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Learning to Be: Teachers' Competences and Practical Solutions: A Step Towards Sustainable Development

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Abstract

The purpose of the present study is to determine teachers' professional competences in "learning to be" and provide practical solutions for its realization. The research employed a mixed-methods sequential explanatory design and was conducted through two qualitative and quantitative methods. The population of the qualitative research consisted of educational experts, among whom 20 participants were selected through the purposive sampling technique after conducting interviews and data saturation. The population of the quantitative research included high school teachers in districts 2 and 3 of Isfahan among whom 217 holding MA, MSc, and PhD. degrees were selected via purposive sampling technique. In the qualitative section, the data collection instrument was semistructured interview, and in the quantitative section, a 14-subscale researcher-made Teacher Professional Competences Questionnaire. Findings of the qualitative section were categorized into teachers' cognitive competences, educational and managerial skills, and scientific, attitudinal, skill, behavioral, and general competences. From teachers' viewpoints, the most important competences in "learning to be" was their ability to develop self-esteem and self-confidence in students, ability to increase personal skills such as self-awareness and self-belief in students, and their ability to guide students to determine the valuable goals for their lives. There was a consensus among views of experts and teachers about professional competences. There were no differences in the teachers' opinions regarding the demographic characteristics of professional competences. Practical solutions of this learning approach were categorized by educational experts into solutions related to teacher education strategies, educational-training modalities, and the involvement of effective factors.

Keywords: UNESCO, high school, teacher professional competences, learning to be, practical solutions

Introduction

Education is intrinsically linked with human development and is a key factor in addressing poverty reduction, health improvement, sustainable livelihoods and environmental sustainability. This is reflected in the international community's commitment to the four United Nations-led initiatives to promote education and development: the Millennium Development Goals (MDGs), Education for All (EFA), the United Nations Literacy Decade (UNLD, 2003-2012) and United Nations Decade of Education for Sustainable Development (DESD, 2005–2014). Education for Sustainable Development is an approach to teaching and learning "that seeks to empower people of all ages to assume responsibility for creating and enjoying a sustainable future" (UNESCO, 2002). It "prepares people of all walks of life to plan for, cope with, and find solutions for issues that threaten the sustainability of our planet," and encourages "changes in behavior that will create a more sustainable future" (UNESCO, 2005). ESD is not a completely new educational framework. To put it simply, ESD promotes five types of learning as the basis for fostering sustainable development. These are: "Learning to know, learning to do, Learning to be, Learning to live together, Learning to transform oneself, and society" (UNESCO, 2008, p. 8). The International Commission on Education for the Twenty First Century, also known as the Delores Report, proposed four pillars of learning (i.e., learning to know, learning to do, learning to be, and learning to live together as 'foundations of education' and 'fundamental types of learning in the reorganization of education in the twenty-first century'. These pillars are coherent, interrelated and encompassing, and 'all form a whole because there are many points of contacts, and exchange among them', and they relate inclusively to phases and areas of education that complement and interpenetrate each other (UNESCO, 1996).

- Learning to know is the understanding and use of knowledge. Related abilities
 include critical thinking, problem solving, and decision-making life skills which
 are fundamental to informed action.
- Learning to do is linked to the mastering of cultural tools, i.e. objects or
 patterns of behaviour, in order to act. The related abilities are linked to the
 practical application of what is learned and need to be associated with life
 skills in a teaching learning situation.
- Learning to be concerns the concept of agency. Related abilities include life skills for coping, self-awareness, esteem, confidence, aiming at building an identity, valuing oneself, setting goals, etc.
- Learning to live together implies feeling affiliated to a group, a category, a society, a culture, understanding, and respecting differences. Related interpersonal abilities include communication, negotiation, and refusal life skills, etc., which are essential to define a person as a social being, in constant interaction with the world (Hoffmann, 2006). The four pillars of learning proposed by the Delores Report are very relevant to the tenets of ESD. They are mutually supportive as they essentially contribute towards sustainable human development (Bory-Adams & Hoffmann, 2005; Lawale & Bory-Adams, 2010). In the current circumstances of education, the pillar of 'learning to be' occupies a fundamental focus on education. It is like the central pillar of a canopy. Its attainment needs a new force with special inputs.

Learning to be

This learning pillar was conceptualized by Edgar Faure in report 'Learning to Be': The World of Education Today and Tomorrow, published by UNESCO in 1972 (UNESCO, 1996). Learning to be is based on this principle that the aim of development is the full realization of a human with all the elements of personality, the complexity of his modes of manifestation, his various obligations as individual, member of the family and society, citizens and producers, the innovator of techniques, and creator of new ideas. This learning approach may be interpreted as a way of learning to be humanized via the acquisition of knowledge, skills, and values leading to the development of personality in all physical, cultural, social, and intellectual aspects. Learning to be means that the purpose of the curriculum should be to develop capabilities such as imagination and creativity, the acquisition of universal human values, the developmental aspects of personal abilities such as memory, reasoning, moral sentiments, physical capacity, social and communication skills, development of critical thinking, exercising independent judgment, and developing commitment and responsibility (Zhauo, 2005). Learning to be is based on the viewpoint of humanism in education. The aim of education in humanism is the learner's comprehensive development for a productive and constructive life in which skills and attitudes are continually modified, developed and used as part of lifelong learner learning (UNESCO, 2002).

Teachers have the most highlighted contribution in students learning as well as the effectiveness of the educational systems (Gholami & Qurbanzada, 2016). Teachers will be most instrumental to inculcate human values and improve values education. While learners should be at the center of educational processes, teachers play critical roles as guides or learning facilitators. At a time when the world is under the threat of violence and terrorism, teachers can no longer afford to claim education to be 'value-free'; educators should no longer shun the moral responsibility for teaching universally shared human values conducive to a culture of peace as well as an all-round human development. The challenge is to design diversified educational materials and approaches suitable to the varied needs of children and adolescents with respect to their physical and psychological development characteristics. Improving the competence in teaching values for 'learning to be' will demand that teachers prepare themselves in an entirely different fashion and emphasis. The teacher needs to assist young students to feel good about themselves; to be emotionally secure and self-confident, to respect themselves and others, and to take full responsibility for their actions. Therefore, teachers will have to look at education from very broad, flexible, and interdisciplinary perspectives (UNESCO, 2002).

The recent World Commission on Teaching pointed out that our teachers, in order to help students, not only should have the skills making teaching and examination easier, but also, more importantly, ways of thinking (creativity, critical thinking, problem solving, decision making, and learning) ways of working (communication and collaboration), tools of working (communication and information technology), skills in the domain of citizenship, life skills, occupation, and personal and social responsibility for success in modern democracy should also be discovered (OECD, 2011). Teachers beliefs, practices, and attitudes are closely related to teachers' strategies used to cope with challenges that they encounter in their profession, and they also influence learners learning environment, motivation, and achievement (Gholami, Sarkhosh, & Abedi, 2016). Utilizing educational strategies such as the formulation of purposive and smart questions, conscious

selection of educational subjects, process-centered teaching methods based on students' meta-cognitive development, development of a questioning spirit, critical thinking, exploratory learning opportunities, valid scientific sources, comparison of ideas, discussions about the subject, and communication with students in a collaborative and cooperative environment, teachers try to increase their students' learning levels (Costa & Lowery, 1989; Driscoll, 2000; Hewson, 1996; Marzano, 1989; Meichenbum, 1986; Persichitte, 1993; Pintrich, 1990).

Considering that teachers are key elements in the educational system and play a significant role in the proper socialization of the youth for sustainable development (UNESCO, 2008), they should acquire necessary professional competencies how to teach students this pillar "learning to be". Eslamian, Jafari, and Neyestani (2018), Korsun, (2017), and Reid and Hovrathora (2016) state that achieving sustainable development requires competent teachers, and that attention to improving the professional competencies of teachers is considered a step towards sustainable development. White (1959) introduced the term 'competences' to describe the knowledge, abilities, skills and features of the personality necessary to perform the work qualitatively and allowing forecasting the individuals successful professional activity in the future (Boyatzis, 1982; Mitrani et al., 1992; Reynal & Rieuner, 1997; Spencer & Spencer, 1993; Spector et al., 2006; Stoof et al., 2002; UNIDO, 2002; Tigelarr et al., 2004). Professional competence is defined as a set of potential behaviors (cognitive, emotional, and psychomotor behaviors) enabling an individual to effectively implement a complex activity. Being competent in a profession indicates the use of specialized information, analysis and decision making, the use of creativity, working with others as a team member, communicating effectively, adapting to the work environment, and dealing with unforeseen circumstances. Competences through sustainable knowledge, skills and the ability to use them to develop specific activities and to obtain successful results are confirmed by others (Miheala, 2015). Accordingly, the present study aims at determining the professional competencies required by teachers to attend to "learning to be" and provide practical solutions to achieve it.

Review of Literature

A lot of studies have been conducted to examine the professional competencies and development of criteria designed for determining those competencies (Danilson, 2001; George Town College, 2010; Singapore teacher Education Model for the 21st Century, 2012; UNESCO, 2011). Each study classifies the teachers' competencies into different categories and examines them from different perspectives (Castro et al., 2005; Cheetham & Chivers, British Columbia, 2004; Cochran & Smith, 1999; Darling Hammond, 2006; Darling Hammond & Bransford, 2005; Darling Hammond et al., 2005; Darling Hammond & Snowden, 2007).

Handrik et al. (2017) categorized teacher competences into the following groups: (1) pedagogical competences including understanding the students' characteristics, understanding learning theories, developing lesson plans, facilitating (flourishing) students' intrinsic talents, communicating with students, organizing the evaluation and assessment process, applying evaluation and assessment results, improving the quality of reflective learning. (2) Social competences include to act fairly means to be fair and just; and to be comprehensive means to have a holistic and inclusive view, not to discriminate, to

communicate effectively, and to conform to work tasks. (3) Specialized competences include understanding structure, concepts, and scientific thoughts supporting educational subjects, identifying criteria of basic professional competences and competencies, and mastering the subject or discipline they teach.

Zhu and Wang (2014) categorized teacher professional competences into learning competency (learning actively, learn with an open mind, learn from reflection, learn with independent thinking), social competency (communicative, cooperative, courageous, persistent, democratic), educational competency (love for teaching, responsible, knowledgeable, problem sensitivity, quick response, educational research), technological competency (use internet to search and extract information, use ICT and multimedia in education). Selvi (2010) identified competences as fields of study competences, research competences, course competences, lifelong learning competences, socio-cultural competences, emotional competences, ICT competences, and environmental competences.

Makarevics (2008) categorized professional competences of future teachers into the following groups: 1) The peculiarities of the scientific approach: behavioral, functional, and multidimensional approaches to understanding of competences; 2) The forms of psychological activity connected with the temporal continuum; 3) The types of interrelation with the environment that includes: a) educational-cognitive competences or the sum of abilities and skills of cognitive activity; mastery of mechanisms of planning, analysis, reflection, self-evaluation of success; mastery of actions in non-standard situations, method of problem solving; mastery of measuring skills, using statistical and other methods of cognition; b) informational competences, or abilities to search, analyze, select, and process the necessary information independently with the help of information technologies; c) communicative competences or mastery of the skills to interact with the people, the ability to work in group, to perform different social roles; 4) The forms of carrying out professional activity.

Mishra and Koehler (2006) in a research titled as "Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge", presented a model for teacher knowledge. This model represents the process of building knowledge and reviewing teaching-learning experiences. In this model, the knowledge required by teachers, i.e. TPCK, includes content knowledge, educational knowledge, pedagogical content knowledge, and technological pedagogical content knowledge. Mishra and Koehler introduced content knowledge including knowledge of concepts, theories, ideas, conceptual frameworks, reasoning and evidence, and promising approaches. This model is the interconnected interface among content knowledge, education knowledge, and ICT knowledge, which has a synthesis and interdisciplinary nature that should lead to strategic thinking about time, location, and how to use ICT for guiding students to learn on a area of knowledge. Therefore, teachers should be able to design their learning experiences through ICT, organize contents enabling them to manage and share knowledge for themselves and their students, and facilitate the learning and fulfillment of individual and professional needs.

Huntly (2008) classifies the teacher competencies in three areas of professional knowledge, professional practice, and professional commitment. Professional knowledge includes content knowledge, student recognition, and teaching and learning awareness. Professional practice includes: learning design, creation of a learning environment, and measurement and evaluation of learning. Professional commitment includes: professional

learning, partnership, leadership, values, communication, and ethics. Hong et al. (2008) categorized teacher competencies into six main categories: intellectual ability, value system, interpersonal skills, management ability, professional ability, and personality traits.

Koster et al. (2005) classified teacher professional competences into five main categories and subcategories: 1) specialized knowledge including having the necessary information in the field of specialized knowledge and keeping it up-to-date; 2) communication including making communication with students with different backgrounds, guiding their duties, and analyzing and clarifying their views; 3) Organizing including determining the student performance system, managing time and organizing a curriculum in accordance with organizational goals; 4) Pedagogy, covers four factors including helping students and identifying learning needs, setting curriculum based on the needs of different students, designing activities for facilitating learners' learning and development, and using information technology in teaching; and 5) Behavioral competences, including a democratic approach, proactive attitude (PA), curiosity about news, and honesty and integrity.

The British Columbia College of Teacher (2004) categorizes teacher professional competences in 13 basic components with sub-components:

1. Valuating and being interested in students as well as doing in line with their interests; 2. Understanding the role of parents and the environment in learners' lives; 3. Having a broad knowledge basic and a deep understanding of subjects; 4. Having knowledge of the country and the world; 5. Being aware of the educational system in the country; 6. Identifying developmental stages; 7. Using teaching skills; 8. Effectively application of measurement, evaluation and reporting principles; 9. Doing practices as educational and ethical leaders; 10. Lifelong learning; 11. Having responsibility for the parents and the community; 12. Having responsibility for the profession; and 13. Having responsibility for students.

Shulman (1986) considers competent education factors as subject knowledge, content knowledge, teaching and learning knowledge, curriculum knowledge and educational experiences that are necessary for a competent teacher. Rosie (1999) provided a model for teachers' professional competencies including knowledge required by teachers for education. This knowledge includes knowledge of real subjects, syntactic knowledge, knowledge of beliefs, curriculum knowledge, general pedagogical knowledge, model knowledge for learning, learners (cognitive and emotional) knowledge, curriculum knowledge, self-knowledge, educational texture knowledge, knowledge of educational goals, and educational content knowledge.

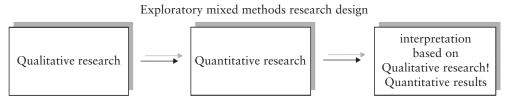
Research Questions

- 1. What are the teachers' professional competences in realizing the "learning to be" approach from the educational experts' perspectives?
- 2. What are the teachers' professional competences in realizing the "learning to be" approach from high school teachers' perspectives?
- 3. Is there any significant difference among teachers' perspectives in terms of demographic characteristics regarding teacher professional competences?
- 4. What are the solutions for realizing the "learning to be" approach from educational experts' perspectives?

Methodology

The research method employed in the present study is mixed methods (qualitative and quantitative methods for its different sections). In the qualitative section, using the grounded theory, the data was extracted via semi-structured interviewing technique. Grounded theory is a research method for data analysis, in this method, using a set of data, a theory emerges. When we need a theory to explain a process, and existing theories do not explain such a process, grounded theory is the method which can formulate a theory about the occurrence of this process, the problem, or the individuals being observed. Additionally, they will also be used to get a glimpse of what they are aware of. This method is used to uncover the less well-known phenomena and see what lies behind them, and has three main approaches to encoding open, central coding and selective coding (Straus & Corbin, 2008, p. 187). In this section, the data about teacher professional competencies in the learning to be was gathered through semi-structured interviews with education professionals, then qualitative findings from the interviews, in addition to answering research questions, were used to design a quantitative research instrument. Accordingly, the exploratory sequential mixed methods design was employed in the present study. Creswell (2003; quoted by Greene, 2007, p. 5) introduced some of the developed designs of the mixed methods research including three explanatory, exploratory and transformational sequential projects, and three multilateral, integrated, and transformational schemes. In the exploratory design, first qualitative data and then quantitative data are collected and analyzed. Accordingly, at first, a phenomenon is analyzed precisely, and then quantitative data is used to determine the relationship of the qualitative data, and quantitative data builds quantitative data. Thus, in this research design, the researcher emphasizes qualitative data rather than quantitative data; the data collection sequence is qualitative and then quantitative data, respectively.

The researcher resorts to quantitative data to determine the qualitative findings. Histogram 1 illustrates the exploratory research sequence. This design is employed for several reasons: 1. The researcher needs to develop an instrument for research, 2. When the researcher intends to identify unknown major variables for study quantitatively; 3. When the researcher intends to generalized data to other groups, test different dimensions of a new theory or classification, or deeply explore a phenomenon, and then measure its generality. In the present study, both qualitative and quantitative approaches have been used.



Histogram 1: mixed methods research design

Figure 1. Creswell and Plano Clark (2007, pp. 62–76)

Population

Research population in the qualitative section consisted of the educational experts in Iranian universities and in quantitative section totaled 498 second high school teachers in Districts 2 and 3 of Isfahan.

Sample Size and Sampling

The primary sampling method used for selection of educational experts who possess valuable information in relation to the topic was the purposive and individual sampling techniques. In addition to the purposive sampling technique, the snowball sampling method was also used during interviews. In this method, informed people are consulted to introduce appropriate cases and subjects. In qualitative research, sample sizes do not matter, but indices such as data saturation and data repeatability and adequacy of the sample size are vital (Gall et al., 2004). After conducing semi-structured interviews with 20 educational experts who were faculty members of universities, the data saturation was achieved. For the quantitative section, the purposive and stratified sampling techniques were employed randomly among different districts of Isfahan. Then, secondlevel teachers holding MA/MSc and PhD were selected through the purposive sampling technique. The total population was 498 individuals among whom 217 participants were selected through Cochran formula. Out of received questionnaires, 13 defected questionnaires with more than 10 unanswered items, were excluded. Totally, the data extracted from 204 teachers were analyzed. The frequency distribution of the qualitative and quantitative samples are represented in Tables 1 and 2.

Table 1 Frequency Distribution of the Qualitative Sample

			Field	d of	study			Ac	adei rank		
University/organization	Curriculum studies	Philosophy of Education	Experimental sciences	Sociology	Educational administration	Economics	Educational planning	Assistant professor	Associate professor	Professor	Total
Research Institute of Education (RIE)	2	1	0	0	0	0	0	3		0	3
Organization for Educational Planning (OERP) And	3		1					2	2		4
Shahid Rajaee Teacher Education University	1			1					1	1	2
Farhangian University of Tehran	2								1	1	2
Kharazmi University	1									1	1
Allameh Tabatabaei University	1				1			1		1	2
University of Isfahan	3	1				1	1				6
Total											20

Characteristics	Group	F	Percentage		
Gender	Women	122	59.8		
_	Men	82	40.2		
_	Total	204	100		
Level of education	MA/MSc	189	92.6		
_	PhD	15	7.4		
_	Total	204	100		
Years of service	1–10 years	21	10.3		
_	11–20 years	46	22.5		
_	21–30 years	123	60.3		
_	31 and longer	14	6.9		
Total		204	100		

Table 2
Frequency Distribution of the Quantitative Sample

Data Collection Instrument

Semi-structured interviews were used to collect data in the qualitative section. The interview form was designed by reviewing literature related to the subject and confirmed by some curriculum specialists (content validity) after modification. The reliability of the interviews (analysis, classifications, and results) was also confirmed after coding by supervisors and an expert in qualitative research. Data collection instrument designed in quantitative section was a researcher-made questionnaire with 14 closed-ended questions based on five-point Likert scale (very high, high, somewhat, low, and very low). Items were formulated based on the qualitative findings of the interviews and the literature review. The reliability of the scales was assessed through internal consistency and Cronbach's alpha coefficient techniques. Results of the analysis illustrated that the Cronbach's alpha coefficient for teacher professional competences in realization of the learning to be approach is 0.89. Validity of the questionnaire was confirmed by 5 faculty members of Isfahan University who were expert at curriculum studies.

Data Analysis Instrument

The data analysis method is divided into two sections: qualitative and quantitative research sections.

Qualitative Section

To answer the first and fourth research questions, qualitative data analysis was conducted using the content analysis or thematic content analysis method of the interviews. The interviews, including data collection (such as recording of content), data reduction, data inference, and data analysis, were conducted based on Krippend or ff' method. Accordingly, the contents of the interviews were fully recorded, transcribed, typed, and entered into MAXQDA v-2008 to make data coding more convenient. Rowto-line interviews were reviewed and significant sentences related to the research question were noted. The main themes of meaningful sentences were extracted as codes and

categorized via the software program. The codes including similar concepts were categorized in one class. The researcher's work continued to classify and revise the classes until the saturation of the classes. Then, a title was given to each class. With each new interview, a class might be revised and even merged with other classes, or even a new class could be created.

Quantitative Section

In the present study, to test the descriptive indices of each item, the frequency, mean, and standard deviations were employed to compare the frequency of each item using the chi-square test. The one sample t-test was employed to test the significance of each item, the independent t-test was used to compare the views of male and female teachers holding MA/MSc and Ph.D. degrees, ANOVA was employed to compare the views of teachers with different backgrounds, and internal consistency (Cronbach's alpha coefficient) was used to assess the reliability.

Findings of Qualitative Research Section

Q1. What are teacher professional competences in realizing of "learning to be" approach from the educational experts' perspectives?

During interviewing with 20 educational experts, the findings reached saturation and repetition. After coding and analyzing the content of the interviews, the findings were categorized into a general class of teacher professional competences with three main components of teachers' knowledge, educational skills, and management and organizational skills. Results of the interview questions are presented separately in Tables 3 and 4.

Table 3Teacher Professional Competences from the Perspectives of Educational Experts

	ne educatio-	he learning ıman being,	y and educ- society and economic,	ication and is century.	cs of curric-	o educatio-	nd attitudes	on, such as ent theories	recognition
Selected speech evidence	Identifying the structure, goals and characteristics of the educational system	Identifying the philosophical views appropriate to the learning to be approach whose goal is to cultivate a perfect human being, a thinker, such as the school of humanism	Understanding the interactive relationship of society and education, paying attention to the structure of culture and society and dominant thoughts on society, recognizing political, economic, religious, and family institutions	Understanding the rules, regulations, styles of education and training of the perfect man who can handle life in this century.	Identifying the objectives, features, principles and basics of curriculum planning and content analysis of the courses.	Identifying diverse and up-to-date resources related to educational topics in learning to be skills	Integrated understanding of the knowledge, skills and attitudes that 21st century learners need to live.	Knowledge of the theory of development in education, such as Piaget's cognitive development theory, the development theories presented by Erikson, Vygotsky etc.	Understanding learning theories that emphasize social recognition and learning.
Percentage of subcomponents	4%	4%	4%	4%	4%	4%	4%	2%	2%
Frequency of main sub- components	4	4	4	4	4	4	4	2	2
Subcomponents	Educational system	Philosophy of education	Sociology	Education methods	Curriculum	Resource identification	Knowledge, attitude, skill	Development theories	Learning theories
Main components and their percentage	Teachers' knowledge	(42%)							
Teacher professional competences		gninse	es in the le h	npeten proac			r prof	Теасће	

Sequel to Table 3 see on the next page.

Sequel to Table 3.

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	Teachers' knowledge (42%)	Life skills	2	2%	Understanding decision-making, problem solving, creative thinking, critical thinking skills, making effective relationships with others, adaptive interpersonal relationship, self-empowerment, empathy.
		Learners	2	2%	Understanding all the dimensions and potentials of learners such as their physical, intellectual, moral, aesthetic, ethical, economic, and cultural, spiritual, religious, dimensions.
aninas		Assessment methods	2	2%	The teacher should have enough knowledge about a variety of assessment methods tailored to the content of the training and the level of learners.
el edt		Effective activities	2	2%	Understanding of social-educational activities affecting the development of students for a decent personal, occupational and social life.
		Technology	2	2%	The present century is the age of information and communication explosions and technology. Therefore, recognizing new technologies and using them is a necessity for teachers.
ompe	Educational skills (45%)	Instructional methods	10	10%	Having skills in teaching methods that bring students to self-awareness, self-confidence and self-esteem.
o Isnoises 9d ot		Reality-based teaching	∞	%8	Teaching methods should link learning to be skills to everyday life issues and encourage students to debate and engage in life skills through discussions and contributions.
ojo:		Facilitation	8	%8	The teacher should facilitate and guide the learning flow.
escher pi		Instructional design	&	%8	Designing learning provisions that result in the personal and social transformation of students and encountering emotional interests, beliefs, values, and goals.
T		Instructional media	9	%9	Selecting and using diverse and different educational media, such as story, educational film and ete.
		Assessment methods	S	2%	Having the skill to use self-assessment methods and self-evaluation by students themselves to gain self-awareness develope self-concept.
	Management and organiz-	Psychological atmosphere	9	%9	Provide an environment full of trust, mutual respect, cooperation friendship and compassion.
	anon (15/0)				

Sequel to Table 3 see on the next page.

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Sequel	

Accurate 2 2% U		Physical	4	4%	Organizing learning environments that bring physical and mental
scheduling Total 100 100 4		Accurate	2	2%	Utilizing timely and coordinated schedules and maintaining
Total 100		scheduling			routines and common methods throughout the class.
Table 4		Total	100	100	
Table 4					
	Table 4	,	,	,	

Teacher Personal Competences from the Perspectives of Educational Experts

Selected speech evidence	While a teacher teaches students to learn, he or she should learn from and learning should be his/her habit.	The teacher should seek new methods and new resources to improve and develop the students' levels of learning and advancement.	Teacher should be: scientifically competent about what he/she	teaches, he will reach the level of academic mastery from the discipline and field of study.	Teacher should be: a thoughtful agent, critical, creative, conceptual, and analytical.	Innovative and creative attitudes towards providing new educational ideas and methods.	Having group activities and collective capacity, provide educational opportunities for students' participation with teachers and other students.	Teacher should be committed to professional standards and job responsibilities.	Admit ethical, religious, spiritual, and cultural values of the society.
Subcomponents percentage	13%	11%	%6		%8	5%	%8	%8	%8
Frequency of subcomponents	5	5	5		5	8	8	8	8
Subcomponents	Lifelong learner	Researcher	Scientific	competency	Reflective	Creativity and innovation	Participatory spirit	Professional commitment	Accepting values
Main component and its percentage	Scientific (20%)					Attitudinal (43%)			
Teacher professional competences	ed ot	guinr	ા નિલ	ioì sa	octenco	comb	personal	acher	эΤ

Sequel to Table 4 see on the next page.

					Sequel to Table 4.
		Inclusive and holistic	2	2%	Have inclusive and holistic approach to education.
		Self-evaluator	3	3%	Have an evaluative view of his/her performance and behaviors.
		Compatibility	3	3%	Have a compatible approach to establishing intimate relation-
Э					snips with concagnes, parents and students.
oq o	Skill (15%)	Observer	4	4%	Have ability to keep accurate notes of class events by recording
1 5					observations.
guir		Good listener	4	4%	A good and exact listener of the students' words.
116		Communication	3	2%	Have communication skills for establishing and facilitating com-
r le					munication.
oj s		Rhetoric	2	2%	Have good rhetoric in the transmission of content in an attractive,
901					intuitive and understandable way.
peten		Authority	2	2%	Prove himself to his students. In this way, he will be educated and ethically followed by his students.
шо	Behavioral	Reverend and	3	3%	Have good behaviors, politeness, and behavior with respect to
၁ լե	(12%)	polite			others.
uo:		Stability	3	3%	Have stability in speech, behaviors and performances.
oets		Exemplar	2	2%	An exemplar of a perfect human being.
et F		Flexible	2	2%	Have flexibility with the challenges and problems emerging during
чэг					activity.
гэТ		Motivated	2	2%	Be filled with motivation to live and transfer positive energy to
,					students to live happily.
	General (10%)	General (10%) Physical health	4	4%	Have physical health necessary for a teacher's profession.
		Psychological	3	3%	Have the spirit of happiness, vitality, participation, compassion,
		health			affection and kindness.
		Mental health	3	3%	Have complete mental health and personality stability.
		Total	100	100	

Findings of Quantitative Research

Q2. What are teacher professional competences in the implementation of the "learning to be" approach form second high school teachers' perspectives?

To evaluate the significance of teacher professional competences scores for realizing the learning to be approach for livelihood, teachers' answers to each item were compared with value 3 using one-sample t-test. Table 5 indicates the descriptive statistics related to the 14-item teacher professional competences for realizing the learning- to be approach, together with the results of the one-sample t-tes:

Table 5 Teacher Professional Competences Needed by Teachers for Realizing the Learning to Be Approach

Item No.	Learning to be	Mean	SD	One-sample t-test	Sig.
1	Ability to increase personal skills of students such as self-awareness, self-belief	4.56	0.580	38.14	0.001
2	Ability to cultivate students' self-esteem and self-confidence	4.60	0.580	39.31	0.001
3	Ability to guide students to determine their valuable goals for their lives	4.54	0.660	33.50	0.001
4	Ability to provide timely feedbacks on the students' strengths and weaknesses	4.51	0.630	34.37	0.001
5	Knowledge of learning theories and their application in life skills training	4.43	0.660	30.78	0.001
6	Ability to discover students' talents and lead them to flourish and develop	4.52	0.620	34.93	0.001
7	Ability to transfer beliefs and attitudes to students as useful and effective individuals in the society	4.47	0.600	35.98	0.001
8	Ability to educate students in all physical, cognitive, emotional and moral aspects	4.42	0.690	30.10	0.001
9	Ability to teach balance in all life affairs	4.53	0.720	27.87	0.001
10	Ability to teach life skills such as: flexibility, coping with negative emotions, coping with stresses	4.53	0.660	33.14	0.001
11	Ability to develop life skills such as: creative thinking, critical thinking, cultural and social awareness	4.50	0.630	33.44	0.001
12	Attention to the students' emotions and feelings	4.46	0.650	32.83	0.001
13	Ability to teach adaptation and flexibility to environmental changes	4.45	0.710	29.33	0.001
14	Skills in teaching management and leadership in personal and professional life	4.45	0.770	26.97	0.001
	Total mean scores	4.50			

Results of the one sample t-test (Table 5) show that the total mean scores of teacher's views for all items of the professional competences in realizing the learning to be approach of 4.50 is significantly bigger than value 3. This means that, for the vast majority of teachers, the offered items, as teacher professional competences, are very significant in

realizing the learning to be approach. Among the items related to professional competences, "ability to cultivate students' self-esteem and self-confidence" (2) with a mean scores of 4.60, "ability to increase personal skills of students such as self-awareness, self-belief" (1), of 4.56, and "ability to guide students to determine their valuable goals for their lives" (3) of 4.54 enjoy the highest priority for teachers to realize the learning to be approach. Other competences are also of great significance.

In this research section, teachers pointed out that they had skill levels and that competent teachers should have the skills to apply methods leading to problem solving, self-esteem, self-awareness, and self-confidence in students. Skills in how to deal with stress, emotions, teaching critical and creative thinking, and how to manage individual and professional life. As teachers notify, having skills competencies for teachers in this learning approach is a more significant dimension.

Q3. Is there any significant difference among teachers' perspectives in terms of demographic characteristics regarding teacher professional competences?

To investigate the difference between the teachers' opinions on the demographic characteristics (gender, level of education, and years of service), the mean, independent t-test, and F-test were employed. The results are presented in Tables 6 and 7.

Table 6

Demographic Characteristics (gender and level of education)

Characteristics	No.	Mean	SD	Standard error	Independent t-test	Sig.
Women	122	4.45	0.467	0.044	1.829	0.069
Men	82	4.58	0.479	0.052		
MA/MSc	189	4.52	0.47	0.034	1.114	0.160
PhD	15	4.34	0.51	0.132		

Table 7
Demographic Characteristics (years of service)

1-10 21 4.36 0.47 0.104 11-20 46 4.38 0.52 0.077 21 30 4.56 0.45 0.040	2.512	0 0 = 1
	2.312	0.054
21 20 122 156 0.45 0.040		
21–30 123 4.56 0.45 0.040		
31 and longer 14 4.64 0.32 0.086		

Based on the results of Table 7, there is no significant difference between professional competences for realizing the, learning to be, approach. The independent t-test was employed for comparing the views of teachers holding MA/MSc and Ph.D. degree with regard to the professional competences. The results showed that there was no significant difference between the teachers' views about professional competences in terms of the level of education.

To compare views of teachers with different years of service (1–10; 11–20; 21–30; and 31-longer) ANOVA was used. The results of which were shown in Table 7. There is no significant difference between teachers with different years of service about teacher professional competences.

Q4. What are the solutions for realization the "learning to be" approach from educational experts' perspectives?

After conducting interviews with 20 educational experts about the practical solutions for realizing, learning to be. The data saturation was obtained after accurate analysis of the interview texts and coding, the findings obtained from the interviews were categorized into three main classes of reforming Teacher Education, the changes in educational-training methods, and cooperation of effective factors along with their subcomponents. Results are presented in Table 8.

As Table 8 illustrates, the findings of analyzing the interviews about realization of, learning to be, approach are categorized into three main components of teachers' education strategies, educational-training modifications, and the collaboration of effective agents.

Teacher Education

Regarding Teacher Education solutions, there was a belief that there should be changes in teacher recruitment so that the educational system should select the most qualified teachers in terms of their professional competences: teachers who have the required specialized knowledge and those who are motivated and willing to enter the profession of a teacher. Teacher Education programs are, according to interviewees, essential and necessary for revision and major developments in teacher education curricula. As a result, many of their curricula and their training should be updated. The curriculum content should be aimed at educating students to learn how to live and prioritize life, so it requires that many of the skills needed to live in the curriculum of teachers and Teacher Education be included. For example, training skills to solve conflicts, anger management, relationship management, learning to love, making relationships, etc. that students need to learn to be should be included in Teacher Education curricula. Briefly, Teacher Education should prepare teachers for the education of students in all of physical, mental, emotional, aesthetic, etc. aspects. This requires the development of curriculum and teaching methods. Action research, content analysis, narrative research, and internship courses can be very helpful if implemented correctly. Modifying assessment methods is another way via which teachers themselves assess their performance. The issue that our teachers should be aware of what kind of behavioral patterns a student needs to learn to be, such good behaviors, kindness, sympathy, politeness and respect, and many of the behavioral patterns of that are appropriate with this learning approach. Professional commitment is another Teacher Education method for making teachers aware that they are responsible for educating their students and bringing them to an appropriate level of knowledge, skills, and attitudes necessary to manage their lives. This training should such that after the completion of the training course they can practically use their learning in life, and in fact, the teacher is committed to know the proverb "I do not give the students fish, I will teach them how to catch fish". Teachers should conduct their training in such a way that it can grow self-directed and selfregulating learners in life affairs.

Table 8 Practical Solutions for Realizing Learning to Be Approach from Viewpoints of Educational Experts

-	Selected speech evidence	Selecting and educating qualified teachers, those who have enough motivation for a teacherhood, and the teaching is their only job.	Updating teachers' educational contents, changing teachers' educational contents in line with this annuach modifying the Teacher	Education course.	Teacher Education courses (pre-service, in-service) should be such	that they educate teachers in all aspects of (teaching to live).		Teachers' self-assessment, or assessment by their colleagues.		Teachers who want to teach students to be should develop behav-	ioral patterns appropriate to their lives and way of learning to be.		Commitment to the education of students in all physical, mental,	and emotional aspects, educate learners with all knowledge,	attitudes and skills required for learning to be approach.	The dialogue-based education to attract students' attentions to	participate in learning to be skills.	Entering a teachers' lived-experience or using their own exper-	iences in the classroom to establish a close relationship between	what the students learn in the classroom and the real world in	which they live.	A shift in assignment that only reinforces one dimension, for	example, the knowledge domain, into a learning design that enhances	the attitudes and skills necessary for students' learning to be.
Percentage of	component	10%	11%		10%			%8		%9			2%			%8		2%				%9		
Frequency	of component	10	11		10			8		9			5			8		7				9		
-	Subcomponents	Modification of teacher recruitment	Revision and	curricula	Modification of	Teacher Education	practices	Modification of	assessment methods	Development of	appropriate behav-	ioral patterns	Reinforcement of	the teachers' profes-	sional commitment	Dialogue-based	education	Experience-based	learning			Changes the struc-	ture of assignments	
Main	components and percentage	Teacher Education (50%)			I			l				l				Changes in	educational-	instructional _	methods (26%) lear			I		
	Solutions		чэг	bro	de a	eq (01 5	guir	uje	ગ દ	Buiz	ils	eə.	ıoî	su	oit	njo	s Įŧ	soit	.કદા	Ιď			

Sequel to Table 8 see on the next page.

The students conduct self-evaluation in order to gain self-awareness, reinforce their own positive thinking, self-direction, enhance their positive thoughts, and eliminate their deficiencies.	Getting help and experiences from families in educating their children.	All applied agents including principals; the teachers; the consultants; etc., should be responsible for their efforts to educate the perfect and grown learners.	Improving all elements and dimensions such as curriculum content of schools, educational spaces, facilities and equipment, culture and economics, and supportive education policies.				
2%	%8	%8	%8	100			
S	8	8	&	100			
Changes in assessment methods	Family	Collaboration of the applied directorate	Improvement of facilities and equip- ment	Total			
	Collaboration of effective staff (24%)	'	'				
Practical solutions for realizing learning to be approach							

Changes in Educational-Training Methods

Teachers must be trained in such a way as to attract students to the learning process and increase their participation in learning. Therefore, dialogue-based methods, i.e. using teachers' own experiences and those of their students in life skills training, are very effective. Modifying the assignment structure: Designing assignments that can take advantage of the knowledge gained to serve themselves and human beings is vital. Student-based assessment methods are also helpful in this regard. Students should be convinced to assess their own activities and skills. This has led to an increase in students' self-awareness and the consequently increase in self-esteem, self-confidence, self-belief, the formation of positive self-concept, and attainment to self-actualization.

Collaboration of Effective Components and Elements

Learning to be and being educated to be are shaped through families before entering school. Thus, the necessary training should be offered to families to educate their children regarding how to be. Children should learn that they are students only for 6 to 7 hours of a day; therefore, they live the rest of their time with their families. Other factors affecting education such as teachers, principals, applied staff, and school counselors should be justified with regard to the issue that the aim of the educational system is not just school education, but they should focus also on other forms of education such as learning to be a citizen, basic skills for life, customs and communication, skills of making relationships, other personal skills for personality development. This aim can be achieved through teamwork of the applied team. Furthermore, the necessary applied platforms and facilities for this learning approach should be provided, and the necessary educational spaces and the curricula content should be structured and regulated in such a way as to teach students how to live. The culture supporting education and effective economic and political factors should be identified and implemented in line with the learning to be approach among students.

Discussion and Conclusion

To achieve lasting development in the 21st century, we need new ways of thinking, diverse educational methods, new educational approaches, and a different perspective on science and culture. The only appropriate training is to create and secure a safe and secure world, and along with the vast scientific, industrial and social advances, encourage international cooperation to achieve sustainable global development. UNESCO's third pillar of learning is learning to be in accordance with the view of humanism in education which aims at developing learners of all dimensions for a fertile, fruitful, and productive life. The fundamental and sustainable development of any society depend on the transformation of the education system of that society, and the main focus of the development in the education system is to improve the quality of the work of teachers as well as their knowledge and characteristics. Teachers are the founders of the scientific ideas of the "Missionaries of Values and Responsibilities" for the students and are the first ones in the training of human resources. The present study aimed at determining teacher professional competencies in the learning to be approach. The findings obtained from two qualitative and quantitative sections of the present study showed that the teachers of 21st century should educate students in a way that they can learn how to be in today's

world and to take on life and the challenges they face. In addition, they should be aware of many educational issues including goals, methods of education and assessment, students, educational resources, and educational technology. Teachers should also be skilled in the implementation of teaching methods appropriate for this learning to be approach such as active teaching methods and the pivotal process leading to self-esteem, self-awareness, and self-confidence in students. They should play their facilitating role in pedagogy as well as possible and teach students about their realities and real issues. They should be able to provide students with objective and tangible problems of their lives and provide them with experience. Teachers need to know in what circumstances they live in global developments and are associated with them, the ability to use modern technologies and technologies, and how to work with them. They have the power of initiative, creativity, and skill and limit their activities to a few books or pamphlets with which they are familiar at teacher training centers or during their career because today's complicated and advancing world requires constant learning, being flexible to developments, activity, sensitivity, and creativity. According to Albert Einstein, human beings should not be regarded as immortal instruments, but the youth should be delivered to the society as balanced figures. Many of the characteristics which 21st century learners are expected to have for living in the present century, in the first place, teachers, in the first place, should themselves have because teachers are personally a model for their students, and their behaviors, personality, and their functions are reflected in student learning. As a result, teachers themselves should have characteristics such as: being lifelong learner, researcher, fancier, creative and innovative, committed, flexible, compassionate and participatory, self-evaluative, ethical, and motivated. Issues raised as competencies for teachers in this learning approach were categorized in terms of teacher recognition, teaching and management skills, academic competencies, attitudes, skills, behavior, and general competencies. The results of the present study are consistent with many studies. The knowledge required by teachers as competencies are classified according to the results of the present study by Schulman (1986), Rosie (1999), Mishra and Koehler (2006), Huntly (2008), UNESCO (2008), Handrik et al. (2017), Koster et al. (2005). Competencies related to teacher training and management skills are consistent with Huntly's (2008) professional practice, Hong's (2008) management skills, Kosters' et al. (2005) organizational competence, and Makarevics (2008) forms of professional activity. teacher personal characteristics in the studies of Handrik et al. (2017) titled as personal and social teacher competencies, Huntly (2008) as professional commitment, Hong et al. (2008), Koster et al. (2005) as behavioral competencies, Zhu and Wang (2014) as learning and social competencies as well as love of learning, Selvi (2010) as socio-cultural competencies, emotional competencies, lifelong learning, and Makarevics (2008) as communication competencies. Each of the categories includes the components of teacher personal competencies, which are presented under the categories of the present research as teacher competencies.

Some of the revealed ideas regarding teacher personal characteristics in this research have not been reported in previous studies. Those ideas provide insights and new questions about the teacher professional competencies in the learning to be approach. For example, the ability to guide students towards determining valuable goals of life is one of the issues that matter in learning to be as a competence for teachers; teachers need to transfer knowledge, skills, and attitudes about living and how to be to students. They should introduce the valuable goals of life and encourage and guide them to achieve the goals.

In addition, teachers' ability to teach their students moderation and proportionality in life affairs; teachers should teach students in such a way that they learn that living is superior to every things, learn to live in unpredictable situations and conditions such as war, crisis, etc., learn that living is their priority and not focus on one dimension or aspect of life, but be humans who grow in all aspects of life.

The most important solutions suggested in this study for implementing this approach are training methods, and system participation. Therefore, UNESCO's guidelines should be developed to train teachers in the context of learning to be approached in teacher training courses. The teaching methods should emphasize the central axis, experiential, axial, student-centered, pivotal process. In order for students to learn to be, all components and elements of the education system are recommended to work together to achieve this goal, and families, education staff, curriculum, and facilities need to be involved in it.

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Appendix

A Questionnaire on the Teacher Professional Competences in the Learning to Be Approach

UNESCO titled the 21st Century the "Learning and Competences Century", and qualified education is on the agenda for all countries. The International Commission on Education for the 21st Century suggests that relying on the four pillars of education forming the basis for education will enable all communities to go to a Utopia, in which all talents which are like the treasures hidden in the human nature, be used as properly as possible. These four pillars are: 1. Learning to know; 2. Learning to do; 3. Learning to be; and 4. Learning to live together. Accordingly, a research is to explain the UNESCO's proposed approaches, to determine the teacher professional competencies, and provide a solution for their realization. The present questionnaire submitted to you is designed for collection of some of the data for a research. Given that you are a prominent and experienced teacher expert at education, your answers have a significant effect on the results of the research. Therefore, I would be obliged I you give a detailed opinion on each of the items listed below.

Row	In your opinion, to what extent teachers should enjoy the following competences for realizing the learning to be approach?	Strongly high	High	To some extent	Low	Strongly low
1	Ability to increase students' individual skills such as self-awareness, self-esteem, etc.					
2	Ability to develop students' self-esteem and self-esteem					
3	Ability to guide students to determine their valuable goals for their lives					
4	Ability to provide timely feedbacks on the students' strengths and weaknesses					
5	Knowledge of learning theories and their use in life skills training					
47	Ability to discover students' talents and lead them to flourish and nurture them					
6	Ability to transfer beliefs and attitudes to students as useful and efficient people in the society					
7	Ability to train students in all physical, cognitive, emotional and moral aspects					
8	Ability to teach balance and fitness in all dimensions and affairs of life					
9	Ability to teach life skills such as: flexibility, coping with emotions, coping with stress, etc.					
10	Ability to develop life skills such as: creative thinking, critical thinking, cultural and social awareness, etc.					
11	Attentions to different students' emotions and feeling					
12	Ability to teach adaptation and compatibility to environmental changes					
13	Skills in teaching management and leadership methods in personal and professional life					