

# Al-Mahdi Research Journal (MRJ)

ISSN (Online): 2789-4150 ISSN (Print): 2789-4142

## Vol 5 Issue 4 (April-June 2024)

# Documenting Teachers' Stance Regarding Financial Literacy of Hearing-Impaired Students: A Qualitative Investigation

### Muhammad Ajmal Khan

PhD Scholar at Institute of Special Education, University of the Punjab, Lahore, ajmalkhan.ise.pk@gmail.com

#### Dr. Hina Fazil

Assistant Professor at Institute of Special Education, University of the Punjab, Lahore, hinafazil.dse@pu.edu.pk

## Nagina Khan

MPhil Scholar (Special Education) at Institute of Southern Punjab, Multan, naginakhan.researcher@gmail.com

### Abstract:

Education of hearing-impaired students is essential for their empowerment and enlightenment. The study aimed at unfolding the stance of teachers of hearing-impaired students about financial literacy while determining the appropriate level financial literacy that should be taught to hearing impaired students and suggesting the strategies to inculcate financial literacy amongst hearing impaired students. The study is a qualitative probe based on content and thematic analysis. Special education teachers of hearing-impaired students enrolled in public sector special education centers across eleven divisions of Punjab constitute the population for the study at hand. As many as sixteen special education teachers, including Junior Special Education Teachers as well as Senior Special Education Teachers, teaching in sixteen special education centers in Sargodha division forms the sample for the study. Sargodha division (comprising four districts, each having four special education centers) was chosen through convenient sampling technique. Researchers collected data from the participants (N=16) through semi-structured interviews. The study revealed that special education teachers of hearing-impaired students consider financial literacy as financial education which tends to make hearing impaired students' financial actors, makes hearing impaired individuals financially independent and aims at financial inclusion thereof in long run. The study further revealed that financial literacy is the need of the hour for hearing impaired students at elementary level in special education centers across Punjab. The study suggested the curricular adaptations as well use of social and electronic media, apprenticeships, workshops, exhibitions and vocational training courses as viable options to ensure an inclusive and financially sustainable community of hearingimpaired individuals. Special education department's curriculum wing is suggested to integrate the concepts of financial literacy at elementary level curricula of hearingimpaired students to enable hearing impaired students to be financially literate, independent, empowered and included.

**Keywords**:

Financial literacy; Curricular Adaptations; students with hearing Impairment; Financial education; Financial Inclusion; Special Education

#### Introduction

Financial literacy has been defined by many researchers and academia in different ways. Financial literacy is the capability to read, analyze, manage and communicate about the personal financial conditions that have





one sort of or other type of impact on economic and wellbeing of the people. It entails the ability to come up with financial choices, manage and discuss money, delve into financial affairs without any discomfort. making plans for the future and respond to life and its events that have bearing on financial decisions, impacting the economy on the whole (Vitt et al., 2000). Remund (2010) defined financial literacy in his own way: "financial literacy is the skill to use the body of knowledge and other abilities in managing financial and economic resources effectively and efficiently for lifetime in the pursuit of financial well-being".

Remund considered financial literacy as a measure of degree to which one comprehends key financial concepts and processes. It is the ability and confidence to manage personal finances through appropriate, short-term decision making. long term financial planning, being mindful of life events and changing economic conditions (Remund ,2010). Financial literacy is considered to be the combination of awareness, cognizance, skills, attitudes and behaviors required to reach at sound financial decisions, finally achieving financial well-being and economic growth (OECD, 2012). Financial literacy is also perceived as knowledge and understanding of financial concepts, risks, skills, motivation and confidence to apply such knowledge and understanding in making decisions in financial contexts with the aim of achieving financial well-being in society and to ensure participation in economic life of the people at large (OECS,2014).

Financial literacy, as per the review of literature, entails fundamental concepts like earning income, budgeting , saving , banking , insuring . All these concepts must be taught to special students in such a way as to address their specific and diverse needs. These concepts, collectively amount to be termed as financial literacy, help special students like hearing impaired ones in setting personal financial goals, engage in financial decision making ,participate in problem solving and take actions that serve their interests on financial lines. These concepts are central and crucial to transition planning as special students prepare themselves for higher classes as was reported by Wehmeyer et al., 2012)

Financial Literacy enhances understanding of financial issues and matters. It acts as an enabler amongst the youth, empowering them to become financial decision makers of homes and outside, creating a generation of actors of economy. Without financial literacy, population of an economy cannot be made productive as it is the financial literacy which makes people producers of fiancés, actors of revenue generation and makes them instrumental for running the economic affairs at local, national and international levels. This financial literacy makes youth financially independent.

Financial independence and empowerment depend on being able to make financial decisions. The more one is financially knowledgeable and informed, the more one is able to contribute in the Gross Domestic and Gross National Product for the country one hails from. Youth, especially hearing-impaired ones, face myriad challenges in making financial decisions. Given the severe inflationary trends across the world, students with hearing impairments encounter a tough economic climate than ever.

Economic challenges faced by hearing impaired students, as per the recent reports from National Longitudinal Survey, include high levels of credit access, and debt, slower income growth and high economic inequalities (Hodson and Dwyer, 2014). Despite getting education till secondary level, majority of hearing-impaired students have been found unable to qualify financial literacy tests (Mandell, 2008; Lusardi and Mitchell, 2014).

There is a dire need to educate the youth on financial lines. Without promoting financial literacy through educational settings, nations can't produce bankers, entrepreneurs, corporate leaders, investors, business tycoons, financial decision makers, chartered accountants, business and operations managers, marketers, advertisers, economists, budget planners, insurers, risk takers, business ventures and sagacious individuals interested in savings. All the aforesaid fields and individuals can have and do have deaf individuals as employers, employees and as enterprise runners. Without educating them on financial lines from the elementary level in school, we can't dream to see them highly successful assets in public as well as private sectors tomorrow.





According to Potton Vision (2018), Financial literacy is taken as a life skill which ensures interplay between theoretical and practical knowledge to improve financial attitudes and behaviors of people at large. Research studies published by OECD, nonetheless, claim that not students of all shades and colors are provided with financial literacy and education in a due way.

Qualitative research, conducted in Malta, provided valuable insights into the current trends of young adults' consumption patterns vis-à-vis financial products and services and the teaching methodologies and strategies which are considered instrumental in teaching financial literacy to students. The results of the study indicated poor financial literacy among the youth in Malta. This was evidenced by over-reliance on credit facilities and reluctance to save the income for a rainy day. To study, in order to address the deficiencies, recommended that financial education and literacy ought to be included within compulsory secondary school curriculum to ensure the financial awareness, competencies, independence and empowerment of Malta 's citizenry.

It has been observed by special education teachers of Pakistan that all students in general and hearing-impaired students in particular lack financial knowledge which is a pre-requisite for making financial decisions. Hence, it is the dire need of the hour to integrate financial literacy starting from the elementary level in schools. Similar attempts have been made by University of Central Florida which has designed a comprehensive financial literacy program model for its students.

The study aimed at unfolding the stance of teachers of hearing-impaired students about financial literacy, knowing either existing curriculum for hearing impaired students contain elements of financial literacy, determining the appropriate level financial literacy should be taught to hearing impaired students and suggesting the strategies to inculcate financial literacy amongst hearing impaired students.

#### Literature Review

Students with hearing impairments are facing numerous challenges including absence of sign language teachers, discrimination, prejudice, exclusion, lack of educational materials, lack of resource centers, shortage of specialized teaching resources and assistive devices, lack of parental involvement in making their children financially literate. All these factors contribute to the inability of hearing-impaired lot in accessing financial literacy (Zulu., 2022)

Extensive Researches were conducted to develop resources for financial literacy Lee, N. (2010), Hilton (1995), Sykes (2003), Varcoe and Fitch (2002; 2003) and Boucher and Bond (2000). The researches revealed that financial literacy was found to be misinterpreted because of poor qualifications of teachers and financial literacy curricula being inappropriate. The research endorsed the notion that financial literacy empowers individuals for financial independence through development financial literacy based curriculum, development of money management skills and by making students going through financial experiences, enabling students' economic behavior.

A number of research articles have concluded that educating students with financial concepts help them in long run by enabling them to become financially independent, autonomous in their spending purchasing and saving priorities, finally making them capable of taking control of their lives (Evans, Behrens et al. 2001).It is noteworthy that a number of researchers focused on educating teenagers in line with financial knowledge including specific educational groups like high school pupils, college going students and university enrolled students (Tennyson and Nguyen 2001; Chen and Volpe 1998; Chen and Volpe 2002; Beal and Deltahedra 2003; Varcoe 2002; Varcoe and Fitch 2003)

Mason and Wilson opined that children who are taught on financial lines become informed adults financially. They defined financial literacy as an ability of an individual to obtain, understand and evaluate the relevant information necessary to make decisions with financial consequences". Financial literacy affects students' lives in multiple ways. Its presence strengthens and it's lacking adversely affects the decision-making abilities of learners (Leyshon et al. (1998).





Despite a lot of investments by concerned stakeholders on financial education, financial literacy of hearing-impaired individuals is yet not up to standards because of limited interests of educators, schools, curriculum developers and policy makers. A lot of individuals have been noticed who purchase financial services owing to lack of financial literacy which prove to be very unhealthy and detrimental to their economic and financial interests (Devlin, 2010). In the wake of this literature on financial literacy, there is a dire need to conduct research in the field of financial literacy of all individuals in general and hearing-impaired ones in particular.

The significance of financial literacy for all in general and for hearing impaired individuals in particular can't be ignored. Without financial literacy, youth empowerment can't be ensured as they lack financial knowledge, economic attitudes, banking awareness and investment minds. Nonetheless, individuals fighting with disabilities especially hearing-impaired ones face numerous challenges and obstacles in the way of financial education and literacy (Gargia-Iriarte et al. 2007; Hartnett 2006; Lehmann et al. 2000; Lombe et al. 2008; Mutawalli et al. 2009).

Financial education should be taken into account the daily life experiences of deaf students. This notion is supported by study conducted in USA. The qualitative study concluded that financial literacy should integrate students' everyday experiences outside the school. The study also recommended that schools and policy makers should introduce culturally responsive and engaging financial literacy-based curriculum in schools (Hirsch, J. S. (2021).

Financial literacy empowers students with hearing impairment in multiple ways. One of these ways is: it helps them to earn income through getting employment opportunities. Hence, financial literacy promotes employment. Getting employed, special students like hearing impaired ones, find opportunities to get integrated in mainstream society, ensuring financial inclusion. Financial literacy, thus provides basis for saving, earning and budgeting (National Collaborative on Workforce and Disability, 2012)

Making all students with disabilities independent in general and hearing-impaired students in particular necessitates the integration of financial concepts in the curricula they are subjected to. However, the curricula available to the youth don't satisfactorily cater to the unique and diverse needs of students with hearing impairment as they give least to no consideration to financial literacy (Henning and Johnston-Rodriguez, 2018). It is the responsibility of special educators and associated professionals to craft and implement Individualized Education Plans and providing students facing hearing impairment with financial literacy.

It has been observed, in special education institutions are not embedded in financial education and literacy (Bay and Parker-Katz 2009). Developing IEPS based on financial literacy goals and rendering appropriate and relevant teaching to students with hearing impairment which is culturally responsive as well is a matter of utmost significance and calls for immediate attention. However, majority of special education teachers have reported not being equipped with required training and not having and proper financial literacy-based curriculum and miscellaneous resources. This fact amounts to research and calls for a timely research intervention (Brownell et al. 2004).

Researchers have been trying to investigate the thread of financial literacy as a skill for promoting entrepreneurial potential amongst the youth. A study was conducted to assess the development of financial literacy as skill to enhance entrepreneurship through money management skills amongst youth. However, it is also pertinent to note that related literature paints a bleak picture in this regard. Many people, of all ages, are deficient in financial literacy skills and projects that financial crunch prevalent across different regions of the world hinges on the lack of poor financial decisions and unsatisfactory money management skills (Atkinson & Messy, Carroll, 2012; Lusardi and Mitchell,2014; OECD,2008). In the light of the research studies mentioned above, literature is replete with calls for the integration of concepts of financial literacy in the curriculum for the youth.

Development of curriculum based on financial literacy is significant but the evaluation of any such developed curricula is equally important. Researchers evaluated as many as five financial literacy curricula in USA. These curricula ranged from Financial Fitness for Life (Gellman and Laux, 2011), Practical Money Skills (Visa





2000-2016), Finance in the Classroom (Utahn's), Money Talks for Teens (University of California Cooperative Extension ,2008) and Money Smart for Young Adults (Federal Deposit Insurance Corporation, FDIC ,2011). These curricula were initially assessed and evaluated by a professor of instruction and curriculum and a special education field professor (Henning and Johnston-Rodriguez, 2018). Both professors ,as a result of evaluation of financial literacy curricula ,came up with a rubric based on their shared interests and beliefs in the significance of meeting national content criteria, universal design and cultural responsiveness. This rubric did not examine the curricula for their applicability to lower incidence disabilities. It was rather for students with specific learning disabilities, speech and language impairments, intellectual disabilities, and emotional and behavioral disabilities (Minarik and Lintner, 2016). Individuals with these four disabilities make up over 75 percent of students receiving special education services in US(Minarik and Lintner, 2016).

Important and salient Financial Literacy Based concepts from National Standards, National Standards for Financial Literacy (CEE, 2013) recommended key concepts, titles, topics and benchmarking progressions for financial literacy. These recommended standards guide nations in the development of financial literacy. Many states have based their benchmarks on these recommendations. These recommendations revolve around concepts like income, budgeting, saving, banking and insuring. Persons with disabilities might have their assistants may have in the form of family members, persona agents, guardians or custodians to make financial decisions for them. Persons with financial literacy are in better position to get financial transactions done in terms of purchases, sales, borrowing, debiting, crediting, investing, saving and getting insured along with appropriate banking (Mutawalli et al., 2009).

Curricula based on financial literacy for special students should introduce special students with banking, taking loans, settling loans and using checks, getting checks cashed. All these financial initiatives require financial literacy to be included in the curricula of special students (Johnson and Sherraden, 2007). Financial literacy curricula make special students aware about banking, budgeting, insuring and saving. Individualized Education Plans of special students must integrate the skills required for budgeting. Such IEPs, based on financial literacy, assist concerned special students in their transition plans as well (Mutawalli, 2015). Along with budgeting, financial literacy helps special students in planning saving initiatives and options like asset accumulation (Leadoff and Kaplan, 2001) and maintaining saving accounts (Cameto et al., 2004). The study is aimed at unfolding the stance of teachers of hearing-impaired students about financial literacy, knowing either existing curriculum for hearing impaired students contain elements of financial literacy or not, determining the appropriate level financial literacy should be taught at to hearing impaired students and suggesting the strategies to inculcate financial literacy amongst hearing impaired students.

#### **Research Objectives**

The study is seeking to:

- 1. Find out what special education teachers of hearing-impaired students know about Financial Literacy
- 2. To analyze existing curricula of hearing-impaired students in terms of financial literacy
- 3. Recommend the strategies to promote financial literacy amongst hearing impaired students

#### **Research Questions**

The study is aimed at addressing following research questions:

- 1. What is the stance of special education teachers of hearing-impaired students about the importance of financial Literacy for hearing impaired students?
- 2. Does existing curriculum for hearing impaired students contain elements of financial literacy or not?
- 3. What is the fundamental appropriate grade level financial literacy must be provided at, to hearing impaired students?
- 4. How can hearing impaired students be provided with financial literacy?



## **Research Methodology**

The study employed Qualitative Research approach, employing content and thematic analysis. Special education teachers engaged in teaching to hearing impaired students enrolled in public sector special education set-ups across 11 divisions of Punjab formed the population for the study at hand. As many as sixteen special education teachers of hearing-impaired students (8 JSETs & 8 SSETs) were chosen from sixteen special education centers of one division of Punjab (Sargodha), choosing one special education teacher from each center, as a sample of the study.

Convenient sampling technique was employed to interview participants with the help of call after getting their prior permission to get them included in research study. The participants were interviewed with the help of semi-structured interviews. Responses were recorded through recording calls after getting prior permission of respondents. Responses were later transcribed and analyzed through Thematic Analysis. Codes were identified, categories were evolved and themes were generated.

Participants were contacted through phone calls while seeking their prior consent through their respective heads of special education centers, seeking their willingness to participate in the research, ensuring ethical canons of research.

## **Population and Sample**

Special education teachers engaged in teaching to hearing impaired students enrolled in public sector special education set-ups across eleven divisions of Punjab formed the population for the study at hand.

As many as sixteen teachers of hearing-impaired students (one from each center) working in sixteen special education centers of Sargodha Division (four special education centers of district Bhakkar; four special education centers of district Mainsail; four special education centers of district Khushabu; four special education centers of district Sargodha), across Punjab, Pakistan constituted the sample of the study.

### **Research Instrument**

The researchers, for data collection, developed a semi-structured interview format to interview special education teachers of hearing-impaired students across one division of Punjab (Pakistan) namely Sargodha. Interviews were conducted in a qualitative probe to find out the subjective and in-length stance of teachers of hearing-impaired students about financial literacy.

#### **Data Collection Procedures**

Researchers gave due attention to ethical standards in data collection stage through accessing participants with the help of WhatsApp Messages and Phone Calls. The participants were informed about the purpose of research, letting them know that their decision to participate or not to participate in the study was their arbitrary decision, ensuring the confidentiality of the data provided by them. Sixteen special education teachers (employed in 16 special education centers in district Bhakkar, Mainsail, Khushabu and Sargodha) were accessed through sending them texts via WhatsApp, seeking their permission through their heads to participate in the research after briefing them about the nature of study. Participants including eight Junior Special Education Teachers JSETs (HI) as well as eight Senior Special Education Teachers SSETs (HI) were interviewed through calls with the help of semi-structured interviews formats. Calls were recorded after seeking approval of interviewees to transcribe the data later.

#### **Ethical Considerations**

Researchers assigned high weight to ethical canons of conducting the research through following ways:

- 1. Participants were briefed about the purpose and nature of the study.
- 2. Informed consent was obtained from Participants.
- 3. Participants were informed that their data will be kept confidential and will solely be used for research purpose, keeping their names anonymous.





4. Participants were informed that their participation in the study was optional and they could discontinue from the study at any time during the study.

#### **Data Analysis and Results**

The syllabus of hearing-impaired students was inspected and analyzed through content analysis. Apart from this, stance of sixteen special education teachers of hearing-impaired students collected through semi-structured interviews, was analyzed with the help of Thematic analysis. Thematic method involves identifying, analyzing, and reporting patterns (themes) within the data (Braun & Clarke, 2006). Thematic Analysis was conducted through four stages: Familiarization wherein the researcher thoroughly reviewed the transcripts of interviews to become familiar with the data; Coding wherein Initial codes were identified based on significant phrases and ideas relevant to the research questions; Theme Development wherein codes were organized into categories to develop potential themes and; Reporting wherein a detailed report was prepared to describe the finally developed themes and their implications.

## **Sample Questions (For Semi-Structured Interview)**

- Q No. 1: What, in your opinion, is financial literacy?
- Q. No. 2: Why financial Literacy is important for students?
- Q. No.3: Do you think hearing impaired students need financial literacy?
- Q. No.4: Does existing curriculum for hearing impaired students contain elements of financial literacy?
- Q. No. 5: At which level, financial literacy must be provided to hearing impaired students?
- Q. No. 6: How can hearing impaired students be provided with financial literacy?

## **Theme Development**

Sixteen Teachers of hearing-impaired students (both JSETs as well as SSETs) employed in sixteen special education centers in four districts namely Bhakkar, Mainsail, Khushabu and Sargodha, across Sargodha Division of Punjab, were interviewed. The data obtained from sixteen teachers of Hearing-Impaired Students was recorded and transcribed later for thematic analysis to generate themes for reporting later.

#### Theme No.1: Financial Decision Making

On being asked what financial literacy actually is, majority of teachers (fourteen out of sixteen) were found to be equipped with the cogent concept of financial literacy. Teachers of hearing impaired, more or less, expressed the similar views about the concept of financial literacy. Five participants considered financial literacy to be equivalent to banking, purchasing, selling, investing and saving, profit making and loss minimization. Six JSETs (HI) considered financial literacy to be financial education aimed at making deaf students financially independent and self-reliant. All teachers reached at consensus: Financial Literacy is aimed at making deaf students financial decision makers.

## Theme No.2: Financial Independence & Inclusion

Seven out of Sixteen special education teachers were found to be of the opinion: financial literacy makes hearing impaired students financially independent. Six out of sixteen special education teachers unanimously expressed: financial literacy, in long term, leads towards including hearing impaired students in the formal or informal economy as financial actors, ensuring financial inclusion of hearing-impaired students. Three out of sixteen special education teachers considered financial literacy as a key to create employment and business opportunities, ensuring their financial independence and freedom.

Theme No.3: Financial Literacy: Need of the Hour





Five out of sixteen Teachers of hearing-impaired students were of the opinion: Financial literacy is the emerging need of all students in general and special students, in particular. Seven out of Sixteen special education teachers deemed financial literacy as a life skill for survival, growth and excellence. Four out of sixteen special education teachers took financial education as a technical and vocational skill to make special students' lives productive and meaningful.

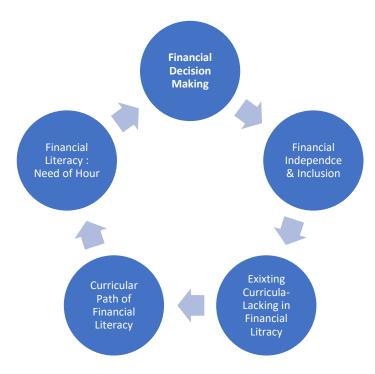
## Theme No.4: Existing Curricula Lacking in Financially Literacy

Out of sixteen, as many as fifteen special education teachers, when asked either existing curriculum of hearingimpaired students was providing hearing impaired students with financial literacy, responded in disagreement. One special education teacher was founded with confused response, mixing financial literacy with numeracy skills, showing lack of balanced argument. Hence, majority of special education teachers of hearing-impaired students were of the opinion: Existing curricula for hearing impaired students lack financial literacy and financial education at primary and elementary levels.

When asked at which level of schooling hearing impaired students must be provided with financial education, thirteen out of out of sixteen teachers signaled to middle (elementary) class level of schooling as the most suitable biological and mental age for reception of financial literacy and financial education for all students in general and hearing-impaired students in particular. Two special education teachers considered that financial education be provided at secondary level whereas two teachers of hearing-impaired students considered higher secondary level the most apt for financial literacy amongst hearing impaired students.

### Theme No.5: Curricular Path of Financial Literacy

When asked how financial literacy can be taught amongst hearing impaired students, twelve out of sixteen special education teachers of hearing-impaired students expressed curriculum embedded in financial literacy and financial education is the most appropriate method to inculcate financial literacy amongst hearing impaired students. One teacher opined: Social as well as print and electronic media should be used for financial literacy of hearing-impaired students. Three out of sixteen teachers opined: an Apprenticeships, workshops, exhibitions and vocational training courses enable hearing impaired students to be financially literate, apart from curricular adaptations.



## **Discussion**



Researchers placed financial literacy as equivalent to inculcating the spirit of entrepreneurship in the learners. Promotion of financial literacy has been found as an economic driver, resulting in the creation of job opportunities, fostering economic growth as well as social development amongst the youth. European Commission proposed a framework known as Intercom to establish critical competencies amongst learners, the most important competency being financial literacy (Bacigalupo et al., 2016). This very competency is considered to be an asset for individuals with hearing impairment, helping them translate ideas into products and services through value creation. Hence, it is apt to argue: the more an individual is financially literate, the more successful entrepreneur he/she turns to be, ultimately enabling individuals to become a good decision maker for business ideas.

Hoare (2003) is concerned about the low rate of financial literacy in the UK and is of the opinion that the 14 -19 generations should be encouraged to take numeracy seriously. Research conducted by Mutawalli et al. (2019) revealed that there is lack of curricula based on financial literacy as well as culturally responsive norms. And if in some states across the world, there are found curricula based on financial literacy, they tend to enhance the discriminatory practices.

Financial education based on financial literacy, though enhances financial empowerment of the general public, it, at the same time, widens the gap between whites and minorities, haves and have nots (Al-Bahrani et al.,2018). Extensive research literature suggests that those coping disabilities must be provided with financial literacy to enable them get out of the vicious cycle of exploitation, poverty and discrimination. People with special needs are more in need of financial literacy as compared to their normal peers (Mansfield and Pinto, 2008).

As far as teaching practices, trainings, workshops and capacity building programs are concerned, majority of teachers are found unprepared or underprepared when it comes to implementing curriculum based on financial education concepts. Exposure of special education teachers regarding financial literacy and financial education-based training is limited (CEC, 2012). Financial literacy proves instrumental in many ways. It is crucial to transition preparation for youth with disabilities especially hearing-impaired ones. Financial literacy promotes money management skills for life. Financial literacy teaches hearing impaired students' concepts like saving, money management, insurance, budgeting and finance handling in and outside homes.

Financial literacy prepares the youth for financial world around wherein they are supposed to take and make financial decisions every now and then. Financial vulnerability of youth, their rising indebtedness financially, likelihood of being exposed to financial frauds, all necessitates the financial literacy and financial education for all individuals in general and for hearing impaired youth in particular (Hodson and Dawyer, 2014). As students with special needs go through the experience of transition to adulthood, they are more likely to be exposed to tougher financial circumstances and vicious poverty cycle (Newman, et al., 2011).

In the wake of transition period of special students like hearing impaired ones, the need of financial literacy becomes pressing. However, the reality depicts the reverse case: exposure of special students including hearing impaired ones is currently limited (Mutawalli et al., 2009). As level of financial literacy among high school pupils below 50% (Mandell, 2008), making youth acquire financial literacy at graduation or post-graduation level is too late. It should be arranged early among students at high school (Hodson and Dwyer, 2014).

## **Conclusion**

Teachers of hearing impaired students deemed financial literacy as financial education aimed at inculcating the financial concepts of banking, saving, investing, budgeting, insuring, running businesses to take financial risks, financial planning as well as financial management. The aim of financial education and financial literacy, as per teachers of hearing impaired students was found to be making hearing impaired students financially independent and financial decision makers in an inclusive society. Teachers of hearing-impaired students considered financial literacy a dire need of the hour for the survival and financial independence, empowerment and financial inclusion of hearing-impaired individuals in long run.





Teachers of hearing-impaired students deemed that existing curriculum of hearing-impaired students prevalent in special education centers across Punjab, Pakistan, is deficient in financial literacy. They suggested that financial literacy should be taught to hearing impaired students starting from elementary level in special education centers across Punjab. Including the concepts of financial literacy in the curriculum of hearingimpaired students (Curricular adaptations) along with use of social, print media and electronic media, apprenticeships, workshops, exhibitions and vocational training courses were suggested as viable strategies to educate hearing impaired students in terms of financial literacy, with an aim to make hearing impaired students to be financially literate, independent, empowered and included in times to come.



#### References

- 1. Hodson, R.; Dwyer, R. Financial behavior, debt, and early life transitions: Insights from the National Longitudinal Survey of Youth, 1997 Cohort. Natl. Endow. Finance. Educ. 2014, 1–14.
- 2. Mandell, L. Financial education in high school. In Overcoming the Saving Slump: How to Increase the Effectiveness of Financial Education and Saving Programs; Lusardi, A., Ed.; University of Chicago Press: Chicago, IL, USA, 2008; pp. 257–279.
- 3. Lusardi, A.; Mitchell, O.S. The economic importance of financial literacy: Theory and evidence. J. Econ. Lit. 2014, 52, 5-44.
- 4. Zulu, C. C. (2022). Facilitators and barriers to acquisition of literacy skills among learners with hearing impairments in lower grades: a case of Chilanga primary school special unit of Chilanga district, Lusaka, Zambia.
- 5. Lee, N. (2010). Financial literacy and financial literacy education: what might be the components of an effective financial literacy curriculum? (Doctoral dissertation, Institute of Education, University of London).)
- 6. Wilson, R. M., Abraham, A., & Mason, C. L. (2014). The nature of financial literacy. In The Routledge companion to accounting education (pp. 50-80). Routledge.
- 7. Leyshon, A., Thrift, N., & Pratt, J. (1998). Reading financial services: texts, consumers, and financial literacy. Environment and Planning D: Society and Space, 16(1), 29-55.
- 8. Harnett, J. New Century Workers with Disabilities: Why Financial Education Matters for Americans with Disabilities. World Institute on Disability. 2006.
- 9. 13. Lombe, M.; Huang, J.; Putnam, M.; Cooney, K. Exploring saving performance in an IDA for people with disabilities: Some preliminary findings. Soc. Work Res. 2010, 24, 83–93.
- 10. Mutawalli, K.M.; Belson, S.I.; Ahmadi, H. Financial Literacy for Youth with Disabilities; Social Dynamics: Gaithersburg, MD, USA, 2009
- 11. Henning, M. B., & Johnston-Rodriguez, S. (2018). Evaluating financial literacy curriculum for young adults with special needs: A review of content, universal design for learning, and culturally responsive curriculum principles. Citizenship, Social and Economic Education, 17(2), 118-135.
- 12. Bay, M.; Parker-Katz, M. Perspectives on induction of beginning special educators. Teach. Educ. Spec. Educ. 2009, 32, 17-32.
- 13. Brownell, M.; Hirsch, E.; Seo, S. Meeting the demand for highly qualified special education teachers during severe shortages: What should policymakers consider? J. Spec. Educ. 2004, 38, 56-61.
- 14. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. American Economic Journal: Journal of Economic Literature, 52(1), 5-44.
- 15. Das, S. C. (2016). Financial literacy among Indian millennial generation and their reflections on financial behavior and attitude: Explanatory research. T Indian Journal He of Commerce, 69(4).
- 16. Remund, D. L., 2010. Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. Journal of Consumer Affairs, 44(2), pp. 276-295.
- 17. OECD, 2012. Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study, OECD Working Papers on Finance, Insurance and Private Pensions No. 15.
- 18. OECD, 2014. PISA 2012 Results: Students and Money: Financial Literacy Skills for the 21st Century (Volume VI), PISA, OECD Publishing.
- 19. Hirsch, J. S. (2021). Let's Ask the Youngsters: Adolescents' Attitudes Toward Money and Financial Literacy Education. Teachers College, Columbia University.
- 20. Mansfield, P.M.; Pinto, M.B. Consumer vulnerability and credit card knowledge among developmentally disabled citizens. J. Consume. Affi. 2008, 42, 425-438



- 21. Mutawalli, K.M.; Belson, S.I.; Ahmadi, H. Financial Literacy for Youth with Disabilities; Social Dynamics: Gaithersburg, MD, USA, 2019.
- 22. Council for Exceptional Children. Special Educator Preparation Standards. 2012.
- 23. Hodson, R.; Dwyer, R. Financial behavior, debt, and early life transitions: Insights from the National Longitudinal Survey of Youth, 1997 Cohort. Natl. Endow. Finance. Educ. 2014, 1–14
- 24. Newman, L.; Wagner, M.; Knokke, A.-M.; Marder, C.; Nagle, K.; Shaver, D.; Wei, X.; Cameto, R.; Contreras, E.; Ferguson, K.; et al. The Post-High School Outcomes of Young Adults with Disabilities up to 8 Years after High School; A Report from the National Longitudinal Transition Study-2 (NLTS2) (NCSER 2011–3005); SRI International: Menlo Park, CA, USA, 2011.
- 25. Mutawalli, K.M.; Belson, S.I.; Ahmadi, H. Financial Literacy for Youth with Disabilities; Social Dynamics: Gaithersburg, MD, USA, 2009.
- 26. Gellman, S.; Laux, S.C. Financial fitness for life (Grades 9-12); Council for Economic Education: New York, NY, USA, 2011.
- 27. USA, 2011. 20. Visa. Practical Money Skills for Life. 2000–2016.
- 28. Utah State Board of Education. Finance in the Classroom.
- 29. University of California Cooperative Extension. Money Talks 4 Teens. 2008
- 30. Council for Economic Education. National Standards for Financial Literacy; CEE: New York, NY, USA, 2013.
- 31. Henning, M.B.; Johnston-Rodriguez, S. Strategies and resources for teaching financial literacy to youth with disabilities. In Financial Literacy for Children and Youth, 2nd ed.; Lucey, T.A., Cooter, K.S., Eds.; Peter Lang: New York, NY, USA, 2018; pp. 49–66
- 32. Council for Economic Education. National Standards for Financial Literacy; CEE: New York, NY, USA, 2013.
- 33. Johnson, E.; Sherraden, M.S. From financial literacy to financial capability among youth. J. Social. Soc. Welf. 2007, 34, 119–146
- 34. Literacy for Youth with Disabilities; Lowry, G., Ed.; Nova: New York, NY, USA, 2015; pp. 85–181.
- 35. Johnston-Rodriguez, S., & Henning, M. B. (2019). Pre-service teachers' perception of financial literacy curriculum: National standards, universal design, and cultural responsiveness. *Education Sciences*, *9*(1), 34.



