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ACADEMICIANS' PREDICTIONS OF 21st CENTURY EDUCATION AND EDUCATION IN THE 21st CENTURY

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Abstract:
This study aims to discover expectations/predictions of academic members about the education of 21st century, and to raise awareness of academicians for education in the future. The survey is designed in a descriptive model as a survey as it aims to uncover the objective reality of the teaching staff's 21st century education in a holistic way. Descriptive analysis method in qualitative data analysis techniques was used since the data obtained from the research consist of qualitative discourse. Participants of the survey included all the teaching staff who participated in the training within the scope of "Project for Acquiring the Form of Educator for Academicians" supported by University Project Management Office between the years 2014-2016. The data collection tool used in the study was developed by the researcher. Five open-ended questions depending on the purpose and sub-problems of the research were asked to the faculty members. Participatory confirmation and self-reflection strategies were used to ensure the internal reliability of the every collection tool. What they understood from the questions, their opinions, comments were asked to the participants and then it was evaluated whether the questions express something to them and reflect their experiences. The answers were first compared to each other and then to the sub-objectives of the research. Scope of six problems used in the data collection tool was provided with literature, the research problem, the aim of the research and directly with the research questions. The generalization of research findings to similar environments was evident in the findings of descriptive qualitative analysis. In the analysis of the data, descriptive analysis in qualitative data analysis methods was used. The data were analyzed taking into account the themes / dimensions of the research questions. Responses given by the participants in writing regarding the research questions were coded by open coding technique. The expressions of the same size, which were indicated by different lecturers were combined. In this context, the answers obtained from the groups were coded according to these dimensions of the research. These

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answers were then separated into categories and their frequencies were determined. Then the categories obtained from the answers were collected under a common theme. All these questions are tabled and interpreted from findings, categorizations, and themes. In the research findings, educational environments in the 21st century, educational problems, student expectations, competencies required by educators, problems encountered by educators and key concepts were revealed and analyzed. In all of the five questions asked to participants, fifteen common themes were shared, some of which were jointly addressed. Thus; technological development, education environment, practical education, globalization, interactive / interactive education, international education, exams and measurement and evaluation, commercialization and economic strength, learning, learning to learn, thinking skills, values education, language communication and program obtained and interpreted.

Keywords: education, 21st century, academic members, future knowledge, vision/prediction

I. Introduction

Future concerns are not only created by people, institutions, brands, cultures, and countries. Individuals make career plans for the future. They make a simulation of their future. They even prototype their products to maintain its existence, nevertheless a nation wants to convey its culture to future generations despite its doubts (counter-socialization). Governments plan their future by making strategic plans for at least five years. Even though the audiovisual arts and literary works that crossed their ages passed hundreds or even thousands of years, the value is rising and continues to affect people.

From the moment of birth, man learns continually. This learning goes on continually during his lifetime as formal, informal or through his experiences. Therefore, education that exists with people affects directly and indirectly both the human being, the society, and the world in which the person lives. Man today lives with the past, but at the same time builds the future. They want to dominate the future by controlling the information they understand and explain by being cumulative in each field such as science, technology, fashion, design, architecture, sports, security, health, education, law, geography, cinema, space research and so on. However, it should not be forgotten that education can be both a cause and a consequence of all this "futuristic" conceptual phenomena. Because education and learning are always there for the concepts and phenomena mentioned here.

For this reason, "future perspectives" in education have always been a common problem of states, political opinions, families, individuals and every stakeholder affected by education. However, it is unlikely to create future perspectives based on strategic plans and side-to-side program changes. Continuous innovation and reform efforts in education, analogous to "untraced ship" and "forty patched packs" during the history of Turkish education, can also be considered as indicators of these

impossibilities. However, it is not as easy to understand, explain, control and generalize the people in the social sciences because of their nature as other positive sciences as sciences.

It is an undeniable fact that recent approaches in educational sciences have been related to 21st Century educational qualifications and expectations. Below is a list of new approaches / perspectives.

• Quantum learning • Five mind areas for Future • Differentiated instruction • Thinking skills and dimensions • Critical and creative thinking • Story / Scenario based learning • Situated learning • Project based learning • Brain based learning • Social skills • Emotional intelligence quotient • Spiritual intelligence quotient • Technological intelligence quotient • Value education • Constructivism • Learning styles • Teaching styles • Thinking skills • Allosteric learning • Lifelong learning • Active learning • Renzulli Learning Approach • Peer learning • Multicultural education) • Blended Learning • Metacognition	• Reflective thinking • Decision making • Cooperative learning • NLP (Neuro Linguistic Programming) • 5E-7E-EELDrC Cycles • Individualized Training Approaches (Puebro Plan, Burk System, Dalton Plan, Winnetka Plan, Morrison Plan, Jena Plan) • Individualized Teaching (Keller Plan) • Tutor- based Approach (Private lesson) • Coaching System • Reggio Emilia Approach • DUPE Model • Suggestopedia • Multiple intelligent theory • Right / Left brain theory • Triple Brain theory • Holistic learning • Authentic learning • Dual coding system • Flipped Classroom Approach • Multi-layered learning • Process based learning	• Complementary learning • 4 Mode application techniques system • Japan lesson study • Intensive learning • Transformative learning • Sheltered instruction • Pedagogy of Waldorf • Freinet Training Approach • Online learning Approach • Distance education • Inquiry-based Learning Approach • Context Based Learning and REACT strategy • Cloud Based Learning • Echeloned activity-based Learning • MOOCs Approach • Play theory and play based learning • Learning with Porphyrios Tree Approach • 3D Teaching Approach • STEM (Science, Tech, Education, Math) Approach

It can also be observed that all these theoretical approaches to education are related to the competencies and expectations that a person in the 21st century should possess. European Qualifications Framework, Turkish Competencies Framework, professional qualifications, 21st century schools, continual change and development, globalization, recognition, equivalence are in fact; can also be seen to be directly related to individual / occupational or field competencies.

21st century Student Profile (2011) survey of the Ministry of National Education (MoNE) in Turkey, 21st century gives some clues about the education system. Questionnaires were applied to prospective teachers and administrators in this research. 65% of the 10912 teachers who participated in the survey think that "Turkey Education System does not seem as it is required during the globalization process". Approximately 15% of the participants stated that they are hesitant. 73% of these

teachers see the education philosophy of the system for students as problematic. Most of the teachers (75%) stated that they did not consider the personal differences among the students and that they did not encourage critical thinking (80%) to research and inquire. 86% of teachers stated that schools did not acquire international vocational qualifications, and about 73% stated that it was insufficient for students to acquire verbal and written expression skills. Students are often found to be inadequate in terms of many values such as responsibility, respect, assertiveness, sensitivity, morality, solidarity, productivity, decision making, problem solving. Responses from school administrators also support teacher findings (MoNE, 2011).

The Ministry of Education, Research and Development Department (EARDGED) made research team in 2001 to conduct a study entitled "Contemporary Teacher Profile the Turkish National Education System Needs towards 21st Century". In this study, 'current situation and the necessary situation' of teacher candidates have been analyzed. Contemporary teacher competencies in questions were asked to teachers, students, parents, inspectors, school administrators, senior executives, non-governmental organizations, lecturers, university administrators, and some topics were analysed such as subject area, student (psychological) development, teaching planning, instructional strategies (method-techniques), scientific process skills, classroom management / classroom activities, professional development, social / environmental dimension and personal characteristics. Significant differences were found between the "existing and the necessary situation" according to various variables in most of the obtained results (MoNE, 2001).

All qualifications gained in the Turkish Qualifications Framework (TYÇ, 2015) in the education system and in other learning environments classify from level 1 to level 8. Each level is defined in terms of "knowledge, skill and competence". The components of this 8-level structure are; core qualifications, unit qualifications, special purpose qualifications and supporting qualifications. Key competencies are defined for lifelong learning skills that each individual is expected to win. These key competencies are; communication in the mother tongue, communication in foreign languages, mathematical competence and basic competences in science/technology, digital competence, learning to learn, social and citizenship competencies, initiative and entrepreneurship, cultural awareness and expression. The fulfillment of these competencies is the responsibility of MoNE, Council of Higher Education (YOK), institutions and organizations within the scope of Law No. 5544. In this context, the competences and responsibilities of the Turkish Education System are also evident.

The Partnership for 21st Century Learning (www.p21.org) project is a very large strategic education project initiative implemented in 21 states in the USA and supported by 33 agencies. The skills and competencies that the individual should have in the project are:

A. **Learning and Innovation (4C) Skills**: **C**ritical Thinking and Problem Solving Skills, **C**reative Thinking and Innovation Skills, **C**ommunication and **C**ooperation Skills,

B. **Knowledge, Media and Technology Skills**: Information Literacy, Media Literacy, **I**nformation and **C**ommunication **T**echnologies (ICT) Literacy
C. **Life and Career Skills**: Flexibility and Compliance, Entrepreneurship and Self-Orientation, Social and Intercultural Skills, Productivity and Responsibility, Leadership and Responsibility

Key issues on which these **skills** are based are *language acquisition, reading and language arts, world languages, art, mathematics, science, geography, history, state and citizenship*. Then, based on these key words, interdisciplinary themes in the 21st century have been identified within these key words. These are the **themes** of *global awareness, entrepreneurship-economic or financial literacy, citizenship literacy, health literacy and environmental literacy*. All these above mentioned themes, key topics and skills are "21st century support systems ". These systems are in a hierarchy from the top and narrowest to the bottom and the inclusive.

The 21st century support systems respectively are; 21st century standards, assessment and evaluation of 21st century skills, 21st century program and teaching, Professional development in the 21st century, 21st century learning environment.

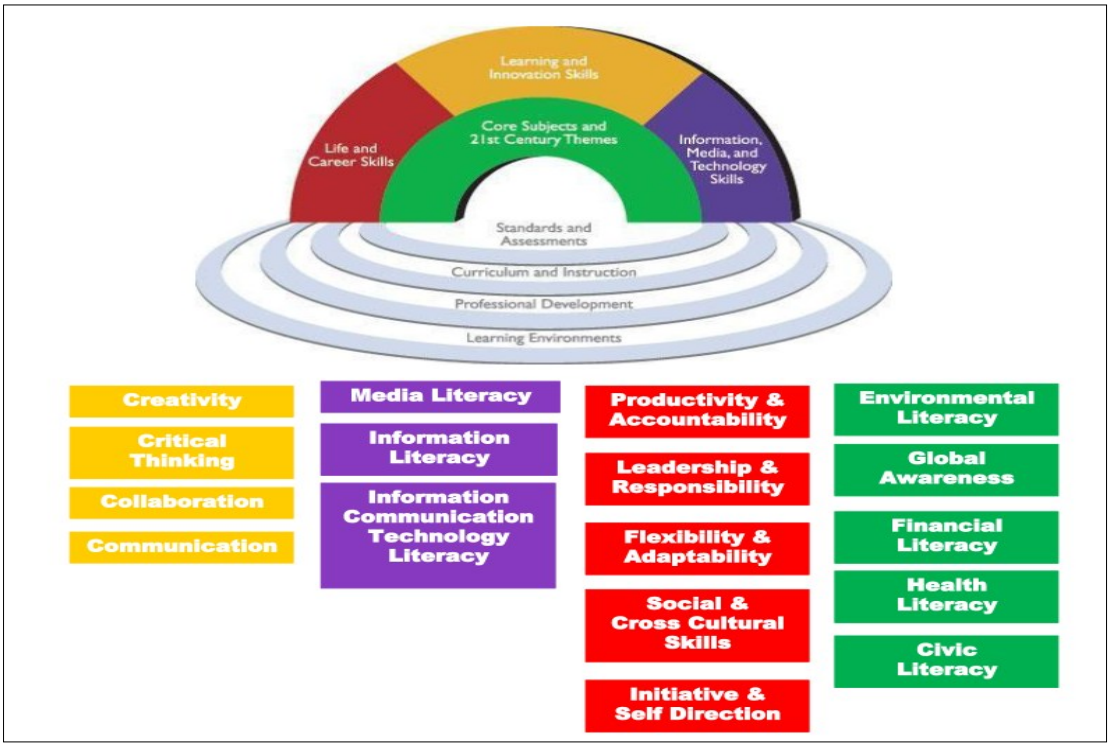

Figure 1: The 21st Century Learning Framework, Learning Outcomes and Support Systems, www.p21.org, 27-04-2017

These standards known as the 21st century learning standards set by the American Association of School Librarians and accepted as 21st century lifelong learning standards, include 81 standards in four dimensions. These:

1. Research, Critical Thinking and Getting information (25 sub-standards)
2. Concluding, Making Conscious Decisions, Applying Information to New Situations and Generating New Information (17 sub-standards)

3. Sharing Knowledge, Ethical and Productive Participation as Democratic Society Members (19 Substandard)
4. Work to Ensure Personal and Aesthetic Development (20 sub-standards) (http://www.ala.org/aasl/standards; Köğce, Özpınar, Mandacı-Şahin, Aydoğan-Yenmez, 2014).

These studies, which stand out in the world and in Turkey, gives some clues about the 21st century educational system's expectations and global trends.

1.1 Problem Statement

It is also important to plan the future as well as to live the moment since the results of education are often long-term. Sometimes it takes a considerable part of human life, or even a hundred years (http://yunus.hacettepe.edu.tr) as the Chinese poet Kuan-Tzu said. Some of the important features that distinguish human beings from other beings are his thinking, future planning, learning and self-awareness. What the characteristics of the 21st century educational environments-school and class structure are, what we do not want to be in the 21st century education system, what are the characteristics we want to change, what the expected characteristics of the 21st century student and teacher are, what the key concepts of the 21st century are and what educational problems will be encountered in the 21st century will be both the future of a nation and the future of a national education system.

The change of "something" in education changes everything. A change that is in a variance affects all variables. Education will be influenced by primary stakeholders such as students, teachers, parents, administrators, as well as all beneficiaries, professions and societies that are secondary stakeholders, directly or indirectly affected. For example, the structure and functioning of renewed education programs to be implemented from the 2017-2018 academic year, the basic philosophy of the program, the aims of the program, the skills to be gained by the students, the education of the values, the measurement and evaluation approach (http://mufredat.meb.gov.tr) will directly affect both its whole functioning, its central exams, and the society.

Questions such as: How will the use of technology affect education?, Which educational / learning approaches will be at the forefront?, Where does thinking skills come from in programs, What is the role of ever-changing and growing information in education?, what are teacher competencies and student acquisitions? Will be the distinctive dimensions of 21st century education?

It is already clear that the school and class of the 21st century will be far beyond the classical conception. In the classical sense, changing the classroom understanding of the school, accessing the internet, computer and electronic devices and virtual classrooms makes it necessary to redefine the "border" concept in education (http://files.eric.ed.gov/fulltext/ED514436.pdf). Instead of book, notebook and pen, electronic media such as computers, tablets and computers are in the forefront of digital media and open schools will come into prominence. Smartphones, training software and distance learning can be said to be a phenomenon of the concept of education. In this case, it is clear that the definition and function of the school will change completely.

In the 21st century, many competences have been started to be taken into consideration. As the concept of "competence" will come to the forefront, the role of the implementation will increase as mentioned in the European Qualifications Framework (www.ecompetences.eu). It is understood that with the technologies such as simulations, models, training will be carried out together with the application at work.

The concept of 'orientation' will become more important instead of the concept of teaching everything, training will be for individual, responsibilities of students will increase, and vocational counseling will be possible from early ages.

Along with globalization, concepts of equivalence, recognition and internationalization will gain importance. However, in spite of the standardization, protecting local and national things is also a problem of education. The importance and function of comparative education will increase.

Central and classical paper-pencil tests will evolve, interactive exams, formatting and training exams will become important, multi-assessment will become part of the measurement and assessment learning. The understanding of education that values cultural differences but is far from ideological and political concerns will be considered. From the point of view of the student, it is inevitable to offer alternative training options which are important to acquire thinking skills and universal values, language, communication and social skills are important, personality development is important and international and technological competencies are offered. According to the North American online learning organization report (http://files.eric.ed.gov/fulltext/ED514436.pdf) global awareness, self-learning, increased opportunities for students, increased information and communication technologies (ICT), problem solving increase of skills, individual responsibility and self-management skills are expected to gain importance in the 21st century.

The teaching profession will not only be limited to schools and classrooms, but will also create new areas for social life and e-world teachers. In addition to the teachers' self-sufficiency and self-improvement, language and communication skills, personality traits, and guidance skills will clearly gain importance.

Along with all these innovations and developments, it is also the point at which new problems will emerge. For example, the problems of the new educational environment (technological, management, competence, security, etc.), the place of the teacher in some fields of the software and robots, the decrease of facial education and the lack of teaching, the unrealized youth, the foreign language is indispensable, the difficulties of evaluating programs and the fact that programs are lagging behind innovations and the reduction of the effect of education on the workforce is also a problem. It is not hard to predict that there will be new and different problems that accompany education. The key question here is; how ready are we for your future education?, where are the anticipates? Because you are preparing for the future; a dynamic program, alternative learning-teaching environments, international competencies, alternative new applications, a technology-equipped infrastructure and quality.

1.2 Questions of the Problem

What are the anticipations and expectations of the teaching staff regarding 21st century education?

1.2.1 Sub-problems

According to the opinions of the lecturers;

1. How will the educational environments (school and / or class) of the twenty-first century in general be?
2. What kind of education should not be in the twenty-first century?
3. What might be the "key concepts" that will shape Education in the twenty-first century?
4. What qualifications should the student of the twenty-first century have?
5. What features should the teacher of the twenty-first century have?
6. What can be the (biggest) problems that the educators will encounter in the twenty-first century?

1.3 General and Sub-Objectives of the Study

The overall objective of the research is to determine the expectations and predictions of the instructors in the 21st century. Accordingly, sub-objectives of the research is to determine what kind of educational environment the lecturers can have in the 21st century, and the expectations from the future student and tutorial profile. In addition to this research, it is possible to identify the key problems that the educators will face in the 21st century and the key words that could be the determinant of future education policies.

1.4 The Scope of the Study

This research is a guiding work for educational institutions and policy makers in the development of education policy and orientation of 21st century education system. As Adam Smith (www.adamsmith.org) pointed out in his work entitled (Gökçen, 2006, pp. 30-34) "Wealth of the Nations" published in 1776, "*the available and acquired abilities of the citizens of an ethnic country are part of the fixed capital of that country*". The biggest capital in terms of educational sciences is human capital. It is widely known that the key to change is children. If we want to dominate our future and control it consciously, the most important way to do this is to set our "education system" accurately, not to move with aimless and short-term solutions such as off-road ships. For this reason, it is thought that this study will have a leading influence on the development of the 21st century Turkish national education system and the formation of vision. It is necessary to see the future for the right determination of the enormous economic spending that the country reserve from the gross national product every year. We now have the fact that we have to act with longer-term, consistent and meaningful plans within itself, and use human capital effectively, not only with 5-10 year plans.

1.5 Limitations

The study is limited to 22 academic units (faculty / institute / college) and doctoral faculty members at Ondokuz Mayıs University (OMU), to OMU project "Acquiring Training Formation and Skills for Academicians" (Project No: PYO.EGF.1907.14.001), and to the feedbacks of the seminar applications made 9 times between -2014-2016.

II. Methodology

2.1 Model of the Research

Since the aim of the survey is to create an objective reality about the predictions of 21st century education in the research as a whole (Yıldırım and Şimşek, 2008), it is designed as a survey model of descriptive study (Büyüköztürk, Kılıç Çakmak, Erkan Akgün, Karadeniz, Demirel, 2008). Six open-ended questions were prepared in line with the questions of the research and applied to the participants. Qualitative discourse (Ilgar and Coşkun-Ilgar, 2014) is formed by the structure of the obtained data. For this reason in this research, descriptive analysis (Özdemir, 2010) method was used in the qualitative data analysis (Saban and Ersoy, 2016) techniques (Karataş, 2015). Descriptive analysis is a qualitative data analysis type that includes summarizing and interpreting data obtained by various data collection techniques according to pre-determined themes (Berg and Lune 2015, Özdemir 2010, Glesne 2014). The descriptive analysis performed was carried out in five stages. In the first step, moving from the research questions; a framework for data analysis was established and data were collected based on this framework. In the second step, "group coding / numbering" was performed on these data and a code was given on each sheet. The answers given by the groups to the questions were gathered together in a categorically meaningful and logical manner under the relevant questions / frameworks. In the third stage, frequencies were taken for repetitive discourses, similar discourses were grouped together. In the fourth stage, these similar answers given to the questions were collected under the same "theme" and "named". In the fifth stage, the themes formed under the six pre-determined problems are interpreted horizontally and vertically, meaningfully, compared and interpreted.

2.2 Population and Sampling / Working Group

The study's population constitutes faculty members of Ondokuz Mayıs University (OMU). OMU has more than 50,000 students and 2,294 academic staff (http://ebs.omu.edu.tr). One of every 10 lecturers has entered the sample of the research. Sampling was performed in two steps. In the first step, 22 academic units were determined giving education at university undergraduate level.by selecting random sampling techniques using stratified sampling technique. In the second stage, academic members (Table 1) participated in the Academic Staff Recruitment Project based on volunteerism from these academic units were sampled. So typical case sampling is used from purposeful sampling techniques. In the typical situation sample, it is the principle to reach the target group which is not unusual in many typical cases and believed to give important ideas about the general (Büyüköztürk et al., 2008). The research both

extended a period of time and effort to determine the current situation by receiving option of the faculty members from different faculties, branches and titles (Glesne, 2014).

Table 1: Academic Units of Study Members Who are Included in The Research Sample, Numbers and Data Collection Process Table

Line	Faculty	Date of Data Collection	Number of Participants
1	Faculty of Aeronautics and Astronautics	September 08 – 12, 2014	14
2	Civil Aeronautics Academy		6
3	Faculty of Engineering		10
4	Education Faculty	January 01 – 05, 2015	5
5	Faculty of Science and Literature		5
6	Faculty of Economics and Administrative Sciences		5
7	Faculty of Theology		5
8	Education Faculty	January 07 – 12, 2015	5
9	Faculty of Science and Literature		5
10	Faculty of Economics and Administrative Sciences		5
11	Faculty of Theology		5
12	Faculty of Veterinary Medicine	February 23 – 27, 2015	25
13	Faculty of Agriculture	June 01 – 05, 2015	31
14	Faculty of Dentistry	June 08 – 12, 2015	25
15	Health Services Vocational School	September 14 – 18, 2015	5
16	Samsun Health School		33
17	Yaşar Doğu Sports Science Faculty	February 1 – 5, 2016	6
18	Faculty of Tourism		5
19	Faculty of Communication		11
20	Faculty of Communication		10
21	Ali Fuat Başgil Faculty of Law		15
22	Faculty of Aeronautics and Astronautics	April 11 – 15, 2016	10
	Total		246

2.3 Data Collection Tools

In the study, based on the objectives and research question "21st Century Education Expectations Question Form", which has been developed by researcher has been used. This questionnaire contains 6 questions in Table 2.

Table 2: 21st Century Education Expectation Questionnaire, Respondent and Group Numbers Table

Expectations From 21st Century Education Survey	Number of groups	N*
1. How do you think in general (in the world) 21st century learning environment (school and / or class) will be like?	(62 group)	220
2. What kind of education do we not want?	(40 group)	144
3. What could be the 'key concepts' that would shape the education of 21st century?	(47 group)	169

4. What qualities do you think the students of 21st century should have?	(32 group)	115
5. What qualities do you think the teacher of the 21st century should have?	(21 group)	76
6. What might be the biggest problems the educators will face in the 21st century? (write up to three)	(23 grip)	83

* The number of individuals in the group is not constant. The number of elements varies between 2 and 4. Total Number of Participating Teaching Members: **246**.

The questions of the questionnaire were written considering the literature search and the primary stakeholders of the education based on this. Reliability in qualitative research is used in the sense of confirmability (Saban and Ersoy, 2016). Similar results are sought from different sources.

- For the external reliability of the measuring instrument (confirmability) After the questionnaires were prepared, two faculty members (Glesne, 2014) were interviewed, who were a linguist and an educational science expert on the questionnaire; As a result of this, first of all, abbreviations and correcting the meaning have been made. Participant confirmation and self-reflection strategies" were used to ensure the internal consistency (internal reliability) of the question form (Başkale, 2016; Saban and Ersoy, 2016). Thus, the participants were evaluated, interpreted and analyzed, and whether or not the questions expressed something or reflected their experiences (Trumbull, 2005). In this context, to ensure the validity of the measurement tool, a pilot was applied to the research assistant in the Department of Educational Sciences (4). These participants were asked "what they understood" from each item of the questionnaire, and the answers were first compared with each other and then with the sub-objectives of the research. As a result of this application, the first question was added to the words "world" and "school and / or class". In the same way, the sixth question was added to the words "no more than three words" and the question form was finalized. Thus, the questionnaire reflects 'participants' thoughts (Koç, 2016) and the level of service to the objectives of the research have been increased.
- The fact that the researcher "really" observes what it is supposed to measure without interfering with other features, the research findings are consistent and meaningful in itself, the plausibility of the results; is related to the internal validity of the measuring instrument (Chief, 2016). The scope of the six questions used in the questionnaire; with literature, with research problems, coincides directly with the objectives of the research and research questions.
- Research findings; determine the external availability (transferability) of the research form so that it can be transferred to the general environments / situations with consistency with the research questions. It is clearly observed that the findings of descriptive qualitative analysis directly coincide with research questions (see. Findings)

2.4 Collection of Data, Schedule and Analysis

The data were collected from September 2014 to April 2016 in nine sessions in 22 academic units within the framework of the project "Acquiring the Training Formation and Ability for Academicians" in the OMU, each of which lasted for one week. Participants formed groups of at least 2 and at up to 5 people (total 246 participants), and they individually discussed the questions that were given to them individually as a group and wrote them by their hand as a group decision. After each question, the new question is given as open-ended. Six questions were asked. The duration of the response is minimum 10 min- 20 min for each question. The obtained data were put into code and analyzed in a 5-step analysis (described in the Patterned Section of the study 3.1).

III. Findings

Descriptive analysis was carried out on the data obtained from the questionnaire of "Expectations from 21st Century Education" in terms of the purpose and sub problems of the research and the findings obtained are given below.

3.1 Findings about 21st Century Educational Environments (School and / or Classroom) Expectations/Visions

Findings about 21st century educational environments (school and / or classroom) expectations/visions are given in table 3.

Table 3: Codes, Categories, Themes and Frequency Table for the 21st Century "Educational Settings (School and / or Classroom)" Expectations

Question 1: In your opinion, in general (in the world) how will the 21st Century's educational environment (school and / or class) be? (62 groups)

Group Coding	Categorical Answers	Frequency	Theme
1.1., 1.4, 1.6., 1.28., 1.55., 1.61.	The use of technology will increase.	15	Technological Development
1.4., 1.47., 1.47.	Technologically advanced classes will be.	6	
1.6., 1.32.	Robots will be used in training.	5	
1.3., 1.13., 1.34., 1.38., 1.51., 1.53., 1.54., 1.56., 1.57.	(In the classical sense) school or class will not be/ will decrease. There will be schools but no classes. There will be virtual classrooms. With internet, computers and electronic devices, virtual classes and lectures can be reached. They will be returned in virtual classes. There will be no class dependence. In education environments, the concept of "border" will be lifted.	29	Classes and schools
1.11., 1.13., 1.22., 1.24., 1.47., 1.55., 1.56., 1.58., 1.61.	Classes will be in smaller classes. Classes will consist of less numbers. But face-to-face training will not be abandoned.	25	
1.10., 1.18., 1.23., 1.29., 1.30., 1.31.,	There will functional schools and classes in which there will not be book, notebook, pens but tablet	30	

1.37., 1.39., 1.47., 1.49., 1.59.	and computers will come to the fore. The use of screen and computer will increase. 3D printers, tablets, supersonic PCs, smart technologies, hologram projections and new technologies will be used in the classes. Learning will take place in the digital environment.		
1.8., 1.54.	There will be schools which open to computer interaction. Schools will lose their functions and other learning environments will emerge. You will have access to the intellectual wisdom that you are asking, when you need it and when you are interested.	5	
1.12., 1.15., 1.29., 1.41., 1.61.	There will be practicing like home-class. There will be classes like home-office. The student will learn in an environment where s/he feels comfortable. There will be no attendance.	16	
1.13., 1.15., 1.21., 1.22., 1.24., 1.25., 1.38.,	There will be (intelligent) classes which is loaded technology. There will be the smart board, Wi-Fi, individual computers integrated with the board in each row.	15	
1.19., 1.40.	There is a possibility of increase or decrease in comfort and ease. Physical conditions will be more convenient for education.	5	
1.55., 1.61.	It will be a school and classroom environment that is at peace with nature; ecological problems are understood and solved. The school will constantly renew itself.	6	
1.17., 1.18., 1.20., 1.23., 1.24., 1.26., 1.37., 1.40., 1.42, 1.43., 1.58.	Classrooms will be more oriented towards practice. Practical training will be done mostly with simulation. They will learn directly on the models. Every subject will be taught practically. Technology and practice will accompany.	28	Practical Training
1.19., 1.22., 1.25., 1.42., 1.47., 1.59.	On-the-job training will increase and the student will recognize at the site of life. It will be practical education, not theoretical. Sections of those living in the environment will be presented as an example to the class.	16	
1.22., 1.39., 1.42.	Project-supported education will gain importance. Students will come to class only for practice. Trial environments will be provided to student.	6	
1.25., 1.58.	Internet (software) programs will become widespread.	5	Interactive, remote and interactive training
1.6., 1.31., 1.47., 1.50., 1.60.	It will be an individual training. Students will also train more effectively with each other.	12	
1.8., 1.25., 1.26., 1.27., 1.33., 1.44., 1.50.	Interactive training environments will increase. It will be interactive learning based on discovery.	17	
1.1., 1.3., 1.9., 1.11., .12, 1.13., 1.18., 1.19.,	Distance education will increase. The education system will be based on distance education. There	57	

1.21., 1.25., 1.29., 1.35., 1.38., 1.45., 1.51., 1.52., 1.53., 1.57., 1.58. 2.1., 2.38.	will be virtual book, virtual classroom and virtual teachers.		
1.16., 1.20., 1.21., 1.30., 1.36., 1.53., 1.54., 1.60.	Education will not depend on space and time. There will not be a permanent place. There will be no time constraints.	20	
1.5., 1.13.	The course will be processed with interaction through smartphones. Mobile applications will develop informal learning.	5	
1.20., 1.39.	The theoretical issues will be with distance education.	5	
1.31., 1.59.	There will be internet groups on any subject (to be learned) and they will be learned by discussing.	6	
1.61.	Three-dimensional applications will increase.	3	

1.37., 1.58.	Counseling and guidance will be available on the Internet at any time. Students will be able to watch thanks to the software.	6	Directing
1.37.	The training that reveals the ability and directs the individual will take place. There will be education training according to the individual. There will be more space for jobs.	3	
1.41.	The learner's responsibility for learning will increase.	3	
1.41.	In higher education, more than one profession can be learned at the same time.	3	

1.7., 1.30., 1.41., 1.43.	The need for tutor will decrease. The teacher will be the guide. Teacher-centered system will be abandoned.	9	Teacher and Teaching
1.9., 1.40., 1.61.	Instead of course teachers, course programmers will come to the forefront. The primary focus of the trainers will be training. Elective courses will increase.	8	
1.19	Education will accelerate in accordance with the rhythm of life.	3	
1.17.	The role of the teacher will diminish, but s/he will always exist.	3	
1.20., 1.49., 1.55.	Instead of an authoritative teacher; the moderator and the trainer system will come. Instead of hierarchical, pedestrian-based education, there will be educational environments where multi-centered and horizontal relationships dominate.	9	
1.22.	The rules will be minimal.	3	
1.24., 1.31., 1.32., 1.35., 1.44., 1.46.,	There can be training in sleep. Animation can be done with the signals and hallucinations that are sent to brain. It will be training with hologram and mind power. When there are holographic systems, there is no need for collective space.	19	

1.27., 1.51.	Without any teacher-student contact, the information will be transferred to the brain (virtually). There will be individual education supported by artificial intelligence.	6	
1.42., 1.59., 1.61., 1.62.	In education, memorization will decrease. Thinking skills will be used more often. Individual thinking / ideas will be given importance. Group work will increase.	13	

1.1., 1.8., 1.9., 1.37.	All resources will be in digital media. Higher quality documents will ensure equal education for everyone.	8	Information source
1.2	Information will grow very quickly.	2	
1.13.	There will be more material for teachers and students.	3	
1.23., 1.24., 1.58.	Not the knowledge, the way of knowing will gain importance. Everyone will be able to access the desired information directly on-line. As the access to information becomes easier, the teachers will be more helpful in the work requiring interpretation.	12	

1.9., 1.37.	Global structures in education can be the forefront. Equivalence and validity can be common language. Students will be international.	6	Globalization
1.28.	In economically unfavorable countries, the current situation will change very little.	2	
1.37.	Unification in education (education around the world) can be.	3	

1.15.	An environment where exams are interactive.	3	Exams
1.25., 1.29.	Exams will decrease and research assignments will increase.	6	

Table 3 shows that "21. (Σ f = 26, Σ group number = 11) "in relation to the educational environment of the 19th century " school year (school and / or class) " it is a common fact that the usage of technology will increase gradually. "(Σf = 29, number of Σgroups = 9)" is defined as the dependence on the class environment is to be reduced, the boundary concept is to be developed, and the classes in the classical sense have to be developed from virtual classrooms. It is indicated that "The number of classes will be small and face-to-face education will not be abandoned for some types of education" (Σf = 25, Σgroup number = 9), "there wiil be no book, (Σf = 30, Σgroup number = 11),''smart technologies'' and ''digital environments'' "everyone who wants to interact with open schools will access the information at any time" (Σf = 5 (Σf = 16, Σgroup number = 5) and "self-renewing school" (Σf = 6, Σgroup number = 2, Σfroup number = 2), "Interactive and virtual classes in home-office style and environment where the student feels comfortable" = 2).will be popular.

In relation to the 21st century educational environments instructors especially indicated that, interactive, remote and interactive education will be popular. (Σf = 130, Σgroup number = 50). In this regard, it is important to understand that "internet programs will become more common", "virtual books, virtual classrooms and virtual teachers" (Σf = 56, group number = 21), "education will not depend onspace and time" (Σf = 31, Σgroup number = 12) "learning groups will be made in relation to the subject to be learned.

In the educational environment of the 21st century, it is indicated that "practice-theory and technology" will be used in the forefront, "on the job" applied education will be increased, "each subject will be taught practically" (Σf = 50, group number = 20) (Σf = 5, Σgroup number = 2) that theoretical subjects will be processed by distance education. In the 21st century schools, it is indicated that "orientation", "internet can be done at the desired time and students can watch with the software", student talents and the individuality are on the foreground and more opportunities for the professions will be provided. (Σf = 12, Σgroup number = 4)

Along with all these changes, the changing roles of teachers and learners in 21st schools and the differentiation of required qualifications are inevitable facts. 21. Related to "teacher and teaching" in educational environments; (Σf = 12, Σgroup number = 5), “memorization will decrease, thinking skills and group work will increase" (Σf = 13, group number = 4), which will be replaced by the teacher-centered system. In addition, with the development of technology, (Σf = 25, Σgroup number = 8) are used in different types of education (brain-based learning) such as "education in sleep", "education with colocations sent to the brain" and "individual education supported by artificial intelligence".

In educational environments; (Σf = 11, Σgroup number = 5), it will be easier to access the information and therefore "Information will not matter but the way the information will gain" (Σf = 14, Group number = 4) is foreseen.

Instructors participated in the research, together with "globalization" in 21st century schools are indicated that; (Σf = 9, Σgroup number = 3) global works will come forefront in education " " equivalent and validity, international common language will be brought to agenda" " the danger of standardization in education will come up", whereas in the "countries that are not economically developed, the current state of affairs (eg, education and training) they will change very little "(Σf = 2, group number = 1). In addition, "exams" will be reduced and alternative and interactive exams will increase (Σf = 9, Σgroup number = 3).

3.2 The Findings related to Undesirable Negative Situations in Education in the 21st Century

Predictions and anticipations that academicians mostly see in the 20th century and do now want to face in the 21st century are analyzed and the findings are given in table 4.

Table 4: Codings, Categories, Themes and Frequency Table for the 21st Century **Negativities in Education**

Question 2: What type of education that you don't want?(40 group)			
Group Encoding	**Categorical Answers**	**Frequency**	**Theme**
2.1., 2.2., 2.3., 2.5., 2.10., 2.12., 2.14., 2.15., 2.16., 2.22., 2.23., 2.25., 2.27., 2.31., 2.36.	We don't want to rote-learning based education system.	38	Rote-learning based education system
2.4., 2.13., 2.24., 2.25.	We don't want to theoretical, superficial and rote-learning system.	10	
2.6., 2.17., 2.26., 2.29., 2.37.	We don't want to rote-learning system which impose ideas to students, avoid thinking, prevent creativity, limit the exchange of ideas and far away from solving problems.	16	
2.1.	We do not want commercial anxiety in education	5	commercial
2.8.	We do not want a education that is shaped by the demands of capital focus.	2	
2.10., 2.19., 2.22., 2.25., 2.27.	We do not want to paid education.	14	
2.6.	We do not want education that does not pay attention to cultural differences.	3	culture/ society
2.8.	We do not want education that focuses on benefits.	2	
2.19.	We do not want politics in education.	3	
2.20.	We do not want education that confuses science and belief.	3	
2.20.	We do not want to encourage ideology and hatred under the name of education.	3	
2.24., 2.38.	. We do not want unequal education	5	
2.6.	We do not want an education that does not allow practice.	3	performing
2.11., 2.25.	We do not want education without practice.	5	
2.12, 2.22., 2.23., 2.29., 2.38.	Practically remote, we do not want useless training without practicality in real life.	12	
2.18.	We do not want the training to be based on classical books and photocopies.	3	
2.1., 2.2., 2.8., 2.12., 2.13., 2.21., 2.38.	We don't want to crowded class.	20	Class
2.3., 2.28.	We don't want to classic class.	5	
2.25.	We do not want an education system that is closed	3	

	to the school.		

2.1.	We do not want decisions about education to be taken without asking the trainers.	5	Management
2.11.	We do not want a training that lacks the infrastructure or the academic staff.	3	
2.14.	We do not want legislation changing over the years.	2	
2.27.	We do not want an undefined education.	4	
2.31., 2.36.,2.37.	We do not want a rigorous education.	9	

2.4.	We do not want education that only shows success with limited tests.	3	Assessment
2.17.	We do not want any education that does not have feedback, and evaluates it as an exam grade.	3	
2.21., 2.26.	We do not want an unfair assessment based on a single test.	5	

2.1.	Not everyone needs to have a higher education.	5	Orientation
2.37.	We do not want a competitive education system.	3	
2.3., 2.10., 2.12., 2.13.	We don't want reluctant student.	11	
2.4.	We do not want mass training.	3	
2.4., 2.8., 2.20., 2.32.	We do not want uniform training in the (heterogeneous) class.	11	
2.5., 2.6., 2.37., 2.38.	We do not want a training that does not allow people to grow / improve themselves and that does not take their skills into account.	17	
2.9., 2.12., 2.15., 2.27., 2.28., 2.31., 2.37.	We do not want unwanted / forced (compulsory) education for the purpose uncertain / targetless. We do not want training that is based on procedures, made without the contribution of students, to be done. We do not want training that makes choices based on family expectancy and teacher imposition.	23	
2.27., 2.36.	We do not want education that is lacking in love, where the educators and educators are not in common payday.	7	

2.2., 2.21., 2.25., 2.36.	We do not want inadequate training environments on the physical side in terms of technology.	10	Educational environment
2.12., 2.21.	We do not want an educational environment where there is no technical infrastructure and where current technology cannot be used.	5	
2.14.	We do not want a training that only focuses on teaching.	2	

2.2.	We do not want very busy (working) teachers.	5	Teacher
2.3., 2.5., 2.6., 2.14., 2.22., 2.25.,	We do not want excessive authority, pressure	31	

2.26., 2.27., 2.37., 2.38.	(violence), student passive, dominant education.		
2.4., 2.16., 2.25., 2.35.	We do not want any emotional (robotlike) training. I do not want to be taught a lesson such as diversity. We do not want a second, unfair education that excludes students.	11	
2.6., 2.13., 2.21., 2.26., 2.30.	we do not want a training that only the teacher is active and teacher-centered.	13	
2.7., 2.17., 2.25., 2.35.	We do not want a classical / monotonous teacher. We do not want the teacher to turn around behind the class. We do not want a boring education.	11	
2.18.	(Under the name of the homework) we don't want to make teach lesson to students.	3	
2.19., 2.24., 2.33., 2.36., 2.37.	We do not want teachers who do not renew themselves, do not keep up with the conditions of the day, do not follow scientific innovations, do not bring innovation for years, are inadequate, passive and obliged to work.	14	
2.26., 2.34., 2.36., 2.38.	We do not want a teacher who uses uniform / traditional teaching methods.	15	
2.35.	We do not want a teacher who is closed to comment, stuck in stereotypical thinking.	3	

2.5.	We do not want static training (not updating itself).	3	Topicality and program
2.9., 2.20.	We do not want any unscientific training made with unconfirmed sources of information (and not knowledge).	5	
2.11.	We do not want to have a trial-and-error training that is based on a program that is not seated.	5	
2.18., 2.24.	We do not want the student to be given unnecessary information. We do not want too many lessons loaded with lessons.	5	
2.21.	We do not want a uniform, standard training schedule.	3	
2.27.	We do not want a well-organized education.	4	
2.18., 2.25.	Universities do not need 5 courses. We do not want unnecessary lessons.	5	
2.27., 2.38.	We do not want to create a training program without asking the trainer, just training based on the compulsory courses. We do not want untrained training.	11	
2.36.	We do not want long-term courses that tires students.	3	

2.1., 2.38.	There should be distance education.	6	Distance education

One of the negative situations academicians do not want to see in their ' 21st century education is "memorizational education". The instructors stated that they did not ask for

an education (Σf = 64, group number = 24) they stated that they did not ask for an education (Σf = 64, group number = 24.) Participants stated that they did not want a training that preceded parcel and shaped by "commercial" concerns (Σf = 21, number of group = 7) In addition, they stated that education is not for "politiket / politics / benefit", beliefs and known things should not be confused with each other, ideologues should not be fostered under the name of education, they want an education that emphasize diversity and is equal. (= 19, group number = 7.) In the 21st century, "primary book and photocopy-based" education is required (Σf = 25, number of group = 9) Instructors' stated they did not want classes that are "lock in school/ordinary, crowded" Σf = 28, group number = 10).

Participants' expectations about "management of education" also define the structure of the 21st century school. Because the instructors stated that they do not want a training based on "strict rules", "decisions are taken without asking the trainers", "boundaries are uncertain", "constantly changing legislation", "lack of infrastructure and cadre" (Σf = 23, group number = 7). They do not want a "measurement evaluation" that is "no feedback, evaluating the test as a grade point", "a single test based, unfair" (Σf = 11, group number = 4).

More than 1/3 of the Participants (24 groups, N = 80) referred to the issue of "orientation" when they pointed out features they did not want to be in the education system of 21st century. They stated that they do not want an education "not cared for people's abilities, competent, crowded, standardizing for everyone" "purpose uncertain / reluctant / imposed" "lacking in love"(Σf = 41, number of groups = 11), (Σf = 34, number of groups = 11), " (Σf = 7, group number = 2). They pointed out that they do not want a "physical education" in terms of technological insufficiency, no technical / technological infrastructure and only gives importance to the teaching. (Σf = 17, group number = 7).

One of the most expressed opinions by the participants (f = 106) is about "teacher". "excessive authoritarian, oppressive, inactivate students, dominative", Teacher-centered" (Σf = 44, Σgroup number = 15) teacher model is not desirable. A teacher's profile (Σf = 54, Σgroup number = 18), which is not self-renewing, is inadequate in its field, is obliged to work, uses traditional teaching methods, teaches by turning their back to students, boring, emotionless, excludes students, is closed to interpretation should not be included in educational settings of 21st century. In addition, they stated that they do not want a teacher who "make students do the lecture under the name of homework" (f = 3, group number = 1) "very busy" (f = 5, group number = 1)

One of the issues that the instructors who participated in the research wanted not to be in 21st century education is about 21 "program and topicality". Participants stated that they did not ask for a program (Σf = 31, group number = 8) based on compulsory courses, unplanned, self-updating / static, uniform, not well-organized, unconfirmed scientific information-based, works with continuous trial-and-error. They also stated that they did not ask for a program (Σf = 8, Σgroup number = 3) that is "make students tired, long-term, loaded with unnecessary information / lessons".

3.3 Findings Related to Key Concepts to shape 21st Century Education

The academicians who participated in the research have been surveyed on the subject of "21. The key concepts that will shape the education of the 21st century". The findings are shown in Table 5.

Table 5: Codes, Categories, Themes and Frequency Table for Key Concepts to Shape 21st Century Education

Question 3: What might be the "key concepts" to shape education in 21st century? (47 groups)			
Group Coding	**Categorized Answers**	**Frequency**	**Theme**
3.1., 3.19., 3.33., 3.35., 3.46.	Internet-based	13	Technology
3.1.	Computer	5	
3.2., 3.3., 3.6., 3.9., 3.11., 3.14., 3.16., 3.18., 3.22., 3.24., 3.27., 3.33., 3.35., 3.36., 3.38., 3.42., 3.43., 3.44.	Using technology	50	
3.13., 3.36.	Innovation	6	
3.5., 3.37.	Artificial Intelligence	6	
3.37., 3.44., 3.45., 3.46.	Three-dimensional imaginary / digital media	13	
3.1., 3.3., 3.4., 3.8., 3.9., 3.12., 3.35., 3.45., 3.47.	Applied / participant / practical education	26	
3.1., 3.8.	Active training	7	
3.4.	Experience	3	
3.25.	Using knowledge	3	
3.5.	Onsite learning	3	
3.34.	Requirements of the era	3	
3.36.	Effective teaching methods	3	
3.13., 3.30., 3.40.	Life-long learning	9	Approaches to education
3.35.	Independent learning	3	
3.1., 3.6., 3.9., 3.15., 3.43.	Distant education	17	
3.6., 3.19., 3.24., 3.44.	Interactive education	11	
3.33., 3.40.	Active learning	6	
3.4.	Education without school	3	
3.4., 3.15.	Pragmatism	6	
3.35.	Pluralism	3	
3.5., 3.34., 3.39., 3.43.	Pluriculturalism	12	
3.34., 3.38., 3.39.	Plurilingualism	8	
3.11.	Cultural unity	3	
3.14., 3.26.	Security in education	6	
3.6., 3.7., 3.10.	Individual training, personal / individual training	8	
3.35., 3.42.	Student centered	6	
3.36., 3.41.	Entrepreneurship	6	
3.8., 3.13.	Multidiscipliner/Interdiscipliner fields	6	
3.15.	Alternative presenter	3	

3.11., 3.37., 3.42.	Values/Dignity	9	
3.30.	Compassion	3	
3.12., 3.15., 3.33.	Productivity	8	
3.35.	Flexibility	3	
3.17.	Re-learning	2	
3.21.	Sharing	3	
3.23., 3.44.	Macroplanning/ Programme	6	
3.27.	Health	2	
3.31.	Control system	3	
3.33.	Collaboration	2	
3.34., 3.39., 3.42., 3.45.	Globalization	12	
3.43.	Localization	3	
3.34., 3.38.	Economic power	5	
3.47.	Benefits	3	

3.3., 3.20.	Science	5	Knowledge
3.1.	Basic knowledge (Unchangeable)	5	
3.1.	Changeable knowledge	5	
3.4.	Reformist Approach	3	
3.11., 3.21.	Informatics	5	
3.27., 3.31.	Update information	6	
3.14., 3.38.	Source of information	6	
3.38.	Reachability	2	
3.45.	Immensity	3	

3.36., 3.45.	Thinking	6	Cognitive skills
3.36.	Awareness	3	
3.1., 3.25., 3.26., 3.28., 3.29.	Acquiring / accessing information	17	
3.1., 3.3.	Asking/Questioning	8	
3.1., 3.7., 3.39.	Critical thinking	10	
3.1., 3.5., 3.25., 3.26., 3.27., 3.28., 3.36., 3.40., 3.42.	Learn to learn	29	
3.1.	Selection	5	
3.1., 3.40.	Problem solving	8	
3.1., 3.45.	Simulative thinking	8	
3.5., 3.12., 3.33., 3.37., 3.44.	Creative thinking	13	
3.6., 3.7., 3.31.	Searching	8	
3.9.	Synthesizing	3	

3.2., 3.14., 3.15., 3.16., 3.18.	Request, interest, free will	13	Learner/Learner
3.12., 3.35., 3.38.	Result-oriented / Focus on the goal	8	
3.3., 3.24., 3.30., 3.31.	Curiosity, innovative	17	
3.3.	Attention	3	
3.38.	Motivation	2	
3.41.	Effort	3	
3.7.	Need	2	
3.10., 3.47.	Ability	6	
3.3., 3.16., 3.18., 3.44.	Individual differences, originality	9	
3.14., 3.20., 3.41.	Human based/ subjectivity	8	

3.10., 3.30., 3.39.	Self-confidence	12	
3.4.	Entertainment	3	
3.24., 3.30.	Individual contentment, Self-realization	8	
3.9.	Elaboration	3	
3.36., 3.39., 3.45.	Communication	9	

3.2., 3.10.	Expertise, profession	6	Teacher's Qualification
3.12., 3.24., 3.30.	Competency	11	
3.6., 3.7.	Classroom management	5	
3.10.	Democratic	3	
3.25.	Encouraging to learn	3	

Since the participants of the research are academicians, they were asked what key concepts might shape 21st century education. In the result, under the theme of technology, it is indicated such words “using technology" (Σf = 50, group number = 18), "three dimensional virtual / digital environment" (Σf = 13, group number = 4), "artificial intelligence and innovation" (Σf = 12, group number = 4), "internet, computer" (Σf = 18, group number = 6).

Under the theme of “Practical Education", a total of 16 groups and 48 academicians expressed a key concept. Similar to the findings in Table 3 and Table 2, the academicians used the term "practical / participatory / practical training, active training, on-the-job training, experience, knowledge use, effective teaching" as key words (Σf = 48, group number = 16) have made clear predictions about the nature of education.

Instructors have identified various key words under the 21st century "educational approach" theme. Because these approaches can be thought as the codes of 21st century education system. The key concepts that have emerged in relation to this subject have been grouped and interpreted within themselves. In the findings the words “distance education, interactive education, multiculturalism, multilingualism, cultural unity, alternative presenting, flexibility, globalization, localization, multidisciplinary and interdisciplinary fields of study (Σf = 28, Σgroup number = 9) (Σf = 18, group number = 5), "utilitarianism, pluralism, productivity, sharing, cooperation, benefit" (Σf = 42, Σgroup number = 50, group number = 17), "lifelong learning, pragmatism, free learning, (Σf = 20, Σgroup number = 7), "entrepreneurship, active learning, one to one education, value / virtue, love / compassion, health, safety" (Σf = 26, group number = 9) seem to define the educational approaches that will guide the 21st century.

Key words "accessibility, resource, current / innovative knowledge, changeable / unlimited knowledge, information" (Σf = 35, group number = 11) are emerging as the key concepts to shape 21st century education under the topic of "knowledge".

One of the defining dimensions of the 21 century education system is, of course, thinking skills. Instructors have identified a number of key concepts under the theme of "thinking skills". (Σf = 33, Σgroup number = 10), "thinking, learning how to learn, awareness, acqusition of knowledge, accession, asking question, questioning, searching,

decision making, problem solving, (Σf = 21, Σgroup number = 5), "critical thinking, creative thinking, synthesis" (Σf = 26, group number = 9) skills were identified by 118 participants and 36 groups.

In the 21st century a number of individual competences and learning items have been identified under the theme "student / learning". Some of these are psychological items that internally affect learning, while others are external ones that affect learning. The words which internally influence learning "Motivation, effort, need, ability, individual difference, originality, self-confidence, individual satisfaction, self-realization, meaning "intention, interest, free will, focus on goal / focus on the target, curiosity" are combined under the theme of student/learning with the words "human orientation, communication, entertainment" (Σf = 20, group number = 7), which externally influence learning with the concepts of Σf = 86, Σgroup number = 25.

One of the dimensions that will determine the 21st century education is determined as "teacher competencies". Key concepts of "expertise, professionalism, competence" (Σf = 17, Σgroup number = 5) and "promoting classroom management, democracy, encouraging" (Σf = 11, group number = 4) are mentioned under the subject of teacher competencies.

3.4 Findings of 21st Century Student Competences

How and what qualifications the student of 21st century will have and the dimension of student competencies are seen as a direct determinant of 21st century education. For this reason, the instructors who participated in the research has been asked which competencies the students of 21st century should have and the expectations regarding this topic are presented in Table 6.

Table 6: The Table of Codings, Categories, Themes and Frequency belonging to expectations regarding 21st century **Student Competences**

Question 4: In your opinion, which competences the students of 21st century should have? (32 groups)			
Group Coding	**Categorical Responses**	**Frequency**	**Theme**
4.1., 4.4., 4.8., 4.10., 4.22., 4.24., 4.29.	S/he should have thinking and interpretation/ reasoning skills.	23	Thinking Skills
4.1., 4.10., 4.23.	S/he should have critical thinking skills and should not move with herd psychology.	11	
4.1., 4.11., 4.19., 4.23., 4.31.	S/he should be creative.	18	
4.5., 4.6., 4.19., 4.22., 4.32.	S/he should have study skills	10	
4.9.	S/he should have lifelong learning skills.	3	
4.10., 4.21., 4.26.	S/he should solve problems (that is; they should interpret the information)	9	
4.6., 4.10., 4.15., 4.17., 4.19., 4.25., 4.30., 4.31.	S/he should query.	24	
4.17.	Making a decision (S/he should have the competence of living on their own)	4	
4.24., 4.27., 4.28., 4.32.	Their awareness and comprehension level	12	

	should be high.		
4.26.	S/he should learn learning.	3	

4.1., 4.15., 4.16.	S/he should be respectful.	11	Values education
4.24.	S/he should be well-behaved.	3	
4.1.	S/he should not pursue his personal interests all the time.	5	
4.2.	S/he should have the moral values of today	3	
4.4.	S/he should not be drowned in traditions	3	
4.11.	Health and happiness should be the main goal.	3	
4.13.	S/he should build empathy.	3	
4.20.	S/he must have national and spiritual values.	3	

4.1., 4.7., 4.9., 4.10., 4.12., 4.13., 4.29.	S/he should know how to reach information.	21	Reaching information and applying
4.1.	S/he should have an open world view.	5	
4.10.	S/he should be able to renew her/his information.	6	
4.20., 4.22., 4.26.	S/he should read much.	9	
4.30., 4.31.	S/he should be able to apply the information he/she has.	6	

4.1., 4.6.	S/he has common language skills.	8	Language and Communication
4.4., 4.6., 4.17.	S/he should be able to master written and verbal communication skills.	10	
4.6., 4.8., 4.31.	S/he should be able to express yourself, be sociable.	9	
4.5., 4.7., 4.8., 4.12., 4.24.	S/he should know international language/s.	15	

4.3., 4.21.	S/he should qualify not only in one field, but also in several fields.	6	Field
4.5., 4.11.	S/he should be open to interdisciplinary courses.	5	
4.8.	S/he should have professional consciousness	3	
4.15.	S/he should be open to innovations.	3	

4.1., 4.3., 4.5., 4.14., 4.24.	S/he should be open to learning, concerned, conscious, curious, willing.	16	Learning Competences and Personality
4.24.	S/he should have high self-confidence	3	
4.1., 4.4., 4.21.	S/he should be able to improve himself/herself constantly, open to innovation.	11	
4.1., 4.10., 4.16.	S/he should have his/her goals and broad vision.	11	

4.4.	S/he should care about persistence rather than speed.	3	
4.5.	S/he should study regularly.	5	
4.6., 4.15.	S/he should be hardworking and be active.	3	
4.22., 4.23.	S/he should be entrepreneur.	6	
4.24.	S/he should be well disciplined.	3	
4.29.	S/he should be productive rather than consumer.	3	
4.8., 4.14.	S/he should not use the lesson for learning, not for grade.	6	
4.16., 4.17., 4.24., 4.25.	S/he should be able to choose his/her profession with his/her own decisions and abilities. S/he should know what you need.	13	
4.19.	S/he should practice what he/she learns.	2	

4.1., 4.7., 4.8., 4.24.	S/he should have social personality.	14	Being social
4.6., 4.11., 4.24.	S/he should share experiences.	9	
4.10.	S/he should have team spirit and work with groups.	3	
4.11.	S/he should have conscious of cooperation rather than competition.	3	
4.17.	There is not any students with financial difficulties.	4	
4.20., 4.24., 4.27.	S/he should have social and cultural background.	9	
4.26.	S/he should be interested in a field other than work and study.	3	

4.1., 4.2., 4.3., 4.4., 4.5., 4.6., 4.7., 4.9., 4.12., 4.17., 4.20., 4.21., 4.23., 4.30., 4.31.	S/he should be able to use information technology well.	45	Technology
4.3., 4.15., 4.22., 4.23.	S/he should be open to technological innovations.	12	
4.8.	S/he should be open to interactive course.	3	

4.1.	S/he can evaluate international opportunities.	5	International
4.8.	S/he should be an international student.	3	
4.20.	S/he should follow country and world agenda.	3	

4.3., 4.25.	S/he should make handcraft, be practical.	6	Skill
4.11., 4.26.	S/he should improve her/himself in terms of sport and art.	6	

Participants have the ability to think in the majority of research questions emphasized that education is a strong determinant. In the expectations regarding the 21st century student competencies, students are expected to have the ability to think and interpret, to have critical thinking skills, to be creative, to have inquiry, problem solving, research and decision making, learning and lifelong learning "skills (Σf = 117, Σgroup number = 38).

The competencies expected by the student regarding the "Learning competencies and personality" theme are as follows: eager, interested, conscious, curious, opening to learning, improving yourself constantly, opening to innovation, choosing his/her profession with his/her own decision and ability, knowing what he/she needs, applying his/her knowledge, attending lessons for her/his learning rather than get point, being systematic, having self-confidence, having goals, having a large vision, being hardworking, active, productive and enterprising.

In addition to the academic and personality competences of the students, the dimension of “value education” is seen as competencies that students should have. In this context, "to be respectful, to be moral, not to pursue perpetual personal interests, to have moral values of today, to not be drowned in traditions, to care for health and happiness, to empathize, to have national and spiritual values" (Σf = 34) values are defined.

Expected competencies to be possessed by students under the theme of "Technology" are stated as "Being able to use information technologies well, being open to technological innovations and being open to interactive classes" (Σf = 60, group number = 20). 21st century. (Σf = 47, Σgroup number = 14) competencies are expected under the theme of "Access to information and practice" from the students "Knowing the way of accessing information, having open world view, renewing information, reading a lot.

Students who are under the theme of "socialization"; (Σf = 45, Σgroup number = 14) skills are expected to be "having social personality, sharing experiences, working with groups, having a social and cultural background, Under the theme of "Language and Communication"; (Σf = 42, Σgroup number = 13) competencies are recognized in the 21st century as "having good command of written and verbal communication skills, being able to express themselves well, being sociable, having common language skills and knowing the international language" are the expected competencies for students. Categorical answers (Σf = 11, Σgroup number = 3) have emerged regarding this theme under the theme of "international", "being able to evaluate international (education) opportunities, becoming an international student, following country and world agenda". (Σf = 17, group number = 6), "being a practical handicraftsman, sportsman", "being open to interdisciplinary courses and innovations" and "being artful" (Σf = 12, Σgroup number = 4).

3.5 21st Century Teacher Competency Findings

Undoubtedly, 'student' and 'teacher' are two important concepts that complement each other. General and field competences have started to be defined all over the world in

relation to the competences that a teacher who has a job of teaching and providing learning should possess. Findings regarding the expected competencies of the 21st century teacher are given in table 7.

Table 7: Codes, Categories, Themes and Frequency Table for the Expected Competencies of the 21st Century Teacher

Question 5: What features should you have in the "tutorial" of the 21st century? (21 groups)			
Group Encoding	**Categorical Answers**	**Frequency**	**Theme**
5.1., 5.4.	S/he should master social media	8	Social Media
5.2.	S/he should follow current events and link them to lessons	3	
5.8., 5.13.	S/he should be sensitive to the culture	6	
5.11.	With changing educational attainment, s/he should be a guide	3	
5.11., 5.13., 5.14.	He/she should be able to communicate with students not only in the classroom but also in social life. He/she should be a model	9	
5.1., 5.13.	S/he has a good command on at least one foreign language	8	Language
5.2.	S/he has elocution and persuasive ability	3	
5.8.	Communication must be strong	3	
5.2., 5.12., 5.20.	S/he should be creative	9	Having thought skills
5.5., 5.15., 5.17.	S/he should have enough competence to give to reach information and learning to learn to the students	9	
5.5.	S/he should bring few rules and boundaries as possible	3	
5.10., 5.12.	S/he should be conductor, a solution maker and broadening horizon (enigmatic) person.	6	
5.1., 5.3., 5.6., 5.8., 5.9., 5.11., 5.14., 5.15., 5.18.	S/he should be open to innovations and follow them	28	Actuality and professional competence
5.2., 5.9., 5.13.	S/he should have intellectual accumulation	9	
5.2., 5.8., 5.9., 5.10., 5.11., 5.13., 5.15., 5.16., 5.18., 5.20.	S/he should be open to self-development, and continue to learn	30	
5.3., 5.5., 5.8., 5.10., 5.13., 5.17.	S/he should be open to current developments	15	
5.16.	S/he should love his/her profession	3	
5.1.	S/he should have multidisciplinary sense of work	5	
5.5., 5.6., 5.20.	S/he should have the information and universality that the 21st century needs	9	
5.11., 5.20.	S/he should be able to use different teaching methods.	6	
5.6.	S/he should be able to be give the measurement and evaluation in digital environment.	3	
5.1.	S/he should be self-confident	5	Individual / personality
5.2., 5.4.	S/he should be flexible and have a good-humored	3	

5.2., 5.4.	S/he should be open to and respectful of students' opinions	6	features
5.10.	S/he should care about individual differences	3	
5.2.	S/he should be able to integrate the views of the students into the classroom.	3	
5.2., 5.13., 5.14.	S/he should be a model	9	
5.3.	S/he should be patient	3	
5.9., 5.14., 5.20.	S/he should be impartial / objective	9	
5.3.	S/he should not be prejudiced	3	
5.2., 5.4., 5.15.	S/he should Be tolerant / understanding and affectionate	9	
5.4.	S/he should be accessible	3	
5.5.	S/he should bring few rules and boundaries as possible. S/he should expand the field of freedom of the learners.	3	
5.4., 5.13., 5.16., 5.20.	S/he be respectful (to human, blessed, animal and neighborhood)	12	
5.8.	S/he should be empathic	3	
5.9., 5.16.	S/he should have human value and conscience	6	
5.11.	S/he should be entrepreneur	3	
5.11., 5.12., 5.13., 5.19.	S/he should be the leader	11	

5.1., 5.2., 5.3., 5.4., 5.5., 5.6., 5.8., 5.9., 5.13., 5.19.	S/he should follow technology and educational equipment and use them well	31	Technology
5.6., 5.21.	S/he should be accessible out of school (interactive)	6	

Participants stated that "competence in the field of vocational and up-to-date" at the beginning of the qualifications that teachers should have in education in 21st century. Under this theme, besides the answers of "Being open to self-development, continuing to learn, being open to innovations and keeping up to date, open to current developments, having intellectual accumulation" (Σf = 82, Σgroup number = 28) (Σf = 26, Σgroup number = 8) categorical answers to be able to do and evaluate, to love their profession, to have multidisciplinary working understanding with knowledge and universality required by the 21st century".

It is stated as "technological" that "it is necessary to follow and use technology and educational equipment and to use (remote) / interactive / accessible from outside the school" (Σf = 37, group number = 12). Under the theme of "Social / Media", teachers should be able to communicate with students not only in the classroom but also in social life, it is designated competences like to be model, to follow current events and associate with the lectures, to dominate social media, to sensitive to the popular culture, Group number = 9).

In the findings obtained, many features are given under the theme of "personality / personality". These are being model, being self-confident, being leader, being entrepreneur, being fair or objective, being tolerant, being understanding, being loving, being respectful, being empathic, being flexible and being friendly, being open

to and respecting the ideas and opinions of students, caring about individual differences, being patient, having conscience, being accessible, being able to integrate the views of the students into the classroom, bringing few rules and boundaries, expanding the student's freedom.

Under the theme of having thought skills, it is specified competences such as being creative, being conductor, generating solutions and being an enigmatic, bringing as few rules and limits as possible, showing the way to learn. Under the "language" theme, the teachers of the 21st century are expected to have "good command of at least one foreign language, strong communication skills, strong speech and persuasion skills" ($\Sigma f = 14$, group number = 4)

3.6 Findings Related to the Problems That the Trainers May Encounter in the 21st Century

Possible problems faced by educators under the theme of "class / education environments, teacher, education system, student, language, program, measurement and economy" in 21st century education are mentioned. The categorical responses to these themes are given in Table 8.

Table 8: Codes, Categories, Themes and Frequency Table Related to the Problems of Educators in the 21st Century

Question 6: What might be the "biggest problems" that educators will face in the 21st century? (please, write at most three of them.) (23 group)

Group Code	Categorical Responses	Frequency	Theme
1.6.	Class dominance will become even harder.	7	Classroom/Education Environment
6.2.	The ease of accessing information can lead to a reduction in interest in school / class.	3	
6.2.	Indiscipline within the scope of freedom.	3	
6.5., 6.7.	Instead of physical school / class, virtual / technological classes.	6	
6.10.	Inadequate training environments.	3	
6.10.	Inadequate equipment, hardware.	3	
6.1., 6.23.	Challenging about classroom management.	8	
6.1.	Teachers may not be needed.	5	Teacher
6.1.	The fact that students cannot meet the expectations of the future and (mutual) unsatisfactoriness.	5	
6.5., 6.21.	Teachers may be inadequate in updating / renewing / improving themselves	6	
6.7.	The trainers may have employment problems.	3	
6.7.	Teachers have to respond those who attend the lesson with the camera from their home, in front of the screen.	3	
6.12.	Teachers continue to old teaching techniques and cannot get results.	3	
6.21.	Teachers cannot maintain their objectivity.	3	

6.2.	Reflection of chain errors in the training system	3	Education System
6.3.	The idea that country policies will be insufficient in the field of education.	3	
6.5.	The problem of giving functional / useful knowledge and skills.	3	
6.6.	Formal education is about to be removed.	3	
6.7., 6.11.	I do not think it will be face to face education; the teacher-student relationship will decrease.	6	
6.7.	Your life / lifelong education needs are not met.	3	
6.9., 6.12.	The ever-changing education system and the inability to keep up with the pace.	6	
6.11., 6.15.	The family and school environment will be involved too much.	6	
6.13., 6.18., 6.22.	Loss of values, emotional deprivation, cultural erosion, lack of respect and love	11	
6.15.	Regulations and so on. applications	3	
6.17.	Population (multiplicity)	3	
6.19., 6.23.	Information and technology cannot be controlled	6	

6.1.	More knowledgeable / conscious students	5	Student
6.15.	Extreme prosperity and self confidence	3	
6.1., 6.13., 6.16.	Facing a more youthful, unskilled, machine-like youth	11	
6.2., 6.16., 6.18.	Fatigue and reluctance in education, the formation of meaning void. Students do not want to go to school.	9	
6.2.	Uncertainty about job life and the lack of orientation in career choice.	3	
6.3.	The understanding of the responsibility and discipline of the educated is gradually diminishing.	3	
6.4., 6.16., 6.22.	It's an asocial youth who is locked in his own world. Social life, from sports, youth away from art.	9	
6.23.	Continuation of human understanding which is part of the order obeying chain.	3	
6.13.	Students are disconnected from education due to virtual worlds in the social environment, and their relations are limited.	3	
6.18., 6.22.	Due to the multiplicity of stimuli, there are increasing clutter and psychological problems.	6	

6.1.	The emergence of foreign language needs	5	Language

6.1., 6.3., 6.9., 6.12., 6.21.	Technology rapidly changes and (teachers) not being able to dominate technology.	17	Technology
6.2..6.23., 6.17.	The robotized student profile captured by the technology is it prominent.	9	

6.4.	There may be a generation that is difficult to communicate due to the use of intensive technology.	3	
6.16.	Due to the improper use of technology, students are caught up in the book without getting the smell.	3	
6.20.	Problems that can be experienced due to problems in energy and technological tools.	3	

6.9.	A training program that is not sensitive to the individual differences of students	3	Programme
6.16.	Unchanging content, redundant information	3	
6.4., 6.11.	Educationally, the youth who learn from technology. The simplification of access to information will ensure that the student is disconnected from the ward. (This may lead to unplanned and non-directional efforts in education)	6	
6.19.	Educating students who are not present (for new professions)	3	

6.2., 6.4.	Information pollution can cause difficulty in measuring.	3	Measuring
6.6.	To reach the stage of commodification of knowledge	3	
3.20.	Because each student will be assessed individually, it can be difficult for trainees to follow each student.	3	

6.10., 6.17.	Inadequate economic power	6	Economic power
6.13., 6.14.	Unemployment	6	
6.14.	The current (human) power is not developed.	3	
6.23.	Inadequacy to produce knowledge	3	

Participants most often point to possible problems under the "technology", "student" and "education system" themes. Under the theme of "Technology", there is the question "Not to be dominant as fast-changing technological competence, a robotized student profile taken by technology, a generation difficult to communicate due to the use of intensive technology, the ability of students to read as well as problems in technological devices" (Σf = 35,) are identified as possible problems.

Problems that may arise under the subject of "students"; "A youth who has been confined to his own world, to meet with a youth who is ready, unqualified, machine, fatigue and reluctance in education, gradual decrease of students' understanding of responsibility and discipline, lack of education due to virtual worlds, increase in disarray and psychological problems, (Σf = 55, Σgroup number = 17), which is a part of the chain of command and obedience, rather than the conscious students "(Σf = 55, Σgroup number = 17).

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Problems that may arise under the theme of "education system" in the 21st century show different distributions. "The problem of losing values, emotional deprivation, cultural erosion, lack of respect and love, diminishing teacher-student relations, a constantly changing education system and not being able to keep up with the agenda, the need for lifelong education, (Σf = 56, Σgroup number = 18), the problems that are mentioned under the subject of education system, the problems of the education system, the problems of the education system, some of them are mentioned.

Problems that may arise in relation to "classroom / educational environments" include "difficulties in classroom management and difficulty of class domination, discipline in the name of freedom", "ease of access to information leads to a decrease in interest in school / class" (Σf = 21, The occurrence of training environments and equipment-hardware deficiency is indicated as possible problems in virtual / technological classes "(Σf = 12, group number = 4).

21st century the problems that can arise under the "teacher" theme in the education system are "insufficient for teachers to update / renew / develop themselves" - continuing to old teaching techniques and the lack of results, the need for teachers and the problem of employment, the inability of students to meet future expectations, and (unsatisfactory) (Σf = 28, Σgroup number = 8) "in order for teachers to be able to maintain their objective and to respond to the teachers'.

It is stated under the "Program" theme that there can be "problems not sensitive to individual differences, unchanging content, unnecessary information, program for new occupations, unplanned" (Σf = 15, group number = 5). It has been determined under the theme of "measurement and evaluation" that there may be problems of "making each student more difficult to follow, information pollution and meta-knowledge" (Σf = 9, group number = 4). It is stated that there may be "unemployment, inadequacy in producing information, economic inadequacy" (Σf = 15, Σgroup number = 5) problems under the subject of "economic power".

4. Conclusions

4.1 Results on the Common Theme of 'Technological Development'

The technology was defined on the top concept come out on the research findings. Total 86 group and 99 percent of the participants determined that technology takes place and have an effect on it. In this context, it is stated that is of technology will increase and developed classroom in terms of technology will be built in the 21st century. And it is stated internet-computer- technology-robot-artificial intelligence -imaginary and three

dimensional- digital environments will be used intensively. Therefore, besides the problems like inability having a grasp of technology and use it, it is anticipated that student profile problem which they are auotomatized by technology and having difficulties in contacting with each other, can appear.

4.2 Results of Education Environment (Classroom/ School)

85% of participants make opinions about how to be improved 21st century education environment (class and school) and how it should be in a positive way and possible problems. According to this, it is anticipated that the educational environments of the 21st century will not be classical; traditional school and classes, imaginary classes will become widespread; small functional classes will be built up but face-to-face education will not disappear totally; education environment will be equipped totally with technology and tablet, computers will be used instead of notebook-book- pencil. Moreover, instead of crowded classic classrooms lock the students in it, the school which smart and new technologies will be used at the alternative education environment, students can access alternative information in scope which they need to learn, education applications such as home-class/ office will be much more suitable in interactive and imaginary atmosphere, and renewing themselves constantly will be built up. But despite all these alternative improvements, it has been determined that the lack of discipline within the scope liberty leads to a decrease in the level of educational attainment, the difficulty in classroom management, and the inadequacy of educational equipment.

4.3 Results about the Common Practice of Applied Education

One of the outstanding themes in the research is related to the practice of education. 64.6% of academician participated at the research expressed that they don't want an education which is out of practice, without real life application, in beneficial classic book and based on photocopy. For this reason, they remarked that education environments must be more application -focused, every topic be taught practice on the work, in a real-life related way.

4.4 Results about the Common Practice of Interactive/ Distance Education

60% of 246 academician participated at research remarked that especially interactive /distance education would get to the foreground. In this context, it is envisaged that students will be able to train more effect effectively with each other and their teachers by means of this way that education of internet- based education software in the 21st century education systems can be realized informally with smart mobile applications and 3D visual applications without having a fixed time and machine. In this respect, it has been pointed out that inadequate training environments in terms of technology, lack of infrastructure and technology, and education that only teaches education will become a problem.

4.5 Results on the Common Theme of 'Orientation'

39% of the academicians taken place at research stated their opinions under the orientation theme. It has been stated that students should be given a choice that is not uniform, standardized/procedural, competitive and competent approach that student competencies are not taken into account, and that they are presented with preferences based on family expectancy and teacher imposition. Instead they point out that a training structure is developed that emphasizes 'education according to education rather than individual, education according to individual', professional orientation is made more professionally and from early ages, and the responsibility of learners is increased.

4.6 Results of "Access to information- source of information"

100% of the academicians (f = 246) indicated that the process of reaching and increasing the use of information has an important effect in the 21st century's education. In this context, it is stated that all resources will be various and high quality in digital media, knowledge will be easier to reach and that higher learning can be done easily, not the information but the way of knowing will gain importance. For this reason, it is said that teacher must be open to innovation, to continue to improve and learn, to work with multidisciplinary understanding, and to use information resources in digital environments effectively. Parallel to this, it is necessary to students know how to reach and use information. Academicians pointed out that the understanding of information-intensive education, which is not based on education, is not self-updating, works with trial-and-error, works with a uniform, unnecessary and cumbersome program, requires students, is based on compulsory courses.

4.7 "Globalization- International Education"

13% of the academicians who participated in the study (14 groups, f = 45) stated that education would be inadvertently affected by globalization and internationalization. Equivalence, validity, competences, common language and limitations of the lesson facilities that do not recognize will come to the agenda in 21st century. It can be said that this situation brings forward the concept of international education.

4.8 "Examinations and Measurement-Evaluation" Related Results

12% of the academicians (11 groups, f = 29) were in the 21st century; they pointed out that a measurement-appraisal approach, in which success is measured by limited tests, is based on traditional measurement techniques, but is not feedback, is considered as an exam grade. In the 21st century, interactive exams and alternative assessment and evaluation techniques can be used effectively. Nevertheless, they have foreseen that the problems of measurement and evaluation of the 21st century will continue.

4.9 "Commercialization and Economic Power" Joint Related Results

In the survey, 16% of the teaching staff (13 groups, f = 39) gave an opinion on education and economic relations in the 21st century. Due to the increase in the economic cost of

the training service, problems such as the emergence of commercial concerns in education and inefficiency in producing information, unemployment and infrastructure failure may arise. Contrary to this situation, they also pointed to the danger that capital foci would make education a commodity.

4.10 Results of the "Culture, Society, Society" Common Theme

37,4% of the participating academicians indicated that (30 groups, f = 92) 21st century's teacher must follow social media and current events, using them in educational environments, popular culture-sensitive people, and students should be able to communicate in social life as well.

4.11 Results of the "Educational System / Approach, Management" Common Theme

It is envisaged that the effects of the management on the educational systems, which dynamically feel their existence in the history of education, will continue in the 21st century. All the participating academicians (87 groups collected under this theme, f = 246) expressed their views by establishing the 21st century education system and management relation. Academicians who are in the 21st century's education; stated that they did not ask for an education management that is rigid, decentralized, functioning according to ever-changing legislation, and lacking infrastructure. Together with the changing world, they have stated that new problems will also arise in education systems The problems of country politics will be inadequate in the field of education, reduction of organized education, the occurrence of chain errors in the education system, the development and reduction of the teacher-student relationship in a diffused way, the constantly changing education system and inability to keep up with the agenda, the inadequacy of life-long learning (LLL) it is foreseen that problems such as loss of values, emotional deprivation, cultural erosion, lack of respect and love may be in the education system as technology becomes uncontrollable. Among the key concepts (31 in total) that define academics' approach to 21st century education, the most repeated ones are; distance education, interactive education, multiculturalism, lifelong learning, value and virtue, individual centeredness, multilingualism, productivity, active learning, usefulness, security, entrepreneurship, interdisciplinarity and macro planning.

4.12 Common Theme Results About '' Learnıng, Learnıng To Learn''

All of the academicians participating in the survey (100%) expressed their views on learning and learning in the 21st century. Above all, academicians, as related to this common theme, stated Above all, academics are concerned with this common theme; In the 21st century, they stated that they did not want a theoretical, superficial, parrot fashion, thought-provoking, creative barriers, restricting exchange of ideas, problem-solving and imposition of student ideas / knowledge. For this purpose, they stated that 21st students should be self-developing, eager, concerned, conscious, curious, open to learning and innovations, having goals, having a broad vision, hardworking, active, enterprising, disciplined, acting in concert with self-thoughts and skills, having

heightened awareness, aware of what s/he need and making sense what s/he have learned and apply them. For the 21st century teachers; they should have the characteristics of being respectful to students' thoughts and opinions, flexible, debonair, fair/objective, approachable, tolerant, empathetic, aware of individual differences, self-reliant, enterprising and leader.

4.13 Common Theme Results About '' Thinkıng Skills''

The most distinctive feature that distinguishes human beings from other living things is his power of thinking. All the academicians who participated in the research expressed their opinion under the common theme of thinking ability. In the 21st century, they have stated that students should be individuals with a high level of cognition who learn way to teach, think by associating, synthesize, get information, lean life-long, decide on his/her own, interrogate, solve problem, research, think creatively and critically, interpret by thinking. It is also stated that teachers should be a person who does not limit students but guides, resolves and becomes an enigmatic with competencies to make students obtain these skills.

4.14 Common Theme Results About '' Values Education''

18% of the participating academicians (13 groups, f = 45) expressed their views on 21st century education values. In the 21st century education to avoid problems such as loss of values, emotional deprivation, cultural erosion, lack of respect and love; being respectful, moral, not pursuing personal interests continuously, having moral values of today, establishing empathy, having national and moral values should be emphasized.

4.15 Common Theme Results About "Language Communication''

23% of the participants (17 groups, f = 56) participated in the study, stated that it would be a necessity to be able to communicate well, having good written and verbal communication skills, common language skills, possessing at least one foreign language at a good level, and having strong communication skills.

4.16 Common Theme Results About ''Programme''

In the study, 22% of the teaching staff (17 groups, f =54); stated that they did not want a training program based on unnecessary information / lessons, tiring students with demanding extra course load, (not being sensitive to individual differences of learners) content is not well organized / only mandatory courses. In addition to this; instead of course teachers, the need for course programmers is expected to increase.

References

1. Başkale H. (2016) Nitel Araştırmalarda Geçerlik, Güvenirlik ve Örneklem Büyüklüğünün Belirlenmesi, Dokuz Eylül Üniversitesi Hemşirelik Fakültesi Elektronik Dergisi, DEUHFED 2016, 9(1), 23-28, http://www.deuhyoedergi.org

2. Berg B. L., Lune H. (2015) *Sosyal Bilimlerde Nitel Araştırma Yöntemleri* (H Aydın Çev.): Konya, Eğitim Yayınevi & Pearson
3. Büyüköztürk, Ş.; Kılıç Çakmak, E.; Erkan Akgün, Ö.; Karadeniz, Ş.; Demirel, F., (2008), Bilimsel Araştırma Yöntemleri, Ankara, PegemA Yay.
4. Glesne C. (2014), Nitel Araştırmaya Giriş (4. Baskı) (Çev. Edt. A. Ersoy, P. Yalçınoğlu), Ankara, Anı Yay. (Şubat 2012)
5. Gökçen B. (2006) Beşeri Sermayenin İktisadi Gelişmedeki Rolü Ve Önemi: Adana İline İlişkin Bir Uygulama, Adana, Çukurova Üniversitesi Sosyal Bilimler Enstitüsü İktisat Anabilim Dalı, Yayınlanmamış Yüksek Lisans Tezi
6. http://ebs.omu.edu.tr/tr/universitemiz.html, Erişim Tarihi: 28-04-2017
7. http://files.eric.ed.gov/fulltext/ED514436.pdf, Erişim Tarihi: 27-04-2017
8. http://mufredat.meb.gov.tr/, Erişim Tarihi: 27-04-2017
9. http://www.ecompetences.eu/, Erişim Tarihi: 27-04-2017
10. http://yunus.hacettepe.edu.tr/~sadi/dizeler/balik-tut.html, Erişim tarihi: 27-04-2017
11. https://www.adamsmith.org/about-adam-smith/, Erişim Tarihi: 28-04-2017
12. Ilgar M. Z., Coşkun-Ilgar S., 2014 Nitel Bir Araştırma Deseni Olarak Gömülü Teori (Temellendirilmiş Kuram), İstanbul Sabahattin Zaim Üniversitesi Sosyal Bilimler Dergisi, 3 (4) 197-247
13. Karataş Z. (2015) Sosyal Bilimlerde Nitel Araştırma Yöntemleri**,** Manevi Temelli Sosyal Hizmet Araştırmaları Dergisi, 1 (1) 62-80
14. Koç E (2016) Nitel Araştırmalarda Geçerlik ve Güvenirlik, M. Y. Özden, L. Durdu (Edt.) *Eğitimde Üretim Tabanlı Çalışmalar İçin Nitel Araştırma Yöntemleri* içinde (148-164), Ankara, Anı Yayıncılık
15. Köğce D., Özpınar İ, Mandacı-Şahin S, Aydoğan-Yenmez A (2014) Öğretim elemanlarının 21. yüzyıl öğrenen standartları ve yaşam boyu öğrenmeye ilişkin görüşleri, *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi, 22 (2014) 185-213*
16. MEB/EARGED (2001) 21. Yüzyıla Girerken Türk Eğitim Sisteminin İhtiyaç Duyduğu Çağdaş Öğretmen Profili, Ankara, Milli Eğitim Basımevi
17. MEB/EARGED (2011) MEB 21. Yüzyıl Öğrenci Profili, Ankara, Milli Eğitim Basımevi
18. Özdemir M. (2010) Nitel Veri Analizi: Sosyal Bilimlerde Yöntembilim Sorunsalı Üzerine Bir Çalışma, Eskişehir Osmangazi Üniversitesi Sosyal Bilimler Dergisi, 11 (1) 323-343
19. Partnership for 21st Century Learning, www.p21.org, https://tr.pearson.com/tr/kurumsal-egitim.html ve http://mebk12.meb.gov.tr/meb_iys_dosyalar/34/34/970222/dosyalar/2013_11/22020856_21_yuzyil_becerileri.pdf, Erişim Tarihi: 26.04.2017
20. Saban A., Ersoy A. (2016) Eğitimde Nitel Araştırma Desenleri, Ankara, Anı Yay.
21. Trumbull M. (2005) Qualitative Research Methods, G R Tailor (Ed.) *Integrating Quantitative and Qualitative Methods in Use* (Second Edition) in (pp101-126), USA Maryland, University Press of America

22. TYÇ (2015), Türkiye Yeterlilikler Çerçevesinin Uygulanmasına İlişkin Usul ve Esaslar Hakkında Yönetmelik, Bakanlar Kurulunun 2015/8213 sayılı Kararıyla 19.11.2015 tarihli ve 29537 sayılı Resmi Gazete, www.myk.gov.tr/TYC, Erişim Tarihi 26.04.2017
23. The American Association of School Librarians (AASL), http://www.ala.org/aasl/standards, Erişim Tarihi: 27-04-2017
24. Yıldırım A., Şimşek H. (2008) Sosyal Bilimlerde Nitel Araştırma Yöntemleri (6. Baskı). Ankara, Seçkin Yayıncılık