# Identification and Explanation of the Current Status of Evaluating Physical Education Curriculum of the Primary Schools to Present and Validate an Optimal Model 

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#### Abstract

Purpose: The objective of the present study was to identify and explain the current status of evaluating physical education curriculum of the primary schools to present and validate an optimal model. Methodology: The present study is applied in terms of purpose and descriptive-exploratory in terms of nature and the data were collected using Delphi method (interview with experts). The statistical population of the study included 10 experts in the field of primary school physical education in Lorestan Province who were selected selectively by purposeful sampling. Using Delphi method, after conducting the interview to ensure the validity of the data and results, research data were collected. The data collection tool using Delphi method was interviews with experts in the field of physical education, those involved and executive planners in the field of curriculum planning of the General Directorate of Education of Lorestan Province. For data analysis, Smart PLS software was used to identify the variables. In addition to mean comparison of values and standard deviation, Kendall's Coefficient of Concordance by SPSS software was used to determine the degree of consensus among panel members. Findings: The study results showed that 9 important elements of evaluating the physical education curriculum from the perspective of experts included objective, content, learning references, learning activities, implementation method, evaluation method, grouping, time and space. The model obtained from Delphi analysis and the view of experts is also presented. Conclusion: Evaluation makes it possible to improve curricula. Therefore, in the definition of curriculum evaluation, there is an orderly search for judging and agreeing on the value of a curriculum, in order to improve it to reduce the gap between current and optimal results. The study results can help physical education planners and teachers improve the physical education curriculum.


Keywords: Evaluation, Curriculum, Physical Education, Optimal Model, Current Status

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## Introduction

One of the factors affecting the systematic development of education and improving its quality is the curriculum. The curriculum is the core of all programs, and the center of all educational activities that can be described as the beating heart of the educational system. The role of curriculum planning in education is to provide experiences to develop the required competencies and skills of students so that they can identify problems and find their solutions. The educational or curriculum programs should be designed according to the real needs of the users of this service, and the educational objectives should be related to the scientific needs of the users of this service (Fathi and Ajargah, 2011). Those familiar with the real world of the curriculum find Barrow's (1985) description of curriculum research understandable and interpretable. This description first shows that curriculum research is related to a set of practical activities that focus on forming, expressing, justifying, and implementing curricula. These curriculum activities deal with decision-making on a variety of topics, which in turn leads to the development of semantic (conceptual) and practical guidelines for the management of these curricula. If these choices are to be made consciously, they should rely on thorough understanding of the study results related to the subject of decisions (C Short, 1991; translated by Mehr Mohammadi et al., 2009: 10). Curriculum evaluation is the process of investigating the value and competence of the curriculum. Study of the value and competence includes both specific elements and aspects of the curriculum and the curriculum as a whole. Curriculum planning requires quality review and control. Therefore, it is required to make the required corrections in the curriculum or its components by investigating all the dimensions and elements of the curriculum (Tyler, translated by Taghi Pourzahir, 2009). Curriculum development is basically a human activity that has certain complexity and delicacy, so it cannot be independent of qualitative review and continuous improvement. Providing quality curricula is one of the ideals of any educational system (Hall, 2014) and the high quality of the curriculum requires continuous evaluation. Of course, the more sensitive the subject of evaluation and effect on life, the more accurate and based on more rational and defined principles and criteria (Lippe, Bekcer, Jones and Carter, 2017). Therefore, curriculum planning should be reviewed and quality controlled. Before formulating objectives, content, and methods, educational needs should first be considered. Investigating educational needs and even reviewing this process is in the realm of educational evaluation. In addition, when the needs are identified, the objectives, content, methods and implementation mechanism of the program should be determined. Curriculum planning is done from the beginning to the end in the context of evaluation. For this reason, a central role should be given to evaluation (Fathi Vajargah et al., 2018).
This also applies to the evaluation of the primary school physical education curriculum because the field of learning physical education and health is one of the eleven fields of learning the national curriculum that seeks to establish complete physical, mental, emotional health and provide the required conditions to identify the correct methods of physical activity, improve physical abilities, explain healthy recreational methods, promote health and the principles of healthy living, prevent diseases, disorders, physical disabilities and empower people to control their behavior and maintain health (Physical Education Course Guide, 2007).
Regarding the importance of physical education course in the educational system and the need for children and adolescents to address it, its coordination and coherence with other courses in the school curriculum has increased. The approach to developing physical education programs in recent years has been strategic leading to the link and closeness of this course with other courses. In the strategic approach, first the perspective of this lesson is formulated and accordingly, the next stages are considered (Oliver, Oesterreich and Aranda, 2015).
Therefore, given that health is the most important asset of every human life; physical activity is an important part of every person's life and through education and educational modernization in designing and compiling curriculum content, special attention should be paid to the importance of physical activity in schools and planning for the health of the next generation and make it a part of daily life. Also, since most studies have been conducted in the field of physical education; the status of physical activity in schools, the status of physical education course, the position of physical education and / or people's views, and the subject of the current status of evaluating the physical education curriculum of the primary school curriculum, or presenting
an optimal model in this regard has been explored less in programs and / or textbooks. In addition, due to the importance of physical activity and related concepts, it is required to review and analyze the existing content of textbooks as the most important element of education to determine the degree of attention to each of the given concepts. Using this approach, the objective of the present study is to identify the current status of evaluating the physical education curriculum of the primary school to present and validate an optimal model. Physical education, as one of the disciplines of education, plays an important role in achieving its objectives. In addition to the above, inactivity due to machine life has led to some musculoskeletal abnormalities, overweight and reduced respiratory volume in students. Neglect of obesity, especially in children, is one of the most important and common causes of diseases such as cardiovascular diseases, which in addition to threatening the general health of students, imposes excessive medical costs on society. Therefore, paying attention to physical education and teaching a healthy lifestyle as a factor of prevention, not only reduces the cost of treatment, but also prevents the occurrence of musculoskeletal abnormalities. On the other hand, according to the study results and the positive relationship between students' academic achievement and physical activity, the need to pay attention to school physical education has doubled in importance (Harandi et al., 2017).
Psychologically, physical education has positive effects such as reducing anxiety and stress, reducing depression and aggression and increasing self-confidence, self-esteem, positive self-concept, and vitality in students. Socially, physical education promotes social relations, responsibility, leadership, teamwork, hope for the future and life expectancy. Socially, physical education is part of the student's emotional and social experiences in the form of activities and plays. Physical education not only meets the need for interaction and social communication, but also contributes to the creation of values related to a good and balanced life (Physical Education Course Guide, 2007).
Regarding the importance of physical education course in the educational system and the need for children and adolescents to address it, its coordination and coherence with other courses in the school curriculum has increased. The approach to developing physical education programs in recent years has been strategic, and this has led to the connection and closeness of this course with other courses. In the strategic approach, first the perspective of this lesson is formulated and accordingly, the next stages are considered. Education through activities and plays is a clear vision for the primary school physical education lessons. Determining basic approaches such as physical fitness, activity, active lifestyle and setting content standards and learning accordingly in the primary school is a complete and comprehensive look at this field. If the curriculum elements are directed to one of the references, different patterns of the curriculum can be identified. Models of developmental physical education, humanism, physical fitness, physical education training, kinesiology studies, education through play, self-knowledge and education as the stages of development are among the main models of physical education curriculum design (Oliver, Oesterreich and Aranda 2015).
Bagheri (2016) has investigated the compliance of the physical education curriculum intended, implemented and obtained in the fifth grade of the primary school in Birjand. The results showed moderate and poor compliance between the implemented and intended curriculum of the fifth grade of the primary school in the components of the teaching and evaluation method, and the components of cognitive, attitudinal and skill objectives, respectively. The results showed poor compliance between the acquired curriculum and the intended curriculum of the fifth grade of the primary school in the components of cognitive, attitudinal and skill objectives, and compliance with the implemented curriculum in the obtained curriculum.
Fatemeh Igdari (2017) conducted comparative study on the status of general physical education courses 1 and 2 in Iran's higher education with Germany, Australia and Canada. The study results showed that using the library method, a significant difference was between objectives and content, educational duration, place of study, sports equipment used and the method of evaluation of Iranian higher education physical education course with Germany, Australia and Canada.
Parsaian (2017) in a study investigated the evaluation of the quality of physical education curriculum in the primary schools in Meybod. The study results showed that for the general objectives of physical education, students' attention and interest in physical education, teamwork and increasing self-confidence and creating a strong, cheerful and healthy spirit in the present and future generations have played a significant role. Also
for the specific objectives, physical abilities and conditions, such as the strength and rate of using agility and coordination, the interest of physical education teachers in educational activities and attention to games and sports have played an important role.
Hosseinbar and Saadatmand (2016) in a study entitled "position of physical education curriculum in the primary school" emphasizing the elements of the curriculum, showed that the main objective of the physical education curriculum in primary school was to help develop children's personality, prepare them for social life and meet their physical and mental needs through physical activity to meet their age needs.
Lynch (2015) has published International Criteria for Physical Education and School Sports in which the criteria of efficiency and effectiveness of activities, knowledge and application of concepts of activities, increasing physical fitness, health of active physical lifestyle, and individual-social and cultural behaviour are discussed.
The American Primary School Curriculum Guide (2014) emphasizes the active lifestyle as the primary approach to the primary school physical education and believes that through the serious participation of students for at least 150 minutes during the week, the objectives of Physical education will be achieved. In addition to the active lifestyle approach, the program also emphasizes physical, personal, social, and cultural activity approaches.
You (2011) in South Korea investigated the physical education curriculum from the perspective of sports teachers in four fields of 1) personal barriers, 2) environmental barriers, 3) professional barriers and 4) institutional barriers in physical education course and through the results the nature of the curriculum was shown to change and provide a new curriculum at the national level.
In a study, Hartmann and Marshall (1990) investigated the status of physical education in schools around the world with the support of the International Olympic Committee. The study results were presented based on literature review and questionnaire from 126 countries and independent education regions in the World Summit on Women in 1999.
McKenzie and Lounsbery (2009) designed a standard model of physical education for public schools. In order to meet the five criteria in primary school in each grade level, the criteria were listed in five concepts of body movements, body management, locomotor movements, manipulative skills, and rhythmic and regular skills.

## Methodology

The present study is applied in terms of purpose and descriptive-exploratory in terms of nature and the data have been collected using Delphi method (interview with experts). The statistical population of the present study consisted of 10 professors, researchers and experts in the field of the primary school physical education in Lorestan Province who were selected selectively and purposefully. Using Delphi method, after conducting the interview to ensure the validity of the data and results, three basic measures were taken: data implementation and resolve differences by reviewing the interviews. At the second stage, in order to ensure the validity of the coding, the categories formed and named by the researchers were reviewed. Finally, by applying some of the opinions of those involved and resolving differences, the consensus was made, and the final categories were formed and named. Data collection tools in the documentary section included fish taking through the study of available scientific and specialized references, international references and research; and interviews with experts in the field of physical education and those involved and executive planners in the field of curriculum planning in Lorestan Province in Delphi section. Also, the validity of the research tool has been confirmed using the formal validation method and the approval of experts.
Results


Figure 1. Conceptual model of the primary school physical education curriculum evaluation
In this section, to answer the research questions, data related to each stage were collected and the research questions were answered using appropriate methods.
Question 1: What is the current state of evaluation of the physical education curriculum (evaluation of the curriculum guide, educational materials, and practical implementation (pilot implementation and final implementation) at different levels)?
The question that arises at this stage is: What are the factors (components) of the evaluation of the primary school physical education curriculum? To find the answer to this question, first a number of factors that may be effective on evaluating the primary school physical education curriculum were extracted from literature. In this section, the process of localization of the evaluation model of the physical education curriculum of the primary school is discussed with the method of academic experts:

Table 1. Identification of factors (components) of the evaluation of the primary school physical education curriculum based on the study of theoretical principles, literature review and expert opinion

| No. | componen | and sub-component |
| :---: | :---: | :---: |
| 1 | Objective element | increasing students' awareness of sports importance in life |
| 2 |  | increasing students' spirit of participation in group and team sports |
| 3 |  | increasing students' awareness of different sports games |
| 4 |  | increasing the spirit of positive role modeling and avoiding antisocial behaviors |
| 5 |  | increasing life skills (individual and social) |
| 6 |  | increasing students' sense of responsibility |
| 7 |  | increasing students' self-confidence |
| 8 |  | divergence in students towards social deviations |
| 9 |  | increasing the spirit of participation and teamwork in students |
| 10 |  | increasing the spirit of vitality and intimacy among students |
| 11 |  | increasing the power of choice in students |
| 12 |  | creating and increasing a permanent interest in movement and play |


| 13 |  | training skills related to shaping movements, body awareness, location perception, and etc. |
| :---: | :---: | :---: |
| 14 |  | developing basic skills such as reaction, spatial orientation, rhythmic movements, and etc. |
| 15 |  | increasing endurance, strength and speed |
| 16 |  | increasing students' interest and positive attitude towards physical education lessons |
| 17 |  | creating a positive self-image and realistic estimation of students' abilities |
| 18 |  | shaping sports activities correctly in game practice and competition |
| 19 |  | learning to apply health behaviors |
| 20 |  | enabling students to actively shape sports activities at school and in life |
| 21 |  | developing considerate behaviour in nature, the environment and when exercising |
| 22 | Element of Content | specific and educational content |
| 23 |  | content preparation according to capability |
| 24 |  | enjoyable and attractive to students |
| 25 |  | content preparation based on tangibility for students |
| 26 |  | content preparation with emphasis on improving life skills |
| 27 |  | content preparation according to informal conditions |
| 28 |  | content preparation with emphasis on solving social, political and personal problems |
| 29 |  | participation of students, teachers and parents in content development |
| 30 |  | content preparation according to the needs and requirements of urban and rural students |
| 31 |  | Content preparation according to the objective and nature of sports activities |
| 32 |  | content preparation with emphasis on topics |
| 33 | Learning resources | educational films and animations |
| 34 |  | educational computer games |
| 35 |  | educational multimedia |
| 36 |  | Internet |
| 37 |  | television |
| 38 |  | educational software |
| 39 |  | Written literature (books, magazines, and etc.) |
| 40 |  | drawing and educational exhibitions and slides ${ }^{\text {a }}$ |
| 41 |  | educational symbols such as signboards |
| 42 |  | educational models and crafts - radio |
| 43 | Element <br> of <br> learning <br> activities | playing and playing a role by students like theater |
| 44 |  | asking a question or problem (creating a mental preoccupation for the student) |
| 45 |  | use of computer (preparation of software, slides and multimedia by the student) |
| 46 |  | defining and discussing personal experiences through storytelling by students (idea presentation by the teacher and student) |
| 47 |  | playwriting, essay writing and magazine preparation by the student |
| 48 |  | introducing references by the teacher and the researcher, collection and study by the student |
| 49 |  | preparing a wall newspaper by students |
| 50 | Execution method element | sports activities in groups and encouraging participation and consultation of students (participatory method) |
| 51 |  | sports activities through holding training camps (scientific tour method) |
| 52 |  | sports activities through student activity and activation (active method) |
| 53 |  | sports activities in practice and in groups |


| 54 |  | sports activities according to the interests, views and abilities of students |
| :---: | :---: | :---: |
| 55 |  | sports activities through students' homework and problem-solving |
| 56 |  | sports activities through students' homework to conduct research (class project method) |
| 57 |  | deciding on implementation methods according to the nature of sports activities |
| 58 |  | sports activities in a debating manner and asking and answering questions (Socratic method) |
| 59 |  | voluntarily and voluntarily participating in sports activities |
| 60 |  | sports activities in the form of trial and error by students |
| 61 |  | sports activities with emphasis on teacher teaching and student listening (lecture method) |
| 62 | Element of evaluation method | mixed evaluation of activities (quantitative and descriptive) |
| 63 |  | flexible evaluation of activities and according to the nature of the activities |
| 64 |  | qualitative (descriptive) evaluation of activities |
| 65 |  | practical evaluation based on students' performance observation (non-pencil and paper evaluation) |
| 66 |  | intangible and indirect evaluation |
| 67 |  | group evaluation based on students' performance |
| 68 |  | considering the needs and abilities of students for evaluating activities |
| 69 |  | evaluation through creating competition between students |
| 70 |  | quantitative evaluation of activities |
| 71 | Grouping element | grouping based on students' interests, abilities and needs |
| 72 |  | flexible grouping and changing the composition of groups in different activities |
| 73 |  | grouping according to students, teacher and the nature of activities |
| 74 |  | grouping based on the nature of the activities (e.g. grouping of joint activities) |
| 75 |  | heterogeneous presence of students in each group |
| 76 |  | grouping based on the knowledge of school trustees, especially teachers |
| 77 |  | fixed grouping and no change in the composition of groups |
| 78 | Element of time | timing of activities formally and informally |
| 79 |  | timing of activities (formally, semi-formally, informally or simultaneously) with respect to the nature and priority of activities |
| 80 |  | use of informal times outside of school |
| 81 |  | establishing activities during the official training time |
| 82 |  | use of free and informal time at school (times between formal and school hours) and timing of activities during the holidays and students' leisure time |
| 83 | The element of space | decision-making indicators about the space and location of curriculum according to the nature of activities |
| 84 |  | use of out-of-school places (camps, educational places and etc.) |
| 85 |  | simultaneous use of the school and places outside the school and the use of school interior space |

At this stage, by reviewing the existing documents in the Educational Research and Planning Organization, and the textbook planning and writing office, the current status of the evaluation system in the curriculum (evaluation of the physical education curriculum guide, educational materials, and practical implementation (pilot implementation and final implementation) has been investigated in different grades using documentary method. Also, valid researches, articles and sites have been used, the results of which are as follows.

1. Providing physical and motor fitness of students in the primary school is considered as an essential and important part of the comprehensive preparation of students. In this regard, since 1997 the textbook
planning and writing office took good measures using the opinion of experts of general education departments, and teachers, but stopped for a variety of reasons, including inability to implement, and a number of teachers continue to remove it from the school curriculum.
2. The current status of the elements of the primary school physical education curriculum

The objectives of the physical education curriculum emphasize the three fields of required knowledge, skills and attitudes.

Required knowledge
A. Basic movements: In this section, the correct forms of basic movements i.e. walking, running, and jumping are investigated.
B. Physical fitness: In this section, general endurance (cardiorespiratory), flexibility, positional endurance (muscle) and strength have been considered.
C. Nutrition and health: In this section, the close relationship between exercise and nutrition is reminded and the exact time of eating before exercise, the role of water and nutrients in the activities of athletes is stated.
D. Safety in sports: In sports places, environment, tools, opponents when competing as well as training and playing conditions may have many effects on the health of athletes.
E. Knowledge of sports disciplines helps students to guide sports talents.
F. Objectives of physical education: The objectives of the physical education course are presented in the form of tables in the teacher's handbook for different educational grades in the form of cognitive and skill objectives and concepts.

## Required skills

The two main parts of skills in physical education are basic movements and physical fitness. In the fourth, fifth and sixth grades, basic movements give way to basic sports skills. However, physical fitness as a basic factor will have a special position in strengthening the physical health and motor function of students in all grades.

## Required attitudes

Knowledge classes provide more opportunities for students to form attitudes.
Methods of evaluating academic achievement
Since the objectives in the physical education curriculum are set in three areas of knowledge, attitude and skills, the evaluation of students' academic achievement in these three areas is emphasized and tables in the curriculum guide for each grade in three fields of skills, attitudes and knowledge. Evaluation of students' academic achievement in these three fields is emphasized and tables are prepared in the textbook guide for each grade in three fields of skills, attitude and knowledge. The field of skills had the dimensions of basic movements and physical fitness. The field of knowledge had the dimensions of basic movements, physical and fitness, health, nutrition, and safety in sports, which include:
Observation checklist of motor and attitude behaviour, verbal and written questions of theoretical and abstract data and standardized tests of physical fitness evaluation

- Basic sports skills (basic movements): acquiring skills in speed running and relief preliminaries, and jumping and throwing preliminaries
- Physical fitness: development and improvement of cardiorespiratory endurance, flexibility, muscle strength and endurance, agility, and balance and coordination
- Health and nutrition in sports: understanding the effect of optimal nutrition and sports on health and individual and general hygiene in sports
- Safety in sports: understanding physical injuries and safety in sports
- Skills in performing local sports games: observing the emotional, social and moral principles in sports Methods of selecting a physical education teacher

The declared policies of education in recruitment are based on having a bachelor's degree. Specific characteristics of the primary school physical education teachers are:

1. Having at least a bachelor's degree in physical education

Note: In the absence of a bachelor's degree in physical education, the employment of a teacher with Associate degree in physical education and / or an unrelated bachelor's teacher is not prohibited by passing the relevant specialized courses).
2. Familiarity with the content of the primary school curriculum
3. Not having a limb defect that prevents him from performing his duty
4. Required physical ability to perform the desired skills and activities in the program
5. Required technical ability to demonstrate basic skills and physical activities
6. Having the desired fitness and weight
7. Belief in the effectiveness of physical activities and physical fitness on health and wellness
8. Belief in physical activities as a means to express students' development and improve their learning
9. Having the required knowledge and ability to combine other educational materials with physical education and vice versa.

Time of physical education curriculum
The working hours of the primary school course are 25 hours in all grades, and the time of each session in the first, second and third grades is 45 minutes and 50 minutes in the fourth, fifth and sixth grades. The primary school physical education course in the Iranian curriculum is 2 hours per week
Location of physical education curriculum
Currently, it is not possible for students to do physical activity in any place other than the school yard. It should be noted that only some schools have a gym and other schools only use the school yard for sports activities which also has problems due to excessive traffic of the client and other students
Equipment required for physical education curriculum
The minimum basic requirements (equipment) for running an hour of physical education curriculum in the primary school and the equipment will depend on the number of students in the class (standard rubber mini ball (basketball, volleyball, and handball), standard rubber volleyball, tennis ball and rubber ball in small size, solo rope, roof rope, sports rackets, nets, baskets $(15 \times 15)$ and a number of boards for aiming, beams in different sizes for relief run, a number of plastic bottles for targeting, balance beam, metal cabinets (for storing equipment), linen bags for carrying balls, toolbox, wheeled box for carrying equipment, obstacle, Gymnastics mat, short parallel, horizontal ladder, a number of rings (Hula hoop, and tire), stairs, a number of boxes with different heights to climb and jump, Swedish design balance board, basketball board, handball or mini-soccer gate, volleyball tour beam and badminton net holder).
In the second part of the teacher's handbook, physical education subjects are presented for different grades, which are usually in the form of 25 lessons, which more than 21 lessons emphasize on skills and less than 4 sessions in the field of knowledge.

Educational policy and management
There is a national curriculum in Iran. The National Curriculum, as one of the main sub-systems of the Fundamental Transformation Document and as a comprehensive learning plan, provides the basis for comprehensive, extensive and profound change in educational concepts and content. This transformational program, with the provision of diverse and comprehensive educational opportunities, seeks to enable the students to acquire the necessary competencies to understand and improve the status based on the Islamic standard system, and help them to develop and enhance their identities continuously.
The mission of the national curriculum is to provide appropriate mechanisms for designing, formulating, implementing and evaluating curricula at the national and local levels provided based on the philosophy of Islamic education, and educational and training concepts to children and adolescents in a structured system depicting a cheerful and loving school environment. Fortunately, with the efforts of those involved, the first mapping of this transformational program was prepared in February 2008. Simultaneously with the review
and approval of the document of fundamental change by the Higher Education Council (December 2009) and in view of the solution of the 11 mentioned documents, the review and correction of the national curriculum was accelerated and by 2011 once again, criticized by experts, principals and teachers and completed to be provided to the Higher Education Council. In the Secretariat of the Supreme Council, a working group including experts of the Council and a group of experts of the Educational Research and Planning Organization, while adhering to the main principles of the program, including the pattern of objectives, elements of the four fields, reviewed, corrected and prepared the new document based on the principles and concepts of the fundamental transformation document of education. Coordination meetings for understanding and consensus on the document principles were held, which was also emphasized, and the document was finalized. Finally, after the meeting, it was approved by the Higher Education Council, and the added to the history of education in the country.
In Iran, the national curriculum is considered as a document that determines and explains the major role of the curriculum and the framework of the country's curriculum planning system in order to achieve the objectives of education in the Islamic Republic of Iran. In fact, within the framework of this document, it is expected that the ultimate goal of the education system, which is "achieving a higher level of education close to God, the divine caliphate, the worship of God and a good life". In the national curriculum, an attempt has been made to use the framework in the Table below for targeting. This framework consists of two dimensions of elements and fields. The elements of the framework (thinking and reasoning, faith, science, action and morality) observe the human existence, levels of attention (relationship with self, God, and creation) and relationships of each human being affecting and forming existence. In the document of the National Curriculum of the Islamic Republic of Iran, physical education is considered as an interdisciplinary field of learning. In other words, in this document, physical education is not considered as a field of independent learning, but the field of health learning has been added to it (National Curriculum of the Islamic Republic of Iran approved by the 857-872 sessions of the Higher Education Council (Feb. 28, 2012 to Sep. 18, 2012).
3. Among training-learning methods, three traditional, revelatory and combined methods are emphasized.
4. In the second part of the teacher's handbook, physical education curriculum titles are presented for different grades, which are usually in the form of 25 lessons, emphasizing skills in more than 21 lessons, and less than 4 sessions in the field of knowledge.
5. Available references do not mention individual differences that are fundamental and important.

6 . Lack of attention to the macro and strategic approach when developing a curriculum for physical education curriculum in Iran
7. Training various sports is the main approach of the existing program.
8. Despite the progress and development of physical education curricula in the world and the continuous use of curriculum theories and design patterns, the physical education curriculum in our country has not been accompanied by scientific progress.
9. If we divide studies on evaluation into several categories, they can be divided into question-oriented, objective-oriented, experimental, evaluation of other models and evaluation of a new model. The study results of the available references showed that most studies on evaluation focused on the existing success of the curriculum instead of determining its value and status in Iran regarding the connection with the physical education curriculum of the primary school which is quite significant.
10. Most studies on evaluation in Iran are based on question-based evaluation models; models introduced by Stafel Beam as quasi-evaluation approaches. In these studies, the emphasis has been on answering explicitly questions instead of measuring the value of a program as a whole. Therefore, they have been less concerned with providing criteria for evaluation, and these studies have been conducted more in order to achieve the success of programs. Even the applied evaluation model is designed in such a way that finally leads to the recognition of the success of the program (Musapour, 1997).
11. Another important point in relation to studies on evaluation in Iran is that despite the passage of several years of change in the physical education curriculum, no study has been conducted that consistently evaluates the value of the physical education curriculum in primary school. Therefore, since the value of a curriculum
in the group is the value of its constituent elements. There are various limitations in the models proposed in the field of educational evaluation, such as dependence on a particular culture and bias in the design and selection of criteria.
12. Non-compliance of approved programs with facilities, equipment, space, place, teaching aids and etc.

Question 2: What is the optimal model for evaluating the physical education curriculum and what characteristics should it have according to the theoretical principles and opinions of experts?
After the stages of Delphi method and determining the research indicators by the elites, finally, the evaluation model of the physical education curriculum of the primary school in this study is as follows:


Table 2. Summary of the final optimal research model

| No. | component | rank | sub-component | rank |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Objective element | 1 | increasing students' awareness of sports importance in life | 3 |
| 2 |  |  | increasing students' spirit of participation in group and team sports | 8 |
| 5 |  |  | increasing life skills (individual and social) | 8 |
| 12 |  |  | creating and increasing a lasting interest in activities and plays | 8 |
| 10 |  |  | increasing the spirit of vitality and intimacy of students | 3 |
| 7 |  |  | increasing students' self-confidence | 8 |
| 8 |  |  | divergence of students towards social deviations | 1 |
| 9 |  |  | increasing the spirit of participation and teamwork of students | 2 |
| 14 |  |  | developing basic skills such as reaction, spatial orientation, rhythmic movements and balance movements. | 3 |
| 13 |  |  | training skills related to movement formation, body awareness, understanding of place and playmate | 3 |
| 15 |  |  | increasing endurance, strength and speed | 3 |
| 16 |  |  | increasing interest and positive attitude towards physical education curriculum, creating a positive self-image and realistic estimation of their abilities | 8 |
| 18 |  |  | shaping sports activities in training and competition correctly | 8 |
| 3 |  |  | increasing students' awareness of different sports games | 8 |
| 4 |  |  | increasing the spirit of positive role modeling and avoiding antisocial behaviors | 8 |
| 21 |  |  | creating considerate behavior in nature, the environment and when exercising. | 8 |
| 22 | Content element | 3 | specific and educational content | 2 |
| 24 |  |  | enjoy and attractiveness for students | 2 |
| 25 |  |  | content preparation according to tangibility for students | 1 |
| 26 |  |  | content preparation with emphasis on improving life skills | 2 |
| 28 |  |  | content preparation with emphasis on solving social, political and individual problems | 6 |
| 29 |  |  | participation of students, teachers and parents in content preparation | 2 |
| 30 |  |  | content preparation according to the needs of urban and rural students | 6 |
| 31 |  |  | content preparation according to the objective and nature of sports activities | 6 |
| 33 | Learning <br> Resources <br> Element | 4 | educational films and animations | 3 |
| 35 |  |  | educational multimedia | 1 |
| 36 |  |  | Internet | 1 |
| 37 |  |  | television | 3 |
| 38 |  |  | educational software | 3 |
| 40 |  |  | educational image, drawing, exhibitions and slides | 3 |
| 41 |  |  | educational signs such as signboards | 3 |


| 43 | Element of learning activities | 2 | playing and playing a role by students such as theater | 1 |
| :---: | :---: | :---: | :---: | :---: |
| 44 |  |  | ask a question or problem (creating a mental preoccupation for the student) | 2 |
| 45 |  |  | use of computer (software, slides and multimedia by the student) | 3 |
| 48 |  |  | introducing resources by the teacher and the researcher, collecting and studving by the student | 4 |
| 50 | Implementation method | 8 | sports activities through students' homework of problem-solving | 2 |
| 51 |  |  | sports activities through students' homework to conduct research (class project method) | 5 |
| 53 |  |  | sports activities in practice and in groups. | 2 |
| 54 |  |  | sports activities according to interests, opinions and abilities of students |  |
| 57 |  |  | decision-making on implementation methods according to the nature of sports activities | 2 |
| 58 |  |  | sports activities in a debating manner and asking and answering questions (Socrates method) | 5 |
| 60 |  |  | sports activities in the form of trial and error by students | 5 |
| 62 | Element evaluation method | 4 | mixed evaluation of activities (quantitative and descriptive) | 2 |
| 63 |  |  | flexible evaluation of activities according to the nature of activities | 4 |
| 64 |  |  | qualitative (descriptive) evaluation of activities | 1 |
| 66 |  |  | intangible and indirect evaluation | 3 |
| 69 |  |  | evaluation through creating competition between students | 4 |
| 70 |  |  | quantitative evaluation of activities | 4 |
| 71 | Grouping element | 5 | grouping based on students' interests, abilities and needs | 1 |
| 72 |  |  | flexible grouping and changing the composition of groups in different activities | 2 |
| 73 |  |  | grouping according to students, teacher and the nature of activities | 2 |
| 75 |  |  | heterogeneous presence of students in each group | 4 |
| 76 |  |  | grouping based on the knowledge of school trustees, especially teachers | 4 |
| 77 |  |  | fixed grouping and no change in the composition of groups | 4 |
| 78 | Element of time | 6 | timing of activities formally and informally | 1 |
| 79 |  |  | timing of activities (formally, semi-formally, informally or simultaneously) with respect to the nature and priority of activities | 2 |
| 80 |  |  | use of informal times outside of school | 4 |
| 82 |  |  | use of free and informal time at school (times between formal and school hours) and timing of activities during the holidays and students' leisure time | 2 |
| 83 | The element of space | 7 | decision-making indicators about the space and location of curriculum according to the nature and requirements of activities | 1 |
| 84 |  |  | use of out-of-school places (camps, educational places and etc.) | 1 |
| 85 |  |  | simultaneous use of the school and places outside the school and the use of school interior space | 3 |

## Consensus of experts

In order to confirm the validity of the study, the response rate of experts in each Delphi round should not be less than $70 \%$, and if the rate of change in scores given by experts during two consecutive rounds is less than $15 \%$, consensus on the subject has been reached. In the fourth round, the comments of each member
in the previous round were shared with the others and they were again asked to evaluate each element. After this round and reaching a consensus, Delphi method was done by completing and finalizing the stages and activities of producing distance educational content using social network platforms. In addition to comparing mean and standard deviation values, Kendall's Coefficient of Concordance was used to determine the degree of consensus among panel members. Kendall's Coefficient of Concordance is a measure of the degree of concordance and agreement between several rank categories related to $n$ objects or individuals. The value of Kendall's Coefficient of Concordance was calculated using SPSS software. Table 3 shows how to interpret the various values of this coefficient. It should be noted that for panels with more than 10 members, even very small values of Kendall's Coefficient of Concordance are significant.

Table 3. Interpretation of the value of Kendall's Coefficient of Concordance
value of Kendall's Coefficient of interpretation Confidence by factors
Concordance

| 0.1 | very poor consensus | - |
| :--- | :--- | :--- |
| 0.3 | poor consensus | low |
| 0.5 | mean consensus | mean |
| 0.7 | high consensus | high |
| 0.9 | very high consensus | very high |

Kendall's Coefficient of Concordance for panel members' responses to the importance of work processes, technology, participants, customers, products, services, and information was 0.735 for the second round, 0.893 for the third round, and 0.903 for the fourth round. Given that the number of panel members was more than 10 people ( 15 people for the second round, 15 people for the third round and 14 people for the fourth round), this value of Kendall's Coefficient of Concordance is quite significant. Since the value of Kendall's Coefficient of Concordance in the fourth round increased by only 0.01 compared to the third round. Given that the degree of consensus of the members in two consecutive rounds showed no significant growth; it is possible to end the repetition of Delphi rounds. On the other hand, the values of Kendall's Coefficient of Concordance show that in the second round there is a strong consensus, but in the third and fourth rounds there is a very strong consensus among the penalty members. Therefore, the model approved by the experts in the field of the primary school curriculum evaluation is such that the factors affecting the evaluation of the primary school physical education curriculum in the form of 9 dimensions include 1) the objective (including 17 indicators), 2) content (including 10 indicators), 3) learning references (including 7 indicators), 4) learning activities (including 4 indicators), 5) implementation method (including 7 indicators), 6) evaluation method (including 7 indicators), 7) grouping (including 7 indicators), 8) time (including 4 indicators) and 9) space (including 3 indicators) shown in Table 4-11.
According to the data analysis algorithm by Smart PLS software, to identify the variables (or in other words, to evaluate which of the nine main variables determined affects the evaluation of the primary school curriculum and can be selected as an influential factor) factor load values and $t$-value are used. Factor load values and t -values related to the main variables are presented in Table 4.

Table 4. Factor load values and $t$-value of the main variables of the research model

| component | dimension | factor <br> load | t-value | variable |
| :--- | :--- | :--- | :--- | :--- |
|  | objective | 0.918 |  |  |
|  | content | 0.870 | 23.784 | accepted |
| Evaluation of elementary school <br> physical education curriculum | learning references | 0.830 | 18.179 | accepted |
|  | learning activities | 0.691 | 10.121 | accepted |
|  | implementation method | 0.671 | 7.829 | accepted |
|  | evaluation method | 0.758 | 15.533 | accepted |


| grouping | 0.734 | 15.465 | accepted |
| :--- | :--- | :--- | :--- |
| time | 0.780 | 16.299 | accepted |
| space | 0.767 | 13.210 | accepted |

The results of Table 4 showed that the value of the significant coefficient $t$ related to the relationship between the variables of the objective, content, learning references, learning activities, implementation method, evaluation method, grouping, time and space and the evaluation of the primary school physical education curriculum at $95 \%$ confidence level was higher than 1.96. This indicated the significant effect of the variables of the objective, content, learning references, learning activities, implementation method, evaluation method, grouping, time and space and the evaluation of the primary school physical education curriculum. In the following, the indicators of each of the main variables are investigated.
Objective
Factor load values and t -value related to the objective indicators are presented in the Table below.
Table 5. Factor load values and t -value of the objective indicators

| index | factor <br> load | t-value | result |
| :--- | :--- | :--- | :--- |
| increase students' spirit of participation in group and team sports | 0.504 | 6.828 | accepted |
| increase students' awareness of different sports games | 0.577 | 5.060 | accepted |
| increase the spirit of positive role modelling and avoid antisocial <br> behaviours | 0.742 | 6.931 | accepted |
| increase life skills (individual and social) | 0.731 | 5.179 | accepted |
| increase the sense of responsibility of students | 0.465 | 8.277 | accepted |
| increase the spirit of participation and teamwork of students | 0.789 | 7.290 | accepted |
| increase the spirit of vitality and intimacy of students | 0.550 | 7.954 | accepted |
| increase the power of choice of students | 0.469 | 7.588 | accepted |
| create and increase a lasting interest in activities and plays | 0.508 | 4.087 | accepted |
| train skills related to movement formation, body awareness, understanding <br> of place and playmate | 0.515 | 5.110 | accepted |
| develop basic skills such as reaction, spatial orientation, rhythmic <br> movements and balance movements. | 0.667 | 3.559 | accepted |
| increase endurance, strength and speed | 0.690 | 6.099 | accepted |
| increase interest and positive attitude of students towards physical <br> education curriculum | 0.479 | 4.277 | accepted |
| create a positive self-image and realistic estimation of abilities of students | 0.521 | 5.236 | accepted |
| shape sports activities in training and competition correctly | 0.817 | 7.519 | accepted |
| enable students to actively shape sports activities at school and in life | 0.596 | 8.235 | accepted |
| develop considerate behaviour in nature, the environment and when <br> exercising | 0.582 | 6.933 | accepted |

The results of Table 5 showed that the value of the significant coefficient $t$ related to the relationship between the indicators of increasing students' spirit of participation in group and team sports, awareness of different sports games, the spirit of positive role modelling and avoiding antisocial behaviours, increasing life skills (individual and social), sense of responsibility, the spirit of participation and teamwork, the spirit of vitality and intimacy, the power of choice, creating and increasing a lasting interest in activities and plays, training skills related to movement formation, body awareness, understanding of place and playmate, developing basic skills such as reaction, spatial orientation, rhythmic and balance movements, endurance, strength and speed, interest and positive attitude towards physical education curriculum, creating a positive self-image and
realistic estimation of their abilities and correct shaping of sports activities in training and competition at $95 \%$ confidence level was higher than 1.96. This indicated the significant effect of indicators of increasing students' spirit of participation in group and team sports, awareness of different sports games, and the spirit of positive role modelling, avoiding antisocial behaviours, increasing life skills (individual and social), sense of responsibility, the spirit of participation and teamwork, the spirit of vitality and intimacy, the power of choice, creating and increasing a lasting interest in activities and plays, training skills related to movement formation, body awareness, understanding of place and playmate, developing basic skills such as reaction, spatial orientation, rhythmic and balance movements, endurance, strength and speed, interest and positive attitude towards physical education curriculum, creating a positive self-image and realistic estimation of their abilities and correct shaping of sports activities in training and competition. Therefore, all 17 indicators were identified as indicators of this dimension.
Content
Factor load values and t -value related to content indicators are presented in the Table below.
Table 6. Factor load values and t-value of content indicators

| index | factor <br> load | t-value | result |
| :--- | :--- | :--- | :--- |
| specific and educational content | 0.689 | 8.285 | accepted |
| content preparation according to capability | 0.554 | 3.649 | accepted |
| enjoy and attractiveness for students | 0.816 | 7.151 | accepted |
| content preparation according to tangibility for students | 0.704 | 3.789 | accepted |
| content preparation with emphasis on improving life skills | 0.530 | accepted |  |
| content preparation according to informal conditions (no restrictions in <br> the classroom) | 0.562 | 8.538 | accepted |
| content preparation with emphasis on solving social, political and <br> individual problems | 0.710 | 5.363 | accepted |
| content preparation according to the needs of urban and rural students | 0.743 | 4.638 | accepted |
| content preparation according to the objective and nature of sports <br> activities | 0.482 | 6.868 | accepted |
| content preparation with emphasis on topics | 0.768 | 7.746 | accepted |

The results of Table 6 showed that the value of the significant coefficient $t$ related to the relationship between specific and educational indicators of content preparation according to capability, enjoy and attractiveness for students, tangibility for students, emphasis on improving life skills, informal conditions (no restrictions in the classroom), emphasis on solving social, political and individual problems according to the needs of urban and rural students, objective and nature of sports activities and emphasis on topics at $95 \%$ confidence level was higher than 1.96. This indicated the significant effect of indicators of content preparation according to capability, enjoy and attractiveness for students, tangibility for students, emphasis on improving life skills, informal conditions (no restrictions in the classroom), emphasis on solving social, political and individual problems according to the needs of urban and rural students, objective and nature of sports activities and emphasis on topics at $95 \%$ confidence level. Therefore, all 10 indicators were identified as indicators of this dimension.
Learning references
Factor load values and t-value related to learning references are presented in the Table below.

Table 7. Factor load values and $t$-value of the indicators of learning references

| index | factor <br> load | t-value | result |
| :--- | :--- | :--- | :--- |
| educational computer games | 0.494 | 7.857 | accepted |
| educational multimedia | 0.838 | 5.184 | accepted |
| Internet | 0.579 | 5.090 | accepted |
| television | 0.559 | 4.911 | accepted |
| educational software | 0.622 | 5.167 | accepted |
| written literature (books, magazines, and etc.) | 0.717 | 8.370 | accepted |
| educational image, drawing, exhibitions and slides | 0.542 | 5.866 | accepted |

The results of Table 7 showed that the value of the significant coefficient $t$ related to the relationship between the indicators of educational computer games, educational multimedia, Internet, television, educational software, written literature (books, magazines, and etc.), and educational image, drawing, exhibitions and slides at $95 \%$ confidence level was higher than 1.96 . This indicated the significant effect of indicators of educational computer games, educational multimedia, Internet, television, educational software, written literature (books, magazines, and etc.), and educational image, drawing, exhibitions and slides at $95 \%$ confidence level. Therefore, all 7 indicators were identified as indicators of this dimension.
Learning activities
Factor load values and $t$-values related to indicators of learning activities are presented in the Table below.
Table 8. Factor load values and t -value of indicators of learning activities

| index | factor <br> load | $\mathrm{t}-$ <br> value | result |
| :--- | :--- | :--- | :--- |
| play and role-playing by the student such as theatre | 0.493 | 4.156 | accepted |
| playwriting, essay writing and magazine preparation by the student | 0.741 | 3.724 | accepted |
| introduction of references by the teacher and search, collection and study <br> by the student | 0.732 | 8.569 | accepted |
| preparation of wall newspaper by the student | 0.799 | 6.798 | accepted |

The results of Table 8 showed that the significant coefficient $t$ related to the relationship between the indicators of play and role-playing by the student such as theatre, playwriting, essay writing and magazine preparation by the student, introduction of references by the teacher and search, collection and study by the student and preparation of wall newspaper by the student at $95 \%$ confidence level was higher than 1.96. This indicates the significant effect of the indicators of play and role-playing by the student such as theatre, playwriting, essay writing and magazine preparation by the student, introduction of references by the teacher and search, collection and study by the student and preparation of wall newspaper by the student at $95 \%$ confidence level. Therefore, all 4 indicators were identified as indicators of this dimension.
Implementation method
Factor load values and $t$-value related to the implementation method indicators are presented in the Table below.

Table 9. Factor load values and $t$-value of indicators of the implementation method

| index | factor <br> load | t-value | result |
| :--- | :--- | :--- | :--- |
| sports activities as a group and participation and consultation of students | 0.619 | 8.380 | accepted |
| sports activities through activity and active students (active method) | 0.525 | 4.582 | accepted |
| sports activities according to interests, opinions and abilities of students | 0.519 | 7.136 | accepted |
| decision-making on implementation methods according to the nature of <br> sports activities | 0.488 | 5.310 | accepted |
| sports activities in a debating manner and asking and answering questions <br> (Socrates method) | 0.833 | 4.082 | accepted |
| voluntary participation in sports activities | 0.782 | 7.701 | accepted |
| sports activities in the form of trial and error by students | 0.532 | 4.998 | accepted |

The results of Table 9 showed that the value of the significant coefficient $t$ related to the relationship between the indicators of sports activities as a group and participation and consultation of students, through activity and active students (active method), according to interests, opinions and abilities of students, decisionmaking on implementation methods according to the nature of sports activities, in a debating manner and asking and answering questions (Socrates method), voluntary participation in sports activities, in the form of trial and error by students at $95 \%$ confidence level was higher than 1.96. This indicated the significant effect of sports activities as a group and participation and consultation of students, through activity and active students (active method), according to interests, opinions and abilities of students, decision-making on implementation methods according to the nature of sports activities, in a debating manner and asking and answering questions (Socrates method), voluntary participation in sports activities, in the form of trial and error by students at $95 \%$ confidence level. Therefore, all 7 indicators were identified as indicators of this dimension.
Evaluation method
Factor load values and t -value related to the evaluation method indicators are presented in the Table below.
Table 10. Factor load values and t-value of indicators of the evaluation method

| index | factor <br> load | t- <br> value | result |
| :--- | :--- | :--- | :--- |
| evaluation of activities in a mixed way (quantitative and descriptive) | 0.497 | 5.145 | accepted |
| evaluation of activities in a flexible way and considering the nature of <br> activities | 0.577 | 3.733 | accepted |
| evaluation of activities in a qualitative way (descriptive evaluation) | 0.806 | 5.826 | accepted |
| practical evaluation based on observation of students' performance (non- <br> pencil and paper evaluation) | 0.635 | 7.562 | accepted |
| intangible and indirect evaluation | 0.477 | 7.543 | accepted |
| group evaluation based on students' performance in the group | 0.829 | 6.467 | accepted |
| evaluation through creating a level of competition among students | 0.831 | 5.499 | accepted |

The results of Table 10 showed that the value of the significant coefficient $t$ related to the relationship between the indicators of evaluation of activities in a mixed way (quantitative and descriptive), in a flexible way and considering the nature of activities, in a qualitative way (descriptive evaluation), in a practical way based on observation of students' performance (non-pencil and paper evaluation), in an intangible and indirect way, in a group way based on students' performance in the group, by creating a level of competition among students at $95 \%$ confidence level was higher than 1.96. This indicated the significant effect of indicators of evaluation of activities in a mixed way (quantitative and descriptive), in a flexible way and considering the nature of activities, in a qualitative way (descriptive evaluation), in a practical way based on
observation of students' performance (non-pencil and paper evaluation), in an intangible and indirect way, in a group way based on students' performance in the group, by creating a level of competition among students at $95 \%$ confidence level. Therefore, all 7 indicators were identified as indicators of this dimension. Grouping element
Factor load values and t -value related to the grouping indicators are presented in the Table below.
Table 12. Factor load values and t -value of grouping indicators

| index | factor <br> load | t- <br> value | result |
| :--- | :--- | :--- | :--- |
| grouping based on students' interests, abilities and needs 0.637 5.139 | accepted |  |  |
| flexible grouping and changing the composition of groups in different <br> activities | 0.804 | 6.656 | accepted |
| grouping according to students, teacher and the nature of activities | 0.680 | 3.621 | accepted |
| grouping based on the nature of activities (e.g. grouping of joint activities) | 0.654 | 5.173 | accepted |
| heterogeneous presence of students in each group | 0.529 | 7.312 | accepted |
| grouping based on the knowledge of school trustees, especially teachers | 0.592 | 7.869 | accepted |
| fixed grouping and no change in the composition of groups | 0.565 | 7.943 | accepted |

The results of Table 12 showed that the value of the significant coefficient $t$ related to the relationship between grouping indicators based on students' interests, abilities and needs, flexible grouping and changing the composition of groups in different activities, grouping according to students, teacher and the nature of activities, grouping based on the nature of activities (e.g. grouping of joint activities), heterogeneous presence of students in each group, grouping based on the knowledge of school trustees, especially teachers, and fixed grouping and no change in the composition of groups at $95 \%$ confidence level was higher than 1.96. This indicated the significant effect of grouping indicators based on students' interests, abilities and needs, flexible grouping and changing the composition of groups in different activities, grouping according to students, teacher and the nature of activities, grouping based on the nature of activities (e.g. grouping of joint activities), heterogeneous presence of students in each group, grouping based on the knowledge of school trustees, especially teachers, and fixed grouping and no change in the composition of groups at $95 \%$ confidence level Therefore, all 7 indicators were identified as indicators of this dimension.
Time
Factor load values and t -value related to the time indicators are presented in the Table below.
Table 13. Factor load values and t -value of the time indicators

| index | factor load | t-value | result |
| :--- | :--- | :--- | :--- |
| formally (at school) and informally (out of school) | 0.771 | 4.733 | accepted |
| (formally, semi-formally, informally or simultaneously) with respect to <br> the nature and priority of activities | 0.785 | 8.572 | accepted |
| use of informal times outside of school | 0.585 | 6.339 | accepted |
| consideration of activities in the formal time of education | 0.742 | 5.606 | accepted |

The results of Table 13 showed that the value of the significance coefficient t related to the relationship between the timing indicators of activities formally and informally (formally, semi-formally, informally or simultaneously) with respect to the nature and priority of activities, the use of informal times outside of school and the consideration of activities in the formal time of education at $95 \%$ confidence level was higher than 1.96. This indicated the significant effect of the timing indicators of activities formally and informally (formally, semi-formally, informally or simultaneously) with respect to the nature and priority of activities, the use of informal times outside of school and the consideration of activities in the formal time of education at $95 \%$ confidence level. Therefore, all 4 indicators were identified as indicators of this dimension.

Space
Factor load values and t-value related to the space indicators are presented in the Table below.
Table 14. Factor load values and t-value of the space indicators

| index | factor load | t-value | result |
| :---: | :---: | :---: | :---: |
| decision-making about the space and location of curriculum according to the nature and requirements of activities | 0.674 | 7.209 | accepted |
| the use of out-of-school places (camps, educational places and etc.) | 0.795 | 6.889 | accepted |
| simultaneous use of the school and places outside the school and the use of school interior space | 0.707 | 6.659 | accepted |

The results of Table 14 showed that the value of the significant coefficient $t$ related to the relationship between decision-making indicators about the space and location of curriculum according to the nature and requirements of activities, the use of out-of-school places (camps, educational places and etc.), the simultaneous use of the school and places outside the school and the use of school interior space at $95 \%$ confidence level was higher than 1.96. This indicated the significant effect of decision-making indicators about the space and location of curriculum according to the nature and requirements of activities, the use of out-of-school places (camps, educational places and etc.), the simultaneous use of the school and places outside the school and the use of school interior space at $95 \%$ confidence level. Therefore, all three indicators were identified as indicators of this dimension.
Question 3: What is the validity of the designed model from the point of view of curriculum experts? In order to evaluate the theorizing of qualitative content analysis, the researcher has asked seven questions with answers on 5-point Likert scale about the quality of the conceptual model presented by the qualitative content analysis approach from 10 experts in the field of the primary school curriculum evaluation. Since these 7 questions investigated the proposed model from 7 different perspectives, Hotelling's t-squared statistic is used to evaluate the opinions of these 10 experts. The results of this test are presented in the Table below.

Table 15. Results of Hotelling's t-squared statistic

| No. | question |  | SD | Hotelling's t-squared statistic |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \mathrm{F} \\ \text { statistic } \end{gathered}$ | significance level |
| 1 | The concepts presented in the model are derived from the studied data. | $4.283$ | 0.683 | 14.567 | 0.021 |
| 2 | Concepts are recognized and systematically related. | 4.133 | 0.738 |  |  |
| 3 | There are conceptual relationships between the concepts and categories and the categories are well formulated. | 4.271 | 0.801 |  |  |
| 4 | The theory is formulated to change different situations. | 3.972 | 0.769 |  |  |
| 5 | General conditions that may affect the phenomenon (optimal model for evaluating the primary school physical education curriculum) are described. | 3.988 | 0.798 |  |  |

6 To change the process has been thought in theory.
7 Theoretical findings seem important.
4.033
0.667
4.106
0.629

The mean values of each of 7 questions evaluated are greater than 3 ("I have no idea" or "mean" in the questionnaire) and the value of standard deviation is less than 1 . On the other hand, the value of $\mathrm{F}(14.567)$ is significant at the level of error less than $0.05(0.021)$, so it can be seen that the results of all 7 questions are significantly different from the mean value of 3 . Therefore, the acceptability of each of 7 questions that measure the quality of the model is evaluated at a high level by experts. Therefore, it can be said that from the point of view of experts aware of the studied subject in the present study, the proposed model is of high quality.

## Conclusion

The objective of this study was to design and validate an optimal model for evaluating the physical education curriculum of the primary school. The results of the present study showed that the elements of learning activities, objective, implementation method, content, space, evaluation method, time, and grouping had the highest priority in the evaluation of the primary school curriculum, respectively. Since the objective in schools is to educate students, having educational objectives is a basic need due to the lack of textbooks for physical education. Having planned objectives in schools is very important. In this regard, Jarrett (2006) showed a significant relationship between students' needs and objectives planned by teachers.
The study results showed that from the perspective of experts, the curriculum is effective on improving the quality of physical education. In this regard, Garrison (2011) stated that in order to ensure the future of physical education in schools, a detailed curriculum, especially for the quality of physical education in schools, should be designed and developed. Ross (2015) also participated in applied research and stated that the time allotted to physical education should be increased. Also, from the experts' point of view, the educational content is effective on the quality of the physical education curriculum. In this regard, having a book that has been compiled based on the required educational content can be very vital. In this regard, studies have shown that the compilation of a physical education textbook is one of the most required measures to improve the status of the implementation of physical education. In general, addressing the objective of curriculum planning, which is itself part of a new way of supervising education and curriculum planning, is very important to go to the stage where a correct model or at least correct and incorrect methods of curriculum planning and training methods can be provided.
The study results of the content showed that the content of the primary school physical education course was not of high quality in the opinion of teachers. So that they evaluated the weakest part of the content among the three subscales (educational belief content, content consistency with policies of society, content consistency with individual differences) regarding the educational and religious content below the mean level. Experts have also evaluated this subscale as below the mean level.
In order to formulate the content of physical education lessons in the primary school, students' physical abilities should be considered through the development of sports skills, team and group games, competitive activities, relief, and gymnastics to increase physical fitness. Regarding the beliefs and conditions of society is very important in regulating the content of the physical education course. Students' physical, mental, emotional, social and mental interests and needs should be taken into account when designing a physical education curriculum. Motivation to set up a physical education curriculum in the primary school is very important. Observance of the principles of vertical and horizontal communication between the skills and motor experiences of the primary school students is very important.
The study results of time in physical education curriculum from the perspective of experts showed that most of these people did not consider the physical education hours in relation to the objectives of the content as adequate. The study results of Bagheri (2018), Fatemeh Igdari (2017), Saeedeh Parsaian (2017), Lynch (2015), and McKenzie and Lounsbery (2009) also confirmed this. Although in the last few years, in some parts of the province, physical education courses have been implemented for three hours, due to the lack of teachers,
the physical education course is now implemented for two hours, which is one of the reasons for teachers' confusion in this field.

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