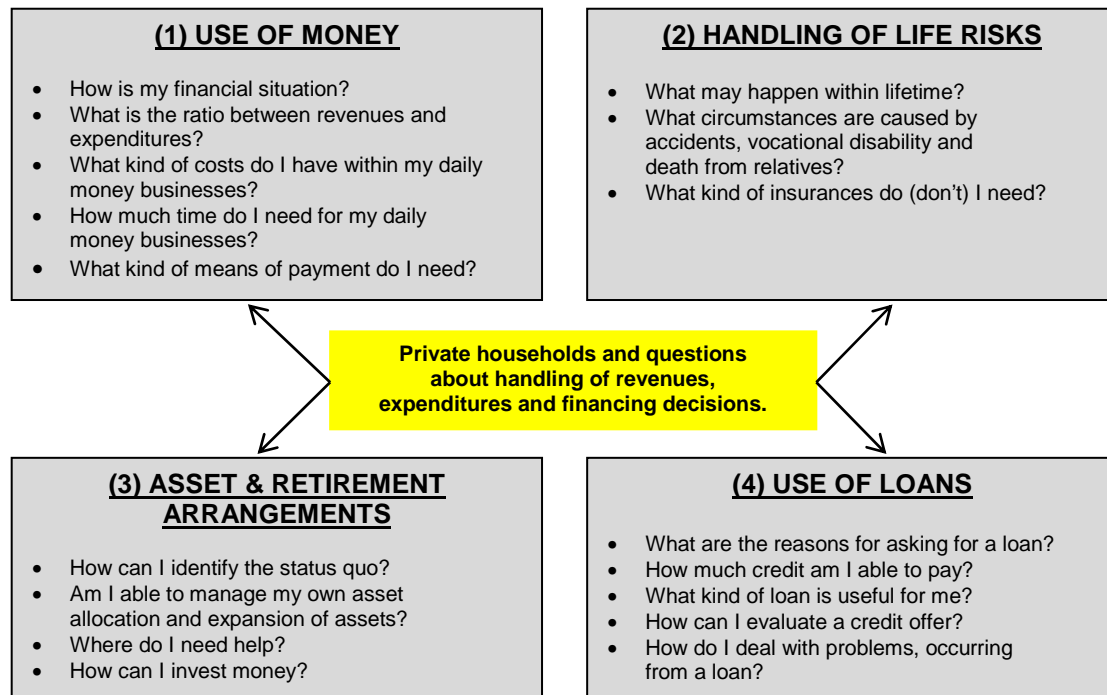


Fig. 1: Reifner (2003), *Finanzielle Allgemeinbildung, Bildung als Mittel der Armutsprävention in der Kreditgesellschaft*, NOMOS, Baden-Baden, translated into German by the authors.

vocational schools but to enhance the developing of financial competences within general education. Concerning a proper definition of financial education, a specific concept by Friebel and Kaminski (2012) is used, which identifies four specific areas within financial education that should be delivered to secondary level pupils of general schools. The following illustration presents those four specific topics as well as the corresponding contents:



Referring to Figure 2, the identified areas *use of money*, *handling of life risks*, *asset and retirement arrangements* and *use of loans* should be part of educational considerations by teachers when implementing financial education in general secondary schools. As the questions in the boxes show, there is no specific in-depth knowledge assigned to be delivered to pupils, but the dealing with general questions of those areas. On the contrary, teachers have to be well educated in this new working field. Thus, it is important that teachers, who integrate financial education in their instruction, have the opportunity to attend further education courses such as financial education workshops. The implementation of these workshops is one important outcome of this project, as teachers get well informed about the topics in Figure 2 and moreover receive open-source teaching materials as well as methodical suggestions for their instruction. The special focus on teachers of general secondary schools is important, since for normal they are not skilled in financial education within their academic career.

3. Financial Education: Status Quo

National investigations by all academic project partners in Austria, Germany, Belgium and Latvia ensued that there is a lack of financial education in those countries. The following examples should give an impression of the current situation: A survey, implemented in Germany, showed that the level of information concerning financial knowledge among young people is very little; only 14 % of the interviewed think that they have a good level of information, whereas 31 % are to the opinion to be bad informed. Another question about the stock exchange ensued that more than 40 % of young people "... don't know anything what's going on at the stock exchange". [5] Regarding Belgium, results of a national survey showed that only 44.5 % of young people between an age range of 18 and 24 years were able to succeed a test about financial literacy. [6] The situation in Austria and Germany is similar. As the lack of financial literacy is a well-known topic in all countries, different organisations try to foster the increase of financial competences among the population. Referring to the school systems in Austria, Belgium, Germany and Latvia, secondary education is divided into different kinds of school types. For simplifying reasons, a differentiation into general and vocational secondary education is conducted, where general education focuses on broad general education and vocational education on professional education for entering the labor market afterwards. [7] In some schools, financial education is offered as an optional subject *economic education* – like in Latvian or Austrian schools. The problem within this specific case is that on the one hand, financial competences can't be delivered to all pupils and on the other hand, financial education is considered as an isolated application.



Therefore, the project consortium aims to include financial education in many compulsory subjects within the given curriculum, as there are a lot of subjects affected by financial education, like mathematics, geography, history or languages (see Table 1). Besides schools, there are also other public and private institutions, which provide financial education to pupils by using different methods. Mostly, organisations offer workshops for pupils to specific topics like *use of own money*. Furthermore, pupils can pass a specially created test to obtain a certificate, called *Euro Finance Driving Licence* – an initiative that was launched in Austria and Germany by a private company. [8] Most of the initiatives launched are supported by governmental organisation, like in Austria the Ministry for Education, Arts and Culture or the Ministry for Work, Social Issues and Consumer Protection. Although a lot of initiatives concerning financial education have already been launched, nearly all of them focus on pupils and do not explicitly foster teachers within the instruction process of financial education. As there are open source teaching materials for financial education instruction available, e.g. on the website *Dolceta*, a project funded by the European Commission, there is less personal support for teachers, like the implementation of a summer school for teachers, as it is planned by the Association of Commercial Banks in Latvia. [9]

4. Needs and Gap Analysis: Extract of Results

The extract of results of the implemented “*Needs and Gap Analysis*”, which is presented in this chapter, is based on the Austrian curriculum for general secondary schools. In order to make the results of the participating countries comparable, it was determined only focusing on compulsory subjects of the curriculum at the very beginning. Optional subjects, which don't ensure the attendance of all pupils, were excluded. The first made gap analysis made obvious that there is a lack of financial competences within general education at secondary schools. There is only one subject in the curriculum, *geography and economics*, which deals with some of the topics in Figure 2. Although there are a lot of subjects that may be used for dealing with financial contents, one most important obstacle is time – referring to an in-depth discussion with teachers of general secondary schools. The level of financial competences developed within the classroom mainly depends on the teachers' willingness to additionally focus on these topics and less on others. Unfortunately, teachers are afraid of decreasing the level of general competences in order to spend more time with financial education. Therefore, a trade-off between given contents and the delivering of financial competences is identified. Referring to the needs analysis, the first step was to identify topics that can be taught in general secondary schools and are covered by the given curriculum. To avoid isolated solutions, it was necessary to find connections between subjects and school grades. In order to find specific topics that relate to the four areas presented in Figure 2, the project consortium determined four umbrella topics within the living environment of pupils. Therefore, topics in the areas of *purchase of a tablet/PC*, *leisure time/clothes*, and *future perspectives/career* were searched for and classified to relevant competences of the model as well as subjects and grades of the curriculum. The following table should give an impression of what is planned in this research field (extract):

General Competence	Partial Competence	Contents referring to: Purchase of a Tablet	Subject and Grade
<p><i>Pupils are able to think in categories of economic behavior:</i></p> <p><i>How do people take economic decisions?</i></p>	<ul style="list-style-type: none"> – differ between various needs and goods. – explain that shortage is the reason for friction between unbounded needs and resources and therefore people have to act in an economic way. – show that the variety of competing (own and external) needs leads to conflicts in decision and allocation. – show that economic player make decisions about alternatives, on basis of economic plans. – explain that economic decisions have to be made under uncertain conditions and therefore are risky, as relevant information cannot be collected completely. – show that economic players take decisions, which provide the highest benefit, also considering own preferences and restrictions. 	<ul style="list-style-type: none"> – Saving or asking parents to buy immediately? – The money I have saved so far is not enough for buying a tablet. – I can save and buy a tablet with my money or can use the money for buying clothes. – If I spend all my money on a tablet, I have no money left for some weeks to go out and must start saving from zero. – Borrowing money from parents may lead into helping more in the household than for normal or getting no pocket money for some time. – Borrowing money from parents means the tablet can be bought immediately and used for e.g. school tasks or private affairs. 	<p>Specific contents:</p> <p>Use of money History of money Barter trading Borrowing money Money flow How is a bank working? Contractual aspects Planning of expenditures</p> <p>Subject/Grade: History: 2, 5, 6 Geography and Economics: 3, 4, 8 Mathematics: 1-4 Language: 5-8 Psychology: 7 Philosophy: 8 Informatics: 5</p>

Table 1: Results of Needs Analysis in Yellow Columns (Extract)

and the identification of relevant contents as well as referring subjects and grades by the academic



project partners. The identification based on an intensive curricula investigation and further discussion with participating teachers to agree upon the results found. It is very important that the teachers agree with the new contents, which are the basis for searching for teaching materials, as they are going to deliver those contents to pupils within financial education instruction and work with the given materials.

5. Further Tasks & Conclusion

As the “Needs and Gap Analysis” was completed in March 2013, further steps focus on the definition of minimum contents (see Table 1, columns 3 and 4) for financial education instruction in order to ensure the development of financial competences among pupils of general secondary schools. Furthermore, the academic project partners will seek for open-source teaching materials to be delivered to the participating teachers. Those materials have to fit to the prior defined minimum contents and should also include information materials for teachers that are used within the teacher’s workshops, starting before financial education is instructed to pupils.

Putting everything into consideration, the results of the “Needs and Gap Analysis” show a lack of financial literacy within the partner countries. This follows from the fact that financial education has not been identified as part of general secondary education so far. The consciousness concerning this problem has to be made obvious among decision makers as well as pedagogics. It is important to prepare pupils for the challenges of the financial market and to enhance teachers by implementing workshops on how to deliver financial education to pupils within the already existing curriculum. Furthermore, teachers have to be kept up-to-date about current financial problems. Although the curriculum of general secondary schools does not obviously include financial education, there are subjects given in the curriculum that allow dealing with financial topics in the fields of *use of money*, *handling of life risks*, *asset and retirement arrangements* and *use of loans*. This is the connection factor this project’s consortium is using in order to increase financial competences among pupils and therefore, supports teachers of general secondary schools within the implementation process.

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