



A Comparative Study of Financial Literacy Curriculum in General Formal Education of Australia, South Africa and USA: Recommendations for Iranian Curriculum Planners

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ARTICLE INFO	ABSTRACT
<p>Received: 15 March 2021 Revised: 19 June 2021 Accepted: 03 July 2021 Online: 01 December 2022</p>	<p>The current research was conducted with the aim of comparative study of financial literacy curriculum in general formal education of Australia, South Africa and USA. The unit of observation and analysis is macro (countries) and the selection strategy was "similar social systems; similar educational outputs". The data was collected in the form of documents from databases related to financial literacy (2000-2021) and George Bereday's model was used for analysis of data. The validity of research was ensured through triangulation of data. The findings reveal similarities among selected countries in the goals and development of financial literacy standards of financial literacy. Employing the integration approach in formulating content and evaluation methods based on activity-oriented and inclusive-oriented is emphasized. The official curriculum is considered as the equivalent of educational programs. Australia's explicit emphasis on the value dimension of financial literacy goals and parents' participation and providing financial literacy as a curriculum unit and using the standardized approach in USA are among the distinguishing features of the selected countries. In the field of evaluation, the non-participation of South Africa in the PISA tests and the development of local and international standards in the United States are other differences between the selected countries. Therefore, preparing, compiling and approving the objectives of the financial literacy curriculum in cognitive, attitudinal, skill and value dimensions, as well as preparations of integrated approach in the financial literacy curriculum are suggested to Iranian curriculum planners.</p>
<p>KEYWORDS</p> <p>Curriculum Cognitive Dimension Financial Literacy General Education Parent Participation</p>	

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1. Introduction

In the past, literacy was limited to the ability to read and write, but nowadays, in order to respond to the diverse needs of humans and growth and development in all aspects of life; many types of literacy have emerged. Financial literacy is a set of financial knowledge, tendencies, values, skills and behaviors that people can make effective financial decisions and allocates financial resources to manage in an optimal way and speed up the economic prosperity of the society. Financial literacy is often considered as a "life skill" or "intuitive remedy" to help people overcome financial problems (Harnisch, 2010; Fernandes, Lynch & Netemeyer, 2014; Willis, 2011; Stolper & Walter, 2017). The importance of financial literacy and citizens' awareness of it was noticed for the first time in 1990 in the USA. Before that, financial literacy was considered informally in noble French and English families; although in the middle of the 18th century, the scope of attention to it expanded through some books (Gide, & Rist, 1948). Today, financial literacy is of particular importance as a factor in achieving success and competition in the global society and is considered one of the urgent needs of the current society (OECD, INFE, 2012; PISA, 2012). In recent decades, due to the importance of teaching financial literacy to teenagers, the PISA test - in the first large-scale international assessment in 2012 - started to determine the level of financial literacy of age group of 15 years in many countries (PISA, 2012). In order to support training of financial literacy, its low level among teenagers was documented by several assessments such as Jumpstart (JUMPSTART, 2007). In Iran, findings of Salimipour Nodoushan (2013) indicated the inadequacy of financial literacy of students and ineffectiveness of Iran's secondary school textbooks in achieving the goals of economic education. Therefore, it is considered necessary to develop a financial literacy curriculum for Iran's secondary schools. Also, concerns about the financial well-being of teenagers and their preparation for making financial decisions in adulthood have led to an increase in interest in financial education (Johnson, & Sherraden, 2007). Since teenagers are one of the most vulnerable sections of the society; financial literacy is the key to helping them overcome economic problems. Financial literacy not only empowers them to face the challenges of life, but also leads to the creation of suitable conditions for a successful and qualitative life.

In this regard, since education leads to an increase in financial literacy and access to financial resources, it is considered a key element (Kokkizil, Karakurum-Ozdemir, & Uysal, 2017). Based on this, many countries have introduced personal financial education through school curricula - as part of a national strategy - to improve financial capabilities (Percy, & Tomlinson, 2011). Also, most of the developed countries - such as Britain, USA, Canada - have developed programs that are planned

to improve financial literacy for the long term include different levels of schools and government institutions (Sant'Ana, De Paiva, & Goulart, 2016). Therefore, the goal of financial literacy programs is to equip people with knowledge and skills in order to shape decisions and control financial conditions and economic prosperity (Lusardi, & Mitchell, 2008; Kefela, 2011). In this regard, in recent decades, financial education of consumers has attracted the attention of financial policymakers, brokers and researchers (Xiao & Porto, 2016) ; many prominent political officials (Xu, & Zia, 2012) and has become a basic and favorite subject of central banks and stock market regulators in developing and developed countries (Kokkizil, Karakurum-Ozdemir, & Uysal, 2017).

Due to the importance of financial literacy training to the young generation, during the last two decades, researchers' attention has been drawn to the study of its dimensions. Oh & Li (2020), conducted a comparative study of Chinese and USA financial literacy curriculum. They found that the similarities of curriculum of two countries are more than the differences. For example, financial literacy is offered as an elective course in both countries. Katenova, & Hoon Lee (2020) investigated financial literacy in Kazakhstan and found that this literacy had an impact on people's financial attitudes and behavior. Nuraini, Sabri & Afida (2019) determined that there is a positive relationship between financial literacy, debt management, and attitude toward money in young workers. Javaherpour (2017), with a comparative study of the financial literacy curriculum in the Canadian states of Quebec and Ontario, showed that in Quebec, financial literacy training is combined with social science education and in Ontario with social and humanities, mathematics and art education. Dube & Asthana (2017) by comparing the financial literacy of students in the state of Uttar Pradesh with the central states of India found that the level of financial literacy in India is low and serious policies should be adopted in this field. Sawatzki and Sullivan (2017) emphasized the need to train them in the field of financial literacy by studying the inference of Australian teachers about financial literacy. Kokkizil, Karakurum-Ozdemir, & Uysal (2017) comparing financial literacy in Mexico, Lebanon, Uruguay, Colombia, and Turkey, found that the level of financial literacy is low among women, youth, and people who cannot read and write in the formal language. Nicolini, Cude, & Chatterjee (2016), conducted a comparative study of financial literacy in USA, Canada, Italy and England. Their findings indicated cultural differences in financial literacy.

The recent economic crisis in Iran has also revealed the increasing attention to the importance of financial literacy and teaching it to the young generation. The findings of some

studies prove the unfavorable situation of financial literacy among Iranian students. An international assessment shows that the level of financial literacy in Iran is low and is around 20% (2014, OECD), while financial literacy for the youth of Iran - who constitute a significant part of the population - is very important. In Iran, researches have been conducted in the field of financial literacy. Seidi and Ahmadi (2018) found out that the goals of economic education in the primary schools are to familiarize with basic concepts and moral values and in the secondary schools to develop skills. Kandahari, Mehrmohammadi, Talai & Faraji (2017) through comparative study of the curriculum of economic education in the primary schools of Australia, China, and Scotland presented implications for economic education in Iran. The findings indicated that the selected countries share the goals of economic education in the field of knowledge and skills. Roshandel, Amiri & Taghiani (2017), by investigating the factors affecting financial literacy among first year high school students, found that there is a significant difference between the financial literacy of male and female students. The findings of Yeganeh & Zarei (2017) showed that there is no significant relationship between financial attitude and financial literacy with financial participation. MusaZadeh and Sanati (2016) explained the components of economic education based on Islamic teachings. The findings indicate the extraction of 48 components under the three general concepts of production, distribution and consumption. An important point that should be mentioned is that despite the importance of financial literacy, it can be said that there is no explicit statement about the training of this literacy in the upstream documents related to educational system of Islamic Republic of Iran. Therefore, in order to learn about global experiences and provide suggestions for developing a financial literacy curriculum in Iran, the present researchers decided to conduct a comparative study of the financial literacy curriculum in the general formal education of Australia, South Africa, and USA. According to this goal, the sub-goals of the research are:

- Identifying the similarities of selected countries in terms of the financial literacy program
- Identifying the differences of selected countries in terms of the financial literacy program

2. Research Method

The research method was qualitative comparative, the research population includes all countries of the world and the sampling method was purposeful. The unit of observation and analysis were at macro level (countries) and the selection strategy was "similar social systems; similar educational outputs" for choosing Australia, South Africa and USA. The method of data collection was documentary by searching primary and secondary sources through keywords of

financial literacy, economic literacy and economic education in databases such as Organization for Economic Co-operation and Development (OECD), International Network of Financial Education, and Ministry of Education websites of the mentioned countries. The validity of the data was obtained through checking by colleagues of the principal researcher. In order to analyze the data, John Stuart Mill's agreement and difference method and Bereday approach were used respectively.

3. Findings

According to Bereday's four-step approach (1964), in the first step, the social systems of the selected countries were described. Then, in the interpretation and juxtaposition stage, the data were analyzed from perspective of components of the financial literacy curriculum. During the comparison stage, the similarities and differences of the mentioned components were taken into consideration.

A. Description Stage

1) Australia

Australia has a capitalist economic system and a free market with minimal restrictions on the import of goods and services. This country plays an active role in the World Trade Organization, Asia-Pacific Economic Cooperation (APEC), Group of Twenty (G20) and other trade associations. This country is an exporter of a significant part of natural resources, energy and food, and the abundant and diverse natural resources of Australia attract a large part of foreign investment. These resources include vast reserves of coal, iron, copper, gold, natural gas, uranium and renewable energy resources. With exports increasing rapidly over imports, the country experienced sustained economic growth, low unemployment, low inflation, very low public debt, and a strong and stable financial system. Australia's real GDP growth rate in 2017, 2018 and 2019 was announced as 2.45%, 1.84%, and 2.77% respectively. Inflation rate in 2019 was 1.6% and unemployment rate was estimated around 5.16%. Gini index coefficient - family income distribution was announced in 1994 and 2014 equal to 35.2 and 34.4 (CIA, 2021a).

2) South Africa

South Africa has an emerging middle-income economic market through an abundant supply of natural resources, and because of this, the financial, legal, communications, energy, and transportation sectors are well developed. However, the economic growth of this country has decreased in recent years and unemployment, poverty and inequality still remain as a national

challenge. South Africa's economic policy is focused on controlling inflation, and at the same time, structural limitations such as lack of skills, reduced global competition, and frequent work stoppages due to strikes have slowed down economic growth. The real GDP growth rate in 2019 was 0.06%, the real GDP per capita was \$12,631, the inflation rate was 4.1% and the unemployment rate in 2018 was 27.09% (CIA, 2021b).

3) USA

USA is the most technologically powerful economy in the world with a GDP per capita of \$59,500. American companies are leaders in technology, computers, pharmaceuticals, and medicine, aerospace and military equipment. In 2014, the US economy fell to second place behind China as the world's largest economic power for more than a century. The US real GDP growth rate in 2019 was 2.16. Also, the real GDP in 2019 was equal to \$20,524,945,000,000, the real GDP per capita was equal to \$62,530, the inflation rate was equal to 1.8 and the unemployment rate in 2018 was equal to 3.89% (CIA, 2021c).

B. Interpretation Stage

This step includes assessment and interpretation of the findings related to each components of financial literacy curriculum in the selected countries.

1. Australia

- Goals

The goals include the ability to apply knowledge, skills and values in the fields of finance and consumption (ASIC, 2011).

- Content

Financial literacy is integrated as an interdisciplinary subject in the curriculum. Financial literacy is combined with subjects such as mathematics, science, history, English language, humanities & social sciences, information & communication technology, health & physical education, science & sustainable environmental development, and civil & citizenship education (Appria et al., 2016; AAMT, 2012; OECD, 2019; Australian Securities & Investments Commission-ASIC, 2011, 2012abc).

- Teaching Methods

Teaching financial literacy takes place to students through games and real experiences of everyday life; teamwork & partnership; use of information technology, creation of smart money

schools - in which the school's financial and consumer literacy initiatives are shared on the smart money website. Also, the "Smart Money Program" and the "Together with the Saver" plan are held for parents and their participation in the process of teaching students' financial literacy (OECD, 2013; ASIC, 2011; 2019; Clitheroe, & Medcraft, 2015; Attard, 2016).

- Evaluation Methods

Formal and informal assessment takes place in a formative and final form (ASIC, 2019) and students have participated in consecutive PISA financial literacy examinations in 2012, 2015 and 2018. The results of participating in the PISA in all three periods were higher than the average level of OECD member countries (OECD, 2020).

- Standards

The standards include the National Curriculum Framework and National Financial Literacy Strategies (Aprea et al., 2016; Australian Association of Mathematics Teachers, 2012; OECD, 2019; ASIC, 2011, 2012abc).

- Educational Programs & Channels

The programs include compulsory education in the school curriculum, smart competitions, and provision of visual educational tools based on games and translation of online books - for consumers whose mother tongue is not English (Attard, 2016; OECD, 2013; 2019).

2. South Africa

-Goals

The goals include improving and promoting financial knowledge and skills, behavior change, preparing people from an economic point of view, increasing awareness of financial issues and consumer rights & responsibilities, optimal money management & savings strategies; strengthening & encouraging savings and access to financial services (Atkinson & Massey, 2013 ; Messy & Monticone, 2012).

- Content

Financial and economic literacy has been compulsorily combined with mathematical literacy and economic and management sciences in all grades (OECD, 2012; 2019; Messy & Monticone, 2012).

- Teaching Methods

Teaching methods include providing practical lessons in schools; use of educational media; right to choose a textbook by the teacher and learner and daily experience of life and play (Apria et al., 2016; Messy & Monticone, 2012).

- Evaluation Methods

Combining financial literacy with other subjects is the basis for its informal assessment (OECD, 2019). The students of this country have not yet participated in the financial literacy examination of PISA.

-Standards

The standards have a national financial literacy framework and a national curriculum (OECD, 2012, 2019; Messy & Monticone, 2012).

- Educational Programs & Channels

Educational programs including the curriculum approved by schools; entertainment training; educational workshops & seminars; use of printed materials; manuals; short-term plans of banks and financial sectors; multimedia resources; Radio & Television programs, Newspaper content and consulting services (Atkinson & Messy, 2013; Messy & Monticone, 2012).

3. USA

-Goals

The goals include improving the level of knowledge; acquiring skills in economic and financial affairs & decision-making and financial choices (Aparia et al., 2016).

- Content

Mandatory provision of financial courses in the school curriculum in some states is done through integration with subjects such as economics, social sciences, mathematics, family consumption sciences, technical-vocational education and history (Apria et al., 2016; OECD, 2019).

- Teaching Methods

Teaching methods include providing financial literacy curriculum in primary and secondary courses; "Personal finance" course in secondary school; emphasis on the practical learning of the financial literacy curriculum - as a complementary skill curriculum -; financial literacy conceptual programs; advantage of Podmani's approach in teaching through determining functional goals & activities; connection of the content with pervasive ecosystem; teaching broad concepts of financial literacy, lecture, question & answer, and collaborative research and learning (Aparia et al., 2016).

- Evaluation methods

Measuring financial literacy in different states of USA is done formally and informally (OECD, 2019). Also, students have participated in PISA's financial literacy tests in 2012, 2015 and 2018. The results of participating in the PISA tests in all three periods were at the same level as the average scores of OECD member countries (OECD, 2020).

-Standards

For the first time, financial literacy standards were developed at three international, national and state levels in USA. While national standards are more informational, state standards are more practical, and books and printed educational resources are in line with national standards (Apria et al., 2016; OECD, 2019).

- Educational Programs & Channels

Programs including training in schools; governmental and non-profit institutions; radio-television programs, newspapers; websites; parent training courses; printed materials; interactive educational materials and trainings under the supervision of the Central Bank (OECD, 2019).

C. Juxtaposition Stage

During the juxtaposition stage, the components of each country's financial literacy curriculum are examined and classified.

Table 1- Juxtaposition of financial literacy's goals

Country	Goals			
Australia	cognitive	attitudinal	Skill oriented	Value oriented
South Africa	cognitive	attitudinal	Skill oriented	-
USA	cognitive	attitudinal	Skill oriented	-

Table 2- Juxtaposition of subject fields and methods of content organization

Country	Field of Subjects	Content organization methods
Australia	Mathematics, Science, History, English language, Humanities & Social Sciences, Information & Communication Technology, Health & Physical Education, Environmental Science & Sustainable Development, Civil & citizenship education	Interdisciplinary
South Africa	Mathematics, Economic & Management Sciences	Interdisciplinary
USA	Economy, Social Sciences, Mathematics, Family consumption sciences, Technical-professional education, History	Interdisciplinary & Multidisciplinary

Table 3- Juxtaposition of teaching methods

Country	teaching methods
Australia	<ul style="list-style-type: none"> • Teaching practical lessons through gaining real life experiences, • Education through games, group work, collaborative activities, information technology, online and digital tools, • Creating smart money schools and involving parents
South Africa	<ul style="list-style-type: none"> • Providing practical courses • Educational media • Learning through experience and game
USA	<ul style="list-style-type: none"> • Emphasis on practical learning • Using the Podmani approach • Relating the content to the environmental context • Teaching through lectures, questions & answers, research and collaborative learning

Table 4- Juxtaposition of evaluation results

Country	Results of evaluation
Australia	<ul style="list-style-type: none"> ☑ Formal and informal evaluation in formative and final form ☑ Participation in financial literacy examination in PISA
South Africa	<ul style="list-style-type: none"> ☑ Informal assessment through topics that incorporate financial literacy ☑ Non-participation in financial literacy tests of PISA
USA	<ul style="list-style-type: none"> ☑ Formal and informal evaluation in different states ☑ Participation in financial literacy tests in PISA

Table 5- Juxtaposition of financial literacy standards

Country	Financial Literacy Standards
Australia	National financial literacy strategies
South Africa	National Financial Literacy Framework
USA	International, national and state financial literacy standards

Table 6- Juxtaposition of educational programs and channels

Country	financial literacy standards
Australia	<ul style="list-style-type: none"> ☒ Compulsory education in schools ☒ Visual and game-based educational tools ☒ Translation of online books for non-English speaking users
South Africa	<ul style="list-style-type: none"> ☒ School curriculum ☒ Entertainment education ☒ Educational workshops and seminars ☒ Printed materials and manuals ☒ Short-term plans of banks and financial departments ☒ Multimedia resources, DVDs, CDs, radio/television programs, newspapers and websites. ☒ Consulting services and providing programs for migrant workers
USA	<ul style="list-style-type: none"> ☒ Education in schools ☒ Government and non-profit institutions ☒ Radio/TV programs, newspapers and websites ☒ Parent education ☒ Printed materials ☒ Interactive educational materials ☒ Training under the supervision of the Central Bank

D. Comparison Stage

At this stage, the differences and similarities of financial literacy curriculum components of the selected countries are compared.

Table 7- Comparing the similarities and differences of the financial literacy curriculum components of selected countries

Components	Sub-components	Australia	South Africa	USA
Goals	Cognitive	*	*	*
	Attitudinal	*	*	*
	Skill oriented	*	*	*
	Value oriented	*	-	-
Content	Separate subject areas	-	-	*
	Integration with other subject areas	*	*	*
Teaching Methods	Learner-centered	*	*	*
	activity oriented	*	*	*
Evaluation Methods	Separate evaluation	*	-	*
	integrated evaluation	*	*	*
	Participation in international financial literacy tests (PISA)	*	-	*
Financial Literacy Standards	international	-	-	*
	National	*	*	*
	state	-	-	*
Educational Programs & Channels	Official curriculum	*	*	*
	Facilities and capacities of informal education	*	*	*

According to the data in Table 7, at this stage, the components of the financial literacy curriculum are compared precisely:

a) Goals

- Similarities: All the studied countries have addressed the goals in cognitive, attitudinal and skill dimensions.
- Differences: Only in Australia the dimension of values has been explicitly addressed in formulating goals.

b) Subject areas and methods of content organization

- Similarities: The mathematics curriculum is the common denominator of the subject areas in the selected countries. In the field of content organization, all countries agree on using a unified approach in content compilation.
- Differences: Different subject areas have been emphasized in the integration of content of each country. Also, in some states in USA, financial literacy is taught as a separate unit.

c) Teaching methods

- Similarities: In all countries, emphasis has been placed on learner-oriented and activity-oriented curricula.
- Differences: Parents' participation in education in Australia and use of the Pudamani approach in teaching the content of financial literacy in USA are the differences between the mentioned countries.

d) Evaluation methods

- Similarities: informal evaluation of financial literacy through integrated topics is common to all selected countries.
- Differences: USA and Australia have participated in consecutive PISA international financial literacy examinations in 2012, 2015 and 2018. In all three tests, the average scores of the USA were at average level of OECD member countries and Australia were higher than the OECD average. This is despite the fact that South Africa has not yet participated in the PISA examination.

e) Financial literacy standards

- Similarities: All selected countries have developed standards for their financial literacy.
- Differences: USA is different from other two countries in terms of formulating financial standards at both local and international levels

f) Educational programs & channels

- Similarities: The existence of an formal curriculum is the common feature of all three countries in the field of educational programs and channels.
- Differences: There are differences between countries in terms of the number of numerous and diverse programs and channels for teaching financial literacy.

The most important similarities of the selected countries are taking advantage of integration approach in compiling the content, using activity-oriented and learner-oriented approaches in providing a formal curriculum for teaching financial literacy. The most important differences among these countries are developing financial literacy standards in local and international dimensions and presenting the financial literacy as a separate curriculum unit in some states of USA and more attention to the value dimension of financial literacy goals in Australia. In general, the degree of similarity of financial literacy curriculum components in the selected countries is more than their differences.

4. Conclusion

Considering that Iran is one of the economically developing countries, it is necessary to pay more attention to the discussion of economic development and its various dimensions. Therefore, according to the need of the young society of Iran for financial literacy and its education, the present research was conducted in order to compare and take advantage of the experiences of selected countries in this field and provide some recommendations for Iranian curriculum planners. The findings of research about goals of financial literacy show similarity of selected countries in goals such as understanding concepts, creating and improving attitudes, and having constructive experiences and skills. It can be noted that despite the attention of most countries on cognitive, attitudinal and skill dimensions; Australia has also mentioned its value dimension. These findings are consistent with the research results of Kandahari et al. (2017) and inconsistent with the findings of Dube, & Asthana (2017). The findings about organizing the content of financial literacy show commonality of selected countries in using the integrated approach. Among various school subjects, the only subject that is common to all countries in the field of integration with financial literacy is mathematics. The findings of the research about learning opportunities indicate that all selected countries emphasize the importance of using activity-oriented and learner-oriented methods in training of financial literacy.

The findings showed that in selected countries, the evaluation of financial literacy is done informally and combined with other school subjects, although in some states of USA, it is done through personal and formal financial curriculum units separately. These findings are in line with the research results of Nicolini et al. (2013) and Javaherpour (2017). The results of the research in the field of financial literacy standards indicated that these standards have been compiled in the national dimension in all countries. Also in USA, attention has been paid to local and international dimensions. In the field of educational programs and channels the similarity of selected countries is the prioritization of financial literacy education through the formal curriculum of schools. Also, the facilities and capacities of all institutions and organizations are used to complete the learning of the financial literacy curriculum. This finding supports the research results of Oh & Lee (2020). These two researchers found that in addition to teaching financial literacy through the school curriculum, other informal programs should also be used. According to the findings of the research, the following items are suggested to Iranian curriculum planners for the development of financial literacy education:

- Preparing, compiling and approving the goals of financial literacy curriculum in cognitive, attitudinal, skill and value dimensions,
- Preparations of using integrated approach in the financial literacy curriculum,
- Designing the content and topics related to financial literacy by using positional-based and local approaches that suit the specific needs of Iranian students,
- Providing activity-oriented and learner-oriented teaching methods and learning opportunities in the field of financial literacy,
- Providing opportunities for Iranian students to participate in international financial literacy tests,
- Preparing and compiling financial literacy standards according to local, national and regional requirements,
- Using the facilities and capacities of institutions and organizations for training of financial literacy curriculum,
- Using web-based information and communication technology in the field of financial literacy,
- Holding financial literacy courses for teachers and preparing teacher's manuals.

References

- AAMT, (2012). *Position paper on consumer and financial literacy in schools*, The Australian Association of Mathematics Teachers Inc. available at: https://aamt.edu.au/wp-content/uploads/2020/07/aamt_fin_lit_2012.pdf.
- Apra, C., Wuttke, E., Breuer, K., Keng Koh, N., Davies, P., Greimel-Fuhrmann, B., & Lopus, J.S. (2016). Chapter 1 Financial Literacy in the Twenty-First Century: An Introduction to the International Handbook of Financial Literacy, *International Handbook of Financial Literacy*. Available at: <https://link.springer.com/book/10.1007/978-981-10-0360-8>.
- ASIC, (2011). *National financial literacy strategy*, Sydney: Australian Securities and Investments Commission. Available at: <https://download.asic.gov.au/media/1343576/rep229-national-financial-literacy-strategy.pdf>.
- ASIC, (2012a). *Money Smart teaching: Primary introduction*, Teacher guide trial 2012-2013. Sydney: Australian Securities and Investments Commission, Available at: <https://www.bing.com/search?q=money+smart+teaching%3A+primary+introduction.+&form=ANNTH1&ref=fe538029c09c4daf>.
- ASIC, (2012b). *Money Smart teaching: Secondary introduction*, Teacher guide trial 2012-2013. Sydney: Australian Securities and Investments Commission. Available at: <https://www.bing.com/search?q=money+smart+teaching%3A+primary+introduction.+&form=ANNTH1&ref=fe538029c09c4daf>.
- ASIC, (2012c). *Money Smart teaching: Links to Australian curriculum*. Available at: <http://teaching.moneysmart.gov.au/professionallearning/teaching-consumer-and-financial-literacy/section-3/links-to-australiancurriculum>.

- ASIC, (2019). *Money Smart Teaching. Implementation Guide Supporting guide for teachers and school leaders to implement the Money Smart Teaching program.* available at: [Websites: asic.gov.au, moneysmart.gov.au](http://www.asic.gov.au/moneysmart.gov.au). Version 2 January 2019.
- Atkinson, A., & Messy, F. (2013). *Promoting Financial Inclusion through Financial Education: OECD/INFE Evidence, Policies and Practice*, OECD Working Papers on Finance, Insurance and Private Pensions No. 34, OECD Publishing, Available at: <http://dx.doi.org/10.1787/5k3xz6m88smp-en>.
- Attard, C. (2016). *Mathematics + Money = Engagement: Financial Literacy as a Tool to Increase Opportunity and Engagement with Mathematics for Students from Low Socio-Economic Areas.* Available at: <http://dx.doi.org/10.4225/35/576376814FB8F>.
- CIA (2021a). *Australia - Central Intelligence Agency.* Available at: <https://www.cia.gov/the-world-factbook/countries/australia>.
- CIA (2021b). *South Africa - The World Factbook*, Available at: <https://www.cia.gov/the-world-factbook/countries/south-africa>.
- CIA (2021c). *United States - The World Factbook.* Available at: <https://www.cia.gov/the-world-factbook/countries/united-states>.
- Clitheroe, P., & Medcraft, G. (2015). *Money Smart teaching; Teacher guide for teachers of primary and secondary students, Money Smart*, Available at: https://www.moneysmart.gov.au/media/528357/mst_teacher_guide.pdf.
- Dube, V.S., & Asthana, P.K. (2017). *A Comparative Study on Financial Literacy of Uttar Pradesh with Central Zone States in India*, *IOSR Journal of Business and Management*, 19(10), 22-27.
- Fernandes, D., Lynch, J.J., & Netemeyer, R.G. (2014). *Financial literacy, financial education, and downstream financial behaviors*, *Management Sciences*, 60(8), 1861-1883
- Gide, C., & Rist, C. (1948). *A history of economic doctrines from the time of the physiocrats to the present day*, Available at: <https://archive.org/details/historyofeconomi00gideiala>.
- Ghndehari, A., Mehrmohammadi, M., Talei, E., & Faraji Dizaji, S. (2018). *Comparative Study of Integration of Economic Education in Elementary School Curriculum in Countries Scotland, China and Australia and providing implications for economic education in Iran.* *Education*, 139, 59- 77.
- Harnisch, T.L. (2010). *Boosting Financial Literacy in America: A Role for State Colleges and Universities*, *Perspectives*, 1-24.
- Johnson, E., & Sherraden, M.S. (2007). *From financial literacy to financial capability among youth*, *Journal of Sociology and Social Welfare*, 34(3), 119-145

- Javaherpour, A. (2017). *A Comparative Study of Quebec & Ontario's Curricula in Financial Literacy Education: Presence, Components & Aims*. Department of Integrated Studies in Education, McGill University, M.A. Thesis, Montreal: McGill University
- Katenova, M., & Hoon Lee, S. (2020). A comparative study of financial literacy, retirement planning and delinquency in payment: The Kazakhstan case. *Eastern Journal of European Studies*, 11(1), 273-292
- Kefela, G. (2011). Implications of financial literacy in developing countries, *African Journal of Business Management*, 5(9), 3699-3705
- Kokkizil, M., Karakurum-Ozdemir, K., & Uysal, G. (2017). Financial literacy in developing countries, *Topics in Middle Eastern and African Economies Proceedings of Middle East Economic Association*, 19(2), 325-353.
- Lusardi, A., & Mitchell, O.S. (2008). *Planning and Financial Literacy: How Do Women Fare?* Working Paper, 13750, 1-12. https://www.nber.org/system/files/working_papers/w13750/w13750.pdf.
- Messy, F., & Monticone, C. (2012). The Status of Financial Education in Africa, *OECD Working Papers on Finance, Insurance and Private Pensions*, 25, 1-93. <http://dx.doi.org/10.1787/5k94cqqx90wl-en>.
- Mousazadeh, Z., & Sanati, F. (2017). Explaining the components of economic education based on Islamic teachings. *Quarterly Journal of Islamic Education*, 12(24), 73-97.
- Nicolini, G., Cude, B., & Chatterjee, S. (2013). Financial literacy: a comparative study across four countries. *International Journal of Consumer Studies*, 1-17. <https://core.ac.uk/download/pdf/53855683.pdf>.
- Nuraini, A., Sabri, M.F., & Afida, M.M.A. (2019). Relationship between Attitude towards Money, Financial Literacy and Debt Management with Young Worker's Financial Well-being, *Social Sciences and Humanities Journal homepage*, 27(1), 361-378. <http://www.pertanika.upm.edu.my/>. Pertanika J. Soc. Sci. and Hum
- OECD INFE (2012). *Financial Education in Schools*, Available at: https://www.oecd.org/daf/fin/financial-education/FinEdSchool_web.pdf.
- OECD (2014). *PISA 2012 Results: Students and Money: Financial Literacy Skills for the 21st Century*. Available at: <http://dx.doi.org/10.1787/9789264208094-en>OECD.
- OECD (2014). *PISA 2012 results: students and money (Volume VI): financial literacy skills for the twenty-first century*. Available at: <https://www.oecd.org/pisa/keyfindings/PISA-2012-results-volume-vi.pdf>.

- OECD, (2019). *Policy Handbook on Financial Education for Young People in the Commonwealth of Independent States*, available at: www.oecd.org/daf/fin/financial-education/financial-education.htm.
- OECD, (2020). PISA 2018 Results (Volume IV): Are Students Smart about Money? PISA, OECD Publishing, Paris. Available at: <https://doi.org/10.1787/48ebd1ba-en>.
- Oh, Y., & Li, J. (2020). *Financial Literacy and Curriculum: A Comparative Study of the United States and China*, Available at: https://cies2020.org/wp-content/uploads/CIES2020Poster_FinancialLiteracyCurriculum.pdf
- Percy, A., & Tomlinson, J. (2011). *APPG Report: Financial Education and the Curriculum*, 1-52. https://mei.org.uk/files/pdf/Financial_Education_Final_report.pdf.
- PISA (2012a). What 15-years-olds know and what they can do with what they know. *OECD 2014*, 5, 1-35.
- PISA (2012b). *Assessment and Analytical Framework: Mathematics, Reading, Science, Problem Solving and Financial Literacy*. Available at: <https://eric.ed.gov/?id=ED541294>.
- Roshandel, A., Amiri, H., & Toghyani, M. (2018). Financial literacy and the necessity of measuring it in the new educational system, a case study in Shahreza, *Journal of New Educational Approaches*, 13(1), 86-67, [in Persian]
- Salimipour Nodoushan, M. (2013). *Financial literacy of high school students*, M.A. Thesis, Islamic Azad University of Yazd, [in Persian]
- Sant'Ana, V., De Paiva, R.C., & Goulart, I.B. (2016). Financial Education in Brazil: An Introduction to the Study of Subject. *International Journal of Economics, Commerce and Management*, 4(7), 395-419, available at: <https://ijecm.co.uk/wp-content/uploads/2016/07/4725.pdf>
- Sawatzki, C.M., & Sullivan P.A. (2017). Teachers' Perceptions of Financial Literacy and the Implications for Professional Learning, *Australian Journal of Teacher Education*, 42(5), 50-65.
- Seyedi, B., & Ahmadi, P. (2019). Explaining the elements of economic education curriculum in general education course, *Iranian Journal of Curriculum Studies*, 14(55), 5-44, [in Persian]
- Stolper, O.A., & Walter, A. (2017). Financial literacy, financial advice, and financial behavior, *Journal of Business Economics*, 87, 581-643, available at: <https://link.springer.com/content/pdf/10.1007%2Fs11573-017-0853-9.pdf>.
- Willis, L.E. (2011). The financial education fallacy, *American Economic Review*, 101(3), 429-434

- Xiao, J.J. & Porto, N. (2016). Financial Education and Financial Satisfaction: Financial Literacy, Behavior, and Capability as Mediators. *International Journal of Bank Marketing*, 35(5), 805-817. <https://doi.org/10.1108/IJBM-01-2016-0009>.
- Xu, L., & Zia, B. (2012). *Financial Literacy around the World: An Overview of the Evidence with Practical Suggestions for the Way Forward*, Report No. WPS610), available <https://documents1.worldbank.org/curated/en/264001468340889422/pdf/WPS6107.pdf>
- Yeganeh, Z., & Zarei, S. (2018). The relationship between financial attitude, financial literacy and financial participation with the mediation of financial self-efficacy in the accounting and auditing profession, *Quarterly Journal of Research Studies in Accounting and Economic Sciences*, 2(5), 65-75.