International Journal of Knowledge Processing Studies
(KPS)

ORIGINAL RESEARCH ARTICLE

Validation of a Citizenship Education Curriculum Model for Students with Special Needs

Seyedeh Maryam Tayebi Masoleh [1], Kambiz Poushaneh [2,*], Ali Akbar Khosravi Babadi[3], Hamid Reza Reza Zaheh[4], Ahmad Ramezani[5]

[1] PhD Candidate, Department of Curriculum Planning, Central Tehran Branch, Islamic Azad University, Tehran, Iran.
[2] Assistant Professor, Department of Curriculum Planning, Central Tehran Branch, Islamic Azad University, Tehran, Iran.
[3] Associate Professor, Department of Training and Consulting, Central Tehran Branch, Islamic Azad University, Tehran, Iran.
[4] Associate Professor, Department of Training and Consulting, Central Tehran Branch, Islamic Azad University, Tehran, Iran.
[5] Assistant Professor, of General, Linguistics, Educational Research, and Planning Organization, Tehran, Iran.

ARTICLE INFO

ABSTRACT

This study aims to validate a curriculum model of citizenship education for students with special educational needs (mental retardation or intellectual disability (ID) group).

This is an applied-developmental study in terms of its purpose, and it is cross-sectional survey research in terms of the method and time frame of data collection. A semi-structured interview and a Likert scale questionnaire were used to collect the data. The reliability of the questionnaire was obtained using Cronbach's alpha and composite reliability. Convergent validity has also been used to validate the questionnaire. The statistical population in the qualitative part includes 24 experts in special curriculum planning and experts in the Special Needs Education Organization. Out of 182 people, 79 people were selected as the sample calculated based on Cochran's table with an error of 0.1. To analyze the data in the qualitative part, a Grounded Theory approach was used to identify the research indicators, and the structural equation modeling and SMART PLS software were used to validate and present the final model.

The obtained results showed the importance of the practicality of citizenship education for students with special needs. The results also indicated the importance of the content of citizenship education and teaching methods.

In terms of teaching and training methods, the formation of informal groups and supervision of group activities, learning by practice, and student-centered and collaborative teaching methods have been emphasized. **©authors**

*****Corresponding Author:** Kambiz Poushaneh
Email: poushaneh@hotmail.com
ORCID ID: 0000-0002-2352-4259

1. Introduction

One of the most important dimensions of citizenship is having knowledge and awareness of citizenship. Citizenship knowledge consists of basic ideas and information that people must have and apply to be effective and responsible citizens (Somerwill et al., 2022). Knowledge of good citizenship is one of the most important concerns of most education systems in many countries of the world (Wehn et al., 2021).

Citizenship is a set of entitlements and duties that make people fully grown and mature members of a socio-political community and provide them with access to scarce resources (Koh et al., 2017); But unfortunately, it has been seen in the case of some members of the community that their rights have been ignored due to their disability. Intellectually disabled (ID) children are among these people who, as citizens, should not be deprived of this right, and the need to get citizenship knowledge to enhance citizenship awareness will be an inevitable necessity for them (Van Brussel et al., 2019). The studies conducted in many developed and developing countries show that education authorities prioritize citizenship rights with a strong determination and through developing diverse educational programs (Arayesh et al., 2018).

Citizenship knowledge equips the students with awareness, skills, and understanding and plays an effective role in their public life. Citizenship encourages them to be interested in solving complicated issues and engaging in discussions. Students learn about their rights, responsibilities, duties, and freedom rights and about laws, justice, and democracy. They learn to participate in decision-making and various forms of practice and are encouraged to respect different national, religious, and ethnic identities (Hallahan et al., 2009).

Today, the importance of the issue of citizenship is such that it has been especially emphasized in many current and modern literature in the first years of the third millennium. For example, the World Conservation Union has used the term "education for sustainable life" which introduces the category of citizenship as one of the most important dimensions and complementary to other dimensions (Ahngar et al., 2019). The social, political, cultural, and economic needs of the present age have made the topic of citizenship education one of the most important areas of decision and action in the education system. Education of responsible and informed citizens is one of the most central and fundamental principles of the education systems in different countries. Every country, through formal and informal education, prepares its citizens to enter social, economic, political, and cultural life, which can be done in the form of explicit citizenship education under this title or in the form of implicit education through other subjects (Tianyu et al., 2020).

In the United States of America, engaging a child with special needs in the process of general education with the implementation of different models of general education, and social and educational adaptation in order to integrate the child into society is one of the main goals of inclusive education (Bezliudnyi et al., 2019). Traditionally, a common type of education for mentally retarded children is special (remedial) education. At the same time, in practice, the process of integration of disabled children in public education institutions is intensifying, different models and forms of interaction between special and general education have been tested, and efforts have been made to create the right conditions for the most comprehensive social adaptation and personality development (Kauffman et al., 1997).

In this regard, a historical look at education indicates that in the past, all over the world, the educational system for exceptional children in the form of educational segregation has been the

dominant thought; but today, designing, planning and implementing educational and social integration programs for such students are considered common thinking (Hu et al., 2018). While in recent years, the most important public issue that has attracted the attention of education specialists is the concentration on the education of students with special needs, their comprehensive growth, and their special educational needs (Hornby, 2015); among them, we can mention "citizenship education". However, it is observed that even although citizenship is the right of every person, regardless of their health status, people with mental disabilities are often denied to have the same citizenship rights as other people (Afrooz, 2021). Providing equal citizenship rights for people with special needs is only possible by the increasing access to education and employment opportunities for them so that they can demonstrate their talents and active presence in the society (Alkahtani et al., 2017).

In this regard, to achieve high educational goals, it is necessary to develop curricula appropriate to the mental and physical abilities of different groups of intellectually disabled students, to prepare for an independent life. In Behrad's (2005) research which analyzes the educational content and education of children with mental disabilities from teachers' and parents' perspectives, it was concluded that both primary and secondary teachers have positive effects on the independent life skills of children with mental retardation. Therefore, the need to design and present a model for teaching citizenship knowledge, with the required validity, in the curriculum of these students (mental retardation) is strongly felt. This education is "a multidimensional concept that includes ethical, environmental, cultural, economic and political concepts. Citizenship education is the preparation of children and teenagers to accept their roles and responsibilities as citizens. Citizenship education refers to that part of education and training activities that, formally prepares and socializes people of a society to become members of the political society (Beh Pazhooh, 2018).

Aghaei et al. (2017) studied the effect of social skills training on the behavioral problems of mentally retarded students. The findings showed that social skills training reduced behavioral problems of the mentally retarded students in the experimental group.

Kazemi (2015), who studied the ideal model of individual education program in line with individual social empowerment of mentally disabled adults concluded that individual training programs based on two levels of general and specific needs assessment can provide more realistic goals for the program and ultimately increase the personal and social adaptation of these people.

In this regard, "special education schools play an important role in preparing students with mental disabilities for active citizenship in different societies" (Afrooz, 2021). The citizenship model, whose goals are the full participation of people with special needs in the society and the optimization of satisfaction and well-being, is the most important paradigm while planning for students with special needs (Kauffman et al., 1998) because "students can be taught citizenship rights" and develop valuable skills such as critical reasoning, decision making, and problem-solving skills. Therefore, the teachers of these centers should emphasize the development of students' citizenship skills and make them mentally safer. It can support the acquisition of necessary skills for active citizenship". With regards to the raised issues about the necessity of teaching citizenship knowledge for all students, especially students with special needs, the present research, in an attempt to design a suitable curriculum model for teaching citizenship knowledge for ID students, seeks to answer this main question: what are the dimensions, components, and indicators of an authentic

and suitable model for the curriculum of teaching citizenship knowledge to students with special needs?

2. Literature Review

According to the statistics published by the country's special education organization, intellectually disabled students constitute the largest number of students with special needs. Therefore, teaching citizenship knowledge to this category of students is of special importance and necessity. The field of citizenship education in Iran needs research attention. Most of the countries in the world have carried out extensive research in the field of citizenship education, set up scientific and research institutes and associations, and conducted appropriate citizenship education; But in our country, both in the fields of research and practice, not enough attention has been paid to this matter (Qiyasvand, 2015).

One of the notable groups in the category of children with special needs is the children with Intellectual Disabilities. Clinical experts diagnose people with intellectual disabilities for the first time in their childhood. The International Classification of Diseases (ICD) uses the term "Intellectual Developmental Disorder", so DSM-5 placed this term in parentheses after the term "Intellectual Disability" in DSM-IV-TR, and for this group of disorders, it used the term "mental retardation" (Sincer et al., 2019).

However, the authors of DSM-5 are in line with the recommendations of the American Association of Intellectual and Developmental Disabilities (AAIDD) among other groups that adopted the term "intellectual disability" (developmental intellectual disorder) (Afrooz, 2021).

Studies show that children with special needs, compared to their peers, have significant weaknesses in terms of social development and do not have the necessary sufficiency to face social expectations (Sebahani et al., 2017). These people face serious problems in communicating, adapting to the social environment, and social and family relationships. They have many compromised behaviors that ultimately cause them to be isolated and rejected by their peers. Mentally retarded children have mild immaturity in social interactions and have difficulty regulating their emotions and behavior according to their age. At an average level, they can establish social and emotional bonds with others, but they may not be able to understand people's social signs (Nesyan et al., 2015). At a high level, these people can understand speech, gestures, and simple gestures and have the ability to have satisfying interpersonal relationships. At a deep level, they have a limited understanding of speech and gestures in social relationships. They have satisfactory relationships with others, but physical and movement disorders may not allow them to participate actively in society (Capri, 2019).

Therefore, these children need education to continue their lives and social activities. But before that, one should see to what extent their learning level is and how it can be improved; Ziegler believes that mentally retarded children are exposed to emotional and social problems (Halgin et al., 2017). In his opinion, these people have a high expectation of failure in terms of their experience, and this expectation affects the way they approach situations that involve cognitive skills" (Ziegler, 1999). Of course, this effect is strongly seen in their social skills and relationships in the environment. Social skills, including "interpersonal skills", "social responsibility", "self-esteem", "simple-mindedness", "optimism", "following rules and regulations", "avoiding victimization" and "solution", become a social issue (Beh Pazhooh, 2018).

3. Method

This study is fundamental research (Creswell, 2012) conducted to validate the curriculum model of teaching citizenship knowledge to students with special needs using a mixed-methods approach. Based on the data collection method, it uses a cross-sectional survey.

The statistical population in the qualitative section includes curriculum planning experts. The number of experts for specialized interviews suggested by the Grounded Theory is between 15 and 30 (Vassilio et al., 2018). In general, the interview process in qualitative analysis continues until theoretical saturation is reached (Ranjabr et al., 2018). The criterion for selecting experts is having the work experience of over twenty years and at least a master's degree. The sample was selected purposefully. Sampling continued until theoretical saturation was reached and 24 eligible people participated in this study.

The statistical population in the quantitative section also includes experts and teachers/trainers of intellectually disabled students. Citizenship education can be taught by experts, and parents may not be able to comment about the model of citizenship education at this stage as experts. The available sampling method was used to select the sample. Based on the obtained statistics, 160 qualified experts and trainers were recruited. A non-random sampling method was used for sampling. The designed model was fitted using the structural equation method in SMART PLS software.

The main tool for collecting research data in the qualitative part was a semi-structured interview and in the quantitative part, a questionnaire was used. The Holstein coefficient was used to measure the validity of the interview results. The "percentage of observed agreement" or PAO was obtained by calculating the Holsti coefficient of 0.809, which is an acceptable value. The validity of the questionnaire was confirmed by calculating the content validity ratio of CVR.

Cronbach's alpha of the overall questionnaire was 0.836 and for all dimensions was greater than 0.7, so the reliability of the questionnaire is confirmed. Qualitative analysis of expert interviews was done using the grounded theory principles. The structural equation modeling method was used to validate the designed model. Data analysis was done with Atlasti and SMARTPLS software.

In open coding, first, the data obtained from the interviews were carefully studied, examined, and analyzed, then conceptualization was done and the data that were conceptually similar to each other were given appropriate names and were consequently labeled.

This stage presents more complex and comprehensive cases in order to compare and differentiate codes and concepts. At this stage, by identifying patterns in the findings, primary categories were formed. Also, at this stage of data analysis, while collecting new data, the researchers, due to involvement in the process of continuous comparison, paid attention to the amount of receiving new information in the categories and therefore to their saturation (Farrell, 2009). A category is a representation of units of information about events, occurrences, and instances. An in-depth interview was used as the main data collection tool at this stage. Based on the obtained results, a total of 106 concepts and 21 categories or open codes were identified and extracted. The 21 identified categories were included in the 6 main data categories. In the following, open coding is devoted to the factors that make up the grounded theory model.

4. Findings

In the first stage, qualitative data was collected through in-depth interviews with a group of experts. In the process of open coding, many themes were obtained, and during the round-trip process of data analysis, the set of these primary qualitative data was reduced to fewer categories. Then, each of these obtained categories was

examined in the qualitative stage. The following section presents the interview process and extraction of the indicators from the texts and interviews.

Table 2. Identified codes of the main category

Label	Axial coding	Selective encoding
Teaching citizenship knowledge for students with special needs		Main article
C1	Participation	Causal conditions
C2	Needs assessment	
C3	Social capital	
C4	Role model	
C5	Life lessons	
C6	Individual characteristics of mentally retarded students	Background conditions
C7	Social situation	
C8	Psychological characteristics	Intervening conditions
C9	Cultural factors	
C10	Facilities and equipment	
C11	The role of teachers	
C12	Teaching techniques	Strategy
C13	Educational assessment and evaluation	
C14	Cultivation	
C15	Moralism	
C16	Government support	
C17	Quality of Life	Consequences
C18	Psychological consequences	
C19	Social consequences	
C20	Improving skills	

By analyzing the data collected in the research, in the initial stage (open coding), 106 concepts were extracted from the transcribed content of the interviews.

Selective coding and axial coding were also done. Among the identified factors, the axial coding paradigm was performed and based on that, the linear relationship between the research categories including causal conditions, central categories, background conditions, intervening conditions, strategies and consequences was determined. Figure 1 shows the implicit coding paradigm, in other words, the model of the qualitative research process.
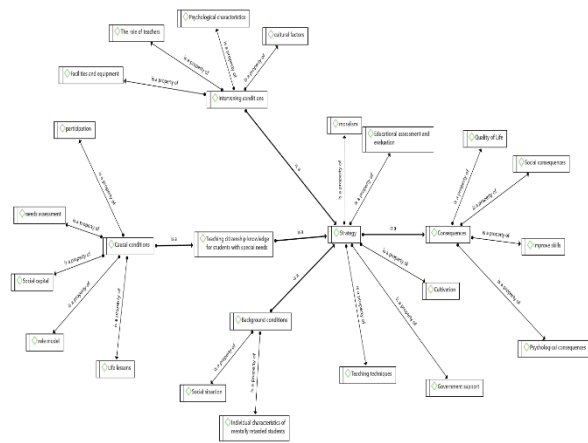

Figure 1. Teaching citizenship knowledge to students with special needs in software

After the initial model of citizenship education for students with special needs was designed, structural equation modeling (SEM) was used to validate and present the final model.

The severity of multiple collinearity can be analyzed by examining the magnitude of the VIF value. In fact, this index expresses how much of the changes related to the estimated coefficients have increased due to collinearity. If the VIF value is greater than 5, the level of inflation is critical, and the ideal value for VIF is 3 or less.

Table 3. VIF

Variable	VIF
Causal factors	1.477
Background factors	1.193
Interfering factors	1.239
Strategies	1.170
Consequences	1.045

Fornell and Locker Method

Divergent validity is acceptable when the AVE for each construct is greater than the shared variance of that construct and other constructs in the model (the square of the correlation coefficients between constructs). This is checked by a matrix. The cells of this matrix contain the values of the correlation coefficients between the constructs and the square root of the AVE values of each construct, if the Stein model has acceptable divergent validity if the numbers listed in the main diameter of the underlying values are greater.

Table4. Fornell and Locker

	Causal factors	Background factors	Interfering factors	Strategies	Consequences
Causal factors	0.864				
Background factors	0.840	0.895			
Interfering factors	0.825	0.860	0.867		
Strategies	0.792	0.845	0.860	0.889	
Consequences	0.750	0.846	0.855	0.873	0.896

HTMT

The HTMT is a measure of similarity between latent variables. If the HTMT is clearly smaller than one, discriminant validity can be regarded as established. In many practical situations, a threshold of 0.85 reliably distinguishes between those pairs of latent variables that are discriminant valid and those that are not.

Table 5. HTMT

	Causal factors	Background factors	Interfering factors	Strategies	Consequences
Causal factors					
Background factors	0.820				
Interfering factors	0.729	0.732			
Strategies	0.738	0.649	0.645		
Consequences	0.719	0.745	0.730	0.804	

The structural model of the research in the standard estimation mode is shown in Figure 2. In this model, which is the output of SMARTPLS software, a summary of the results related to the standard factor load of factor relationships is presented. The t statistic to measure the significance of relationships is also presented in Figure 3.
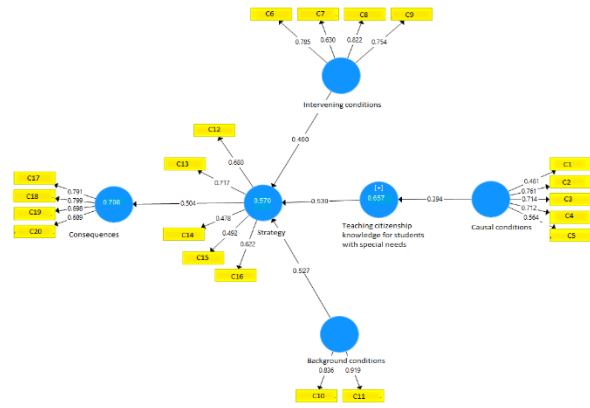

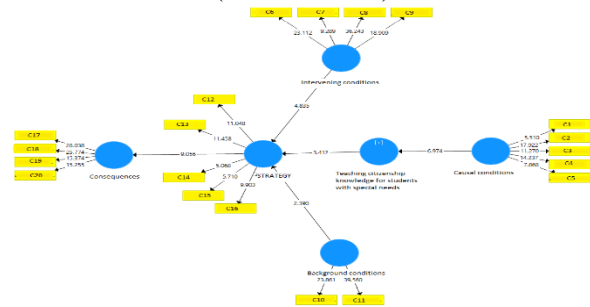***Figure 2.*** Factor loading of the research model (external model)

Figure 3. Bootstrapping t statistic of the research model (external research model)

Table 6. Exterior model

Label	object	Factor load	P-value
C1	participation	0.461	0.000
C2	needs assessment	0.761	0.000
C3	Social capital	0.714	0.000
C4	role model	0.712	0.000
C5	Life lessons	0.564	0.000
C6	Individual characteristics of mentally retarded students	0.785	0.000
C7	Social situation	0.630	0.000
C8	Psychological characteristics	0.822	0.000
C9	cultural factors	0.754	0.000
C10	Facilities and equipment	0.836	0.000
C11	The role of teachers	0.919	0.000
C12	Teaching techniques	0.680	0.000
C13	Educational assessment and evaluation	0.717	0.000
C14	Cultivation	0.478	0.000
C15	moralism	0.492	0.000

C16	Government support	0.622	0.000
C17	Quality of Life	0.791	0.000
C18	Psychological consequences	0.799	0.000
C19	Social consequences	0.698	0.000
C20	Improve skills	0.689	0.000

In this part, based on the results obtained from partial least squares calculation based on factor loading and bootstrapping, research hypotheses have been examined:

Table 7. Examination of research hypotheses and model path analysis.

Hypothesis	P-value	T-value-	Factor loading	Status
Causal conditions have a significant effect on the main category.	0.000	7.48	0.325	accepted
The main category has a significant effect on strategies.	0.000	6.121	0.413	accepted
Strategies have a significant impact on outcomes.	0.000	9.91	0.529	accepted
Intervening conditions have a significant effect on strategies.	0.000	9.846	0.528	accepted

Based on the results obtained from the structural equation model, the path coefficient in all hypotheses is higher than 0.3. The significance level in all hypotheses is less than 0.05 (0.000). Therefore, with a confidence of 0.95, it can be said that all hypotheses are confirmed. Structural equation modeling was used for simultaneous investigation of correlation relationships. The results of structural equation estimation showed that causal conditions have a positive and significant effect on the main category. The main category has a positive and significant effect on strategies. Strategies have a positive and significant effect on outcomes. Intervening conditions have a positive and significant effect on the results, and finally, the background conditions have a positive and significant effect on the results.

5. Discussion

The purpose of the present study was to validate the curriculum model of citizenship education for students with special needs. In this research, foundation data and structural equation model methods have been used. This research, by reviewing the subject literature and taking advantage of past researches, to identify a number of effective factors in the configuration based on the curriculum of citizenship education, for students with special needs and other similar cases, and to the experts in this field for a better understanding of this The concept helped and provided a model in this connection.

The current research is argumentative and based on the analysis of the information obtained from the qualitative part of the research, its combination and integration with the literature of the research has been done. The results of this research showed that, despite the implementation of a wide range of research related to education for students with special needs in the past and present, the curriculum model of citizenship education can be examined more carefully and thoughtfully. This research was carried out with an integrated approach, in the first step by reviewing the subject literature and using past researches and identifying a number of new and effective factors in the curriculum model of citizenship education for students with special needs, starting and the initial conceptual model with The comparative (quantitative) approach was extracted and then the model was obtained and completed inductively (qualitative).

Teaching citizenship knowledge in academic levels requires the inclusion of different topics in all elements of the curriculum, including goals, content, teaching methods, etc. Abbaszadeh Shahri et al. (2021), based on the model of professional citizen training in education based on the data theory of the foundation,

showed that the most influential codes of each criteria of citizenship were social education strategies, evaluation of the performance of educational elements in the education system, and compliance with educational standards. Also, the three dimensions of knowledge, attitude and ability (skills) are the most important dimensions of citizenship education. To teach citizenship knowledge, a special curriculum should be developed. Including the specific content of citizenship education in regular programs cannot meet the needs of society. Rather, it is important to pay attention to all aspects and elements of the curriculum in teaching citizenship knowledge. At the general level, the plan or pattern of the curriculum refers to the decision-making about the value bases or the pattern of the curriculum of the type of source or sources of information and is chosen by the planner, which is the identification of the viewpoints governing the curriculum. Determining goals, choosing content, teaching-learning strategies and evaluation methods are the main elements of the curriculum. Golshan et al. (2019) stated that despite the importance of citizenship education, it is necessary that such education should take place in the form of codified and organized programs, for this purpose it is necessary to design a curriculum model. Bruce et al. (2019) showed that their view on the idea of a citizen was unknown, they sought harmony and the desire to assimilate in relationships, and they accepted the views of ethnocentrism, patriarchy, and salvation. Alipour et al. (2019) showed that a single teaching method cannot meet the all-round needs of mentally retarded children, so teachers can use different teaching methods and the method of performance assessment along with the evaluation of reference criteria.

Fathi Vajargah et al. (2016) showed that creating a curriculum that matches the needs of students can be more productive in their performance. The design of the proposed model is also consistent with the spider web model of the curriculum by Akker et al. (2010) and all 10 components of curriculum including goals and objectives, content, learning activities, teacher's role, materials and resources, grouping of learners, place, time and assessment.

The most important results obtained from the interviews emphasized the content of citizenship education and teaching methods. The importance of the practicality of citizenship education for students with special needs was expressed extensively by the interviewees. Regarding the topics of citizenship education, emphasis has been placed on teaching humane and moral values, teaching life lessons (order and responsibility), culture building, teaching social values and norms, political education, civic participation, emphasis on social justice and multicultural education. In terms of teaching and training methods, the formation of informal groups and supervision of group activities, learning in practice and student-centered and collaborative teaching methods have been emphasized. The best solution for increasing citizenship knowledge and the level of awareness of citizenship rights, both among students and among other classes, are culture creation and public information, including education and promotion of citizenship knowledge and increasing the necessary fields for people's participation in society. In Sett Haklan's study, he is trying to pass laws in the field of urban management according to the concept of civic knowledge and revising educational books. Based on the obtained results, the following suggestions are made:

- Incorporating citizenship education in the Department of Education;
- Formation of special educational groups for citizenship knowledge;

- Approval of necessary laws to improve the quality of citizenship knowledge;
- Separation of citizenship education from social studies;
- Cultivation at the community level to understand the importance of citizenship knowledge;
- Creating a platform for society to respect the position of children with special needs;
- Privatization of citizenship education units under the supervision of education;
- Appreciating and valuing the actions and activities of students during the implementation of citizenship education;
- Organizing training courses for trainers in the correct implementation of citizenship education.

Funding

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

Abbaszadeh Shahri, T., Shafizadeh, H. & Soleimani, N., (2021). Designing a professional citizen training model in education based on data-based theory. *Islamic lifestyle with a focus on health*, 5 (3): 139-129. [in Persian]

Afrooz, G. (2021). An introduction to the education and upbringing of exceptional children, 31st edition. Tehran, Tehran University Press. [in Persian]

Aghai, H., Mohammadi Faiz-Abadi, A. & Niazi, M. R., (2017). The effectiveness of social skills training on the behavioral problems of mentally retarded students, the fifth national conference of school psychology, Tehran, *Educational Psychology Association of Iran*. [in Persian]

Ahangar A.A., Soltani-Nejad, M. & DareKurdi, A. (2019). A comparative study of syntactic comprehension and production between educable intellectually disabled children and normal Persian-speaking children, *Scientific-Research Quarterly of Rehabilitation Medicine*, 9(3): 285-274. [in Persian]

Alevriadou, A., & Lang, L. (2011). Active Citizenship and contexts of special education. CiCe.

Alipour, A., Ali Asgari, M., Hosseinikhah, A. & Haj Hosseinnejad, H., (2019). Explanation of curriculum elements for job empowerment of intellectually disabled children (research synthesis). *Theory and Practice in Curriculum*, 8 (15): 382-347. [in Persian]

Alkahtani, M. A., & Al-Qahtani, H. H. (2017). Promoting Active Participation of Children with Intellectual Disabilities in Social Activities through Citizenship Education in Disability Centers in Tabuk, Saudi Arabia. Educational Research and Reviews, 12(19): 950-955. https://doi.org/10.5897/ERR2017.3348

Arash, M., Sheikhi, M. T., Ajjali, H. P., (2018). Developing a model for citizenship education with an approach based on foundational data theory, Urban Sociological Studies, 9 (31): 118-85. [in Persian]

Beh Pazhooh, A., (2018). Intellectual disability: definition, classification and support systems, second edition, Tehran, *Tehran University Publishing Institute*. [in Persian]

Behrad, B., (2005). Educational content and preparation of educable mentally retarded children in the field of independent life skills from the point of view of teachers and parents. *Research in the field of exceptional children,* 17(3): 271-294. [in Persian]

Bezliudnyi, R. (2019). Inclusive education of teenagers with special needs in the United States of America. Pavlo Tychyna Uman State Pedagogical University, 1, 1-7. https://doi.org/10.31499/23065532.1.2019.174722

Bruce, J., North, C. & FitzPatrick, J. (2019). Preservice teachers' views of global citizenship and implications for global citizenship education. Globalisation. *Societies and Education*, 1-16. https://doi.org/10.1080/14767724.2018.1558049

Capri, C. (2019). The politics of person-making: Ethics of care, Intellectual impairment citizenship, and a reclaiming of knowledge. *In The Palgrave handbook of disability and citizenship in the Global South*, 269-292. https://doi.org/10.1007/978-3-319-74675-3_19

Creswell, J. W. (2012). *Research Design: Qualitative, Quantitative and Mixed Method Approaches*, 3rd ed. Thousand Oaks, CA: Sage.

Farrell, M. (2009). *Foundations of Special Education: An Introduction*. Malden: Wiley-Blackwell. https://doi.org/10.1002/9780470744659

Fathi Vajargah, K., Aghazadeh, M. & Abolghasemi, M. (2016). School-based curriculum needs assessment. *Bal publications*. [in Persian]

Garrote, A. (2017). The Relationship between Social Participation and Social Skills of Pupils with an Intellectual Disability: A Study in Inclusive Classrooms. *Frontline Learning Research*, 5(1): 1-15. https://doi.org/10.14786/flr.v5i1.266

Ghiasvand, A. (2014). Citizenship education in schools of Tehran city, results and consequences. *welfare planning and social development quarterly*, 23: 207-231. [in Persian]

Golshani, M., Makki Al-Agha, B. & Etemad Ahari, A. (2019). Designing a citizenship education curriculum template for students. *Journal of Research in Educational Systems*, 14 (51): 39-60. [in Persian]

Halgin, R. & Whitburn, S. (2014). *Cross Psychopathology (Clinical Perspectives on Mental Disorders Based on DSM-5* (Yahya Seyed Mohammadi, translation) Volume One, Tehran, Ravan Publishing, Thirteenth Edition.

Hallahan, D. P., Kauffman, J. M., & Pullen, P. C. (2009). *Exceptional learners: An Introduction to Education.* Allyn & Bacon, Pearson Education, Inc. USA.

Hornby, G. (2015). Inclusive special education: development of a new theory for the education of children with special educational needs and disabilities. *British Journal of Special Education*, 42(3): 234-256

Hornby, G. (2015). Inclusive special education: development of a new theory for the education of children with special educational needs and disabilities. *British Journal of Special Education*, 42(3): 234-256. https://doi.org/10.1111/1467-8578.12101

Hu, H., Gao, J., Jiang, H., Jiang, H., Guo, S., Chen, K., ... & Qi, Y. (2018). A comparative study of behavior problems among left-behind children, migrant children and local children. *International journal of environmental research and public health*, 15(4): 655. https://doi.org/10.3390/ijerph15040655

Kauffman, J. M., Hallahan, D. P., & Lloyd, J. W. (1998). Politics, science, and the future of learning disabilities. *Learning Disability Quarterly*, 21(4): 276-280. https://doi.org/10.2307/1511173

Kazemi, p., (2015). The ideal model of the individual training program in line with individual social empowerment of mentally retarded adults, the second international congress of community empowerment in the field of counseling, *family and Islamic education, Tehran, Center* for the empowerment of cultural and social skills of society. [in Persian]

Koh M., Shin S. (2017). Education of students with disabilities in the USA: Is Inclusion the answer? *International Journal of Learning, Teaching and Educational Research*, 16(10): 1-17. https://doi.org/10.26803/ijlter.16.10.1

Nasaian, A. & Asadi Gandmani, R., (2015). The effectiveness of social skills training on the behavioral problems of adolescents with mental retardation. *Rehabilitation Quarterly*, 17(2): 166-158. [in Persian] https://doi.org/10.21859/jrehab-1702158

Ranjbar, H., Haqdoost, A., Salsali, M. & Khoshdel, A. (2011). Sampling in qualitative research: a guide for getting started. Health and Military Science Research, 2(3): 238-250 [in Persian]

Sincer, I., Severiens, S. & Volman, M. (2019). Teaching diversity in citizenship education: Context-related teacher understandings and practices. Teaching and Teacher Education, 78: 183-92. https://doi.org/10.1016/j.tate.2018.11.015

Sobhani-nejad, M., Najafi, H., Jafari Harandi, R., (2017). Analysis of the position of the basic components of citizenship education in the content of elementary school social studies textbooks, *teaching and learning researches (behavior science)*. 15(1): 67-78. [in Persian]

Somerwill, L., & Wehn, U. (2022). How to measure the impact of citizen science on environmental attitudes, behaviour and knowledge? A review of state-of-the-art approaches. *Environmental Sciences Europe*, *34*(1), 1-29. https://doi.org/10.1186/s12302-022-00596-1

Tianyu J, Meng L (2020) Does education increase pro-environmental willingness to pay? Evidence from Chinese household survey. *J Cleaner Prod* 275:122713. https://doi.org/10.1016/j.jclepro.2020.122713

Van Brussel, S., & Huyse, H. (2019). Citizen science on speed? Realising the triple objective of scientific rigour, policy influence and deep citizen engagement in a large-scale citizen science project on ambient air quality in Antwerp. *Journal of Environmental Planning and Management*, *62*(3), 534-551. https://doi.org/10.1080/09640568.2018.1428183

Van den Akker, J. J. H., Fasoglio, D., & Mulder, H. (2010). A curriculum perspective on plurilingual education. Enschede: Council of Europe.

Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterising and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. *BMC medical research methodology*, 18(1), 1-18. https://doi.org/10.1186/s12874-018-0594-7

Wehn, U., Gharesifard, M., Ceccaroni, L., Joyce, H., Ajates, R., Woods, S., ... & Wheatland, J. (2021). Impact assessment of citizen science: state of the art and guiding principles for a consolidated approach. *Sustainability Science*, *16*(5), 1683-1699. https://doi.org/10.1007/s11625-021-00959-2

Zigler, E. (1999). *The individual with mental retardation as a whole person. Personality development in individuals with mental retardation*, ed. E. Zigler & D. Bennett-Gates, 1-16.