International Journal of Education & Literacy Studies
ISSN: 2202-9478
www.ijels.aiac.org.au

Cognitive Constructs of Teacher Candidates on Ideal Qualifications of Academicians

Oğuzhan Sevim, Durdağı Akan, İsa Yıldırım*

Ataturk University, Turkey

Corresponding author: İsa Yıldırım, E-mail: isa.yildirim@atauni.edu.tr

ARTICLE INFO

Article history
Received: May 24, 2020
Accepted: July 15, 2020
Published: July 31, 2020
Volume: 8 Issue: 3

Conflicts of interest: None
Funding: None

ABSTRACT

The aim of the study is to analyze the cognitive construct of teacher candidates on ideal qualifications of academicians. Since the study has both quantitative and qualitative dimensions, it has been conducted in accordance with the exploratory sequential design which is a kind of mixed method. The study included twenty-four teacher candidates who were studying at different departments, at Kazım Karabekir Faculty of Education, Atatürk University during 2019-2020 spring semester. Since the cognitive constructs of teacher candidates on ideal qualifications of academicians were questioned, the repertory grid method was used for data collection. Data obtained in the study were analyzedwith quantitative and qualitative data analysis techniques. In conclusion, many cognitive constructs regarding academicians were obtained. The frequency of referring to cognitive constructs showed that teacher candidates expect academicians to have the values such as respect, justice, democracy, and impartiality, to be sympathetic, sincere, tolerant, humanist, and reliable in their relations, to attach importance to several features such as being disciplined, well-informed, being effective instructors, researchers, and being up-to-date while fulfilling their duties.

Key words: Teacher Candidates, Ideal Qualifications of Academicians, Cognitive Construct, Repertory Grid Technique

INTRODUCTION

In an ever developing and changing world, societies desire to retain their current positions and take firm steps forward for the future. In this sense, universities play an important role in the development and progress of societies. Universities carry out their scientific studies by the academicians.

The academic life has caused different discussions in terms of generating and spreading information in the changing and developing world. For instance, as Babacan, Kozak, Babat and Kulakoğlu (2012) mentioned, it has led to the following questions: What are the beneficial aspects of information? What kind of information do we need? What methodological ways to use in order to produce this information? How to finance studies in order to obtain data? Who will use these results and how? What is and/or should be the position of the academicians the developer of universities and information? and what kind of information will be generated for what purposes?

Due to the information explosion formed parallel to the increase of information networks such as the internet developed recently and the information pollution, one of its consequences, the abilities of realizing, finding, choosing, evaluating and actively transmitting knowledge have been turning into essential skills not only for researchers but for every individual (Doyle, 1994; Pinto, Cordon and Diaz, 2010; Polat, 2004). This situation eventually widened the impact area of academicians, regarding the education of individuals with skills and characteristics of information literacy.

Although the word academia is derived from the school of Plato called Akademia, today, the word academia represents the meaning of a university (Aydın, 2016; Erdem, 2008). An academician can be defined as a professional title which conducts activities on research, development, and teaching in higher education institutions and contributes both to their field and scientific development with their original studies (Arı, 2018). The academicians who are able to solve the problems experienced or that can be experienced by accessing the appropriate information, who ensures the continuity of the process of obtaining information by accessing various sources of information and who can put different strategies into effect in order to obtain information can be regarded as an information literate individual (Behrens, 1994; Spitzer, Eisenberg & Lowe, 1998).

Considering the notion of scholarship and discussion on fundamental dynamics supporting this notion, it could be noted that scholarship has a binary role, being teaching-based and/or research-based (Odabaşı et al., 2010). According to Boyer (1990), academicians have four different functions, and these are discovery, integration, application, and teaching.

Published by Australian International Academic Centre PTY.LTD.

http://dx.doi.org/10.7575/aiac.ijels.v.8n.3p.76

Research, teaching, social and management services are among basic activities of the academician (Hattie and Marsh, 2002). Therefore, features such as researching, questioning, curiosity, thinking differently, and being entrepreneurs may be regarded as the necessities of being an academician. However, it would not be a correct approach to define or limit being an academician into certain notions because global changes bring about many different needs (Etzkowitz, 2004; Froman, 1999; Odabaşı et al., 2010; Özgüngör and Duru, 2014).

The qualifications of the academicians who are always willing to improve themselves according to the changing conditions are closely related to the efforts of the students to get prepared for professional life in various faculties and departments of universities. It is no more possible to acknowledge a model of academicians only transferring the knowledge in the present world where we experience the Fourth Industrial Revolution (Schwab, 2016). When the "The Report on the Jobs of the Future" published by World Economic Forum is examined, the skill requirements for the employees are listed as follows: 1) ability to solve complex problems, 2) critical thinking, 3) creativity, 4) people management, 5) coordinating with others, 6) emotional intelligence, 7) decision-making, 8) service orientation, 9) negotiation, and 10) cognitive flexibility (Karaçay and Alpkan, 2019). In addition, along with the technological developments experienced today, information skills community has also changed and the usage areas of the concept of literacy has considerably diversified. Depending upon the fields required, the personnel are expected to be informed in fields such as computer, environment, economy, graphics, digital, politics, media and web literacy and efficiently use the skills regarding these types of literacy. (Snavely and Cooper, 1997). Moreover, according to Shapiro and Hughes (1996), skills on information literacy should be included in higher education programs as a new method and a curricula should be prepared on the skills of information literacy.

In addition to teaching a subject during the lesson, academicians should also take the role of providing students with critical, creative, and reflective thinking, problem solving, decision-making, effective communication, and metacognitive skills. All these requirements and expectations raise questions on whether academicians working in universities are qualified enough to contribute to the personal and professional developments of the students at most and this issue has been questioned recently (Özgüngör and Duru, 2014).

Academicians conducting scientific studies in universities and the university students directly under the effect of these studies represent the qualified work force that is required for the countries and make the universities essential. While academicians play a role in the information production process, students in different faculties and departments play a role in evaluating this information regarding fields that the society needs.

Students from different faculties and departments have a major impact on making the information produced in universities beneficial for the society. Being the bridge between the university and the society, university students are the intermediary in presenting academic knowledge for needs in social life. Teacher candidates studying at education faculties have a more special obligation because just like academicians, teachers are also role-models for the target audience and they have an important role and voice in raising the qualified work force that the society needs Therefore, qualifications that academicians have or are expected to have are also valid for teacher candidates.

The fact that students from the education faculty find solutions for problems they face using the scientific method, that they apply these solutions in scientific processes again, and that they evaluate these results are important dimensions of their professional development (Karasar, 2007). To have these features is thought to contribute to their professional knowledge, skills, and performance in teacher candidates (Çepni, Küçük and Gökdere, 2002). Academicians play a major role in providing teacher candidates with the ability to transform the knowledge they have obtained in their career by adopting a scientific attitude into behavior. In this sense, it is thought that to obtain information on the cognitive perceptions of teacher candidates on academicians that they take classes from will provide important tips for educational activities conducted in education faculties. The present study aimed to analyze the cognitive constructs of teacher candidates on the ideal qualifications of academicians.

METHOD

Research Design

Since the study has both quantitative and qualitative dimensions, it has been conducted in accordance with the exploratory sequential design which is a kind of mixed method. Mixed method research is collecting data and using quantitative and qualitative methods in combination in order to understand the research problem better and thoroughly (Creswell and Plano Clark, 2014; Hesse-Biber, 2010). There are different kinds of mixed method researches such as sequential descriptive pattern, exploratory sequential design, sequential transformational design, synchronic triangulation design, synchronic intertwined design, synchronic transformational design (Creswell, 2003). The exploratory design is considered as an important research method in terms of quantitative expression of the similarities and relationships between the cases created by the participants with qualitative methods (McMillan and Schumacher, 2006). Since the features of the exploratory design correspond to the features of this study, the exploratory sequential design has been used in the study.

As can be seen in the Figure 1, the first three steps represent the qualitative dimension of the study and the fourth step represents the quantitative dimension. In the last step of the study, all qualitative and quantitative data obtained, were evaluated together, and compared with the relevant literature.

Study Group

The study included twenty-four teacher candidates studying in different departments, at Kazım Karabekir Faculty of

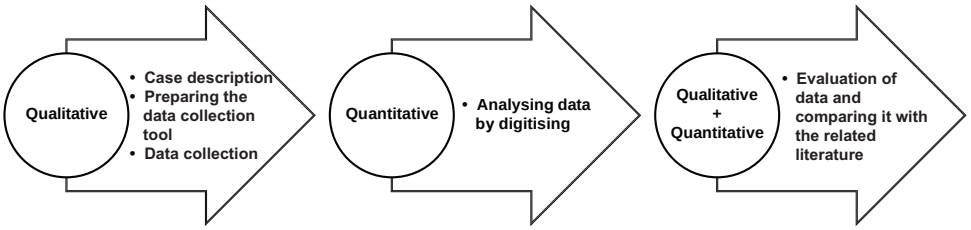

Figure 1. Process steps of the study procedure

Education, Atatürk University during the 2019-2020 spring semester. The study group was formed based on criterion sampling method, one of the purposive sampling methods, and the principle of maximum variation. The criterion was to be senior year students for teacher candidates because teacher candidates needed to have sufficient information on 6 academicians that they referred to in the triad repertory gird from and to have developed cognitive constructs on ideal qualifications of academicians (Patton, 2014). The researches attempted to achieve maximum variation by recruiting teacher candidates from several departments in education faculties raising teachers. Information on the participants is presented in Table 1.

As seen in Table 1, the researchers attempted to represent all the departments in education faculties by recruiting 3 participants from each department raising teachers in the study.

Table 1. Features of the study group

Departments	Female	Male	Total
Computer and instructional technologies teaching	1	2	3
Educational sciences	2	1	3
Fine arts teaching	1	2	3
Mathematics and science teaching	3	-	3
Special education	-	3	3
Primary education	1	2	3
Turkish and social sciences teaching	2	1	3
Foreign languages education	3	-	3
Total	13	11	24

Data Collection Tool

In order to understand and interpret human behavior on any given subject or event, their cognitive structures need to be understood. The repertory grid technique, an information analysis technique derived from the Personal Construct Theory of Kelly (1955), is one of the most popular indirect knowledge acquisition techniques used in understanding opinions in human beings on any given subject, event, and object (Yaman, 2008). Kelly (1955) claim that a certain number of constructs may be acquired by evaluating the events arising from human experience using the repertory grid technique. These constructs may be good and positive or bad and negative, being bipolar. Events (human, opinion, subject, incident) are called "materials" while constructive notions are called "constructs". Constructs may be nouns or adjectives or a notion described in two-three words. Cognitive constructs reflected in repertory grid from are used as tools in grasping the conceptual frameworks in human being on any given field, subject or object and in understanding forms of evaluating events and decision-making process on the subject.

Since the study aimed to question the cognitive constructs of teacher candidates on ideal qualifications of academicians, the repertory grid method was used. The study presented the cognitive constructs of teacher candidates regarding the ideal qualifications of academicians using grading charts formed by the repertory grid technique and to understand the relationships between constructs that were obtained. In order to provide repertory charts on cognitive constructs of teacher candidates, interview and writing techniques were used in data collection. The triad repertory grid form provided for each interviewed participant was filled out individually by participants. In interviews, the ability to concretize how experience guided them and to better understand the process in teacher candidates was paid attention.

Data Analysis

The study was conducted by following steps such as identifying the phenomenon, preparing the data collection tool, collecting and analyzing data (Sezer, 2016; Yıldırım and Şimşek, 2013):

Identifying the phenomenon: In this process, the researchers attempted to form the conceptual framework in order to make evaluations on ideal qualifications of academicians, obtained using the repertory grid technique. Accordingly, the relevant literature was reviewed and the ideal qualities of an academician based on the academy, academician and the changing conditions were highlighted. Thus the phenomenon, the subject of the research, was defined. Then the qualifications of an ideal academician are associated with the occupational development of teacher candidates and the problem situation was clarified.

Preparing the data collection tool: The triad repertory grid technique by which teacher candidates could reflect their cognitive constructs on ideal qualifications of academicians was used (Bell, 2005; Jankowicz, 2004; Sezer, 2016). The triad repertory grid form sample used in the study is given in Table 2:

Data collection: The repertory grid technique was used to receive the opinions on the qualifications of an ideal academician in the present study. The following steps were followed for the data collection process (Palmisano, 2007; Sanders, 1982):

- Teacher candidates included in the study were randomly selected from class rosters in a way that they would represent different departments, and then these participants were contacted. Teacher candidates were provided appointments on different days according to their schedules and they were interviewed.
- Firstly, teacher candidates were provided information on the triad repertory grid from and a brief sample was applied by the researchers on a different subject. Teacher candidates were first asked to think of three academicians who had ideal qualifications and who did not have these qualifications. Secondly, they were asked to write these three academies in the gaps on the triad repertory grid forms using aliases for these academicians. Thirdly, they were asked to write ideal qualifications shown by academicians in the relevant gaps on the form and the researches attempted to understand the cognitive constructs of teacher candidates on the subject. Fourthly, teacher candidates were asked to rearrange the cognitive constructs they had written regarding ideal qualifications of academicians according to their relative importance to the department they studied in. Fifthly, two-dimensional cognitive constructs of teacher candidates were scored between 1 and 6 for ideal and non-ideal academicians that each candidate had determined earlier.
- 4 teacher candidates were interviewed for 20-30 minutes for each day of the study and interviews were completed within 6 days. A cross-section from a repertory grid from filled out by a teacher candidate is given in Table 3.

Analysing the data by digitising: Cognitive constructs indicated by teacher candidates on these forms were put online and were subject to thematic analysis. The data is coded and then the theme and patterns are examined in the thematic analysis. Thematic analysis has four stages. In the first stage, 240 cognitive constructs indicated by teacher candidates were identified. In the second stage, these cognitive constructs were analyzed, and main constructs were determined by combining interrelated constructs. In the third stage, cognitive constructs on the ideal qualifications of academicians were grouped in a way that no construct would be excluded; it is tried to discover how ideal academic qualities are represented in thematic context (Gibbs, 2007). In the fourth stage, the first cognitive construct was multiplied by 10 and the last produced cognitive construct was multiplied by 10. Relative importance scores were obtained that way.

Findings obtained in the data analysis were interpreted in seven stages (Karadağ, 2011; Sezer, 2016). Data obtained in the first stage was separated into cognitive construct groups and their frequencies were identified. In the second stage, samples arising from repetitions were noted. In the third stage, cognitive groups showing similar features were combined under different groups. In the fourth stage, variables were classified in a fit for purpose manner. In the fifth stage, relationships between variables were determined. In the sixth stage, links between variables were formed. In the seventh stage, findings were associated with the theoretical structure of the study and special findings were explained.

Information Regarding the Consistency, Being able to be Confirmed, Plausibility and Being able to be Transmissible of the Study

In order to provide consistency in the study, the inter-relations of cognitive constructs formed by teacher candidates and their relations with previously formed theoretical structure were analyzed and it was seen that they presented a significant and coherent totality. After the participants filled

Table 2. Triad repertory grid form

	Academicians						
Ideal qualifications	**Ideal**			**Non-ideal**			**Non-ideal qualifications**
	George	**Lisa**	**Kevin**	**James**	**Robert**	**Paul**	
	◊		◊		◊		
	◊				◊	◊	

Suppose that two out of three academicians in ideal and non-ideal triads have the same qualification; however, third one has a different qualification

While describing qualifications of academicians, you may use nouns, adjectives or notions described in two-three words.

The figure indicating that qualifications of two academicians are similar is described as the similarity pole (ideal).

The figure indicating that qualifications of two academicians are different from those of the third one is described as the contrast pole (non-ideal).

Table 3. Repertory grid form, evaluated by a teacher candidate

	Academicians						
Ideal qualifications	**Ideal**			**Non-ideal**			**Non-ideal qualifications**
	George	**Lisa**	**Kevin**	**James**	**Robert**	**Paul**	
Respectful	6◊	5	6◊	1	2◊	1	Disrespectful
Patient	5◊	6	6	2	1◊	1◊	Impatient
Self-confident	6	6	5 ◊	1	1	2◊	Diffident

out the form used in the study, participants were interviewed on constructs indicated in the form and the researchers attempted to confirm thoughts reflected in the form as well as clarifying inexplicit and incomprehensible constructs. After completing the findings obtained in the study, three teacher candidates randomly selected from the participants were shown these findings and they provided feedback on cognitive constructs reflecting the truth (Miles and Huberman, 1994; Yıldırımand Şimşek, 2013).

In order to provide the conformity in the study, the scientific process, sampling technique, data collection tool and data analysis processes in the study were described in great detail. The study group was formed in a way that would entail all teaching departments. The conceptual framework formed for the present study was prepared in a comprehensive manner in order to explain findings easily (LeCompte and Goetz, 1982).

In order to provide plausibility in the study, cognitive constructs indicated by participants were evaluated as they were described without any interpretation. After associating and classifying these cognitive constructs, two subject-matter experts, one in educational sciences field and the other one in Turkish teaching field shared their opinions on this process and confirmed the classification (Miles and Huberman, 1994).

In order to provide transmissibility in the study, first of all, the researchers attempted to describe their roles in data collection and analysis processes. Features of participants in the study group and the reasons for inclusion were identified together. Moreover, how interviews were conducted in the data collection procession, how the data collection tool was used, how obtained data were associated and presented were explained in great detail (LeCompte and Goetz, 1982).

RESULTS

The repertory grid form applied to teacher candidates were analyzed and it was observed that 240 cognitive constructs on ideal qualifications of academicians were produced by teacher candidates. When the frequency of referring to cognitive constructs were analyzed, it was observed that the most referred cognitive constructs were respectively (1) understanding, (2) respectful and (3) impartial [η=10, 4.17%], (4) fair, [η=9, 3.75%], (5) hardworking [η=8, 3.33%], (6) democratic, (7) humanist, (8) sincere, (9) disciplined, (10) well-informed and (11) effective instructor [η=6, 2.50%], (12) tolerant, (13) reliable, (14) inquisitive and (15) up-to-date [η=5, 2.08%]. As a result of the classification, 7 main construct groups were determined based on 240 construct groups. These groups are presented in Table 4.

As Table 4 shows, 7 main construct groups are presented. The number of cognitive constructs in these main construct groups and 5 principal cognitive constructs by the relative importance level are as follows:

Affective competency: There are 66 cognitive constructs in total in this group. Top three cognitive constructs by relative importance level are (1) democratic [15/10] 250, (2) patient [8/8] 232, (3) well-intentioned [9/10] 230 respectively.

Ethical attitude and behavior: There are 32 cognitive constructs in total in this group. Top three cognitive constructs by relative importance level are (1) fair [24/10] 340, (2) reliable [8/9] 252, (3) fair [17/10] 250 respectively.

Entrepreneurship and leadership: There are 21 cognitive constructs in total in this group. Top three cognitive constructs by relative importance level are (1) leader [24/9] 261, (2) motivating [22/10] 260, (3) eager [7/9] 198 respectively.

Discovery and integration: There are 27 cognitive constructs in total in this group. Top three cognitive constructs by relative importance level are (1) inquisitive [1/10] 270, (2) practitioner [20/9] 225, (3) inquisitive [6/10] 200 respectively.

Personal characteristics: There are 32 cognitive constructs in total in this group. Top three cognitive constructs by relative importance level are (1) hardworking [8/10] 280, (2) disciplined [18/10] 220, (3) systematic [18/9] 207 respectively.

Expertise in the field: There are 41 cognitive constructs in total in this group. Top three cognitive constructs by relative importance level are (1) equipped [23/10] 340, (2) well-informed [1/9] 279, (3) caring about profession [4/10] 270 respectively.

Social skills: There are 21 cognitive constructs in total in this group. Top three cognitive constructs by relative importance level are (1) using the I-language [15/8] 192, (2) effective communication [13/8] 192, (3) effective listener [22/7] 168 respectively.

Cognitive constructs of teacher candidates on ideal qualifications of academicians were combined under 7 different groups. Since the frequency level of some cognitive constructs were too many, these cognitive constructs were accepted as a single construct. The number and percentages of participants in each construct group are presented in Figure 1.

According to Figure 2, construct groups are Affective Competency [η=23, 22.33%], Expertise in the field [η=19, 18.45%], Discovery and Integration [η=15, 14.56%], Entrepreneurship and Leadership [η=13, 12.62%], Personal Characteristics [η=13, 12.62%], Social Skills [η=13, 12.62%], Ethical Attitude and Behavior [η=7, 6.80%] respectively.

Based on participants' grading on cognitive constructs, the relative importance levels of cognitive constructs were obtained. Totals and results obtained by multiplying each cognitive construct score by figures from 10 to 1 are presented in Table 5 respectively.

The information in Table 5 were analyzed in two different ways. Firstly, the total relative importance scores of each participant on cognitive construct groups were identified and they were shown separately in each row. Secondly, the total participant relative importance score was found for each cognitive construct groups and means were calculated. The mean relative importance level of cognitive constructs groups belong to respectively Affective Competency [η=9, 37.5%], Expertise in the field [η=8, 33.3%], Discovery and Integration [η=3, 12.5%], Ethical Attitude and Behavior [η=2, 8.3%], Entrepreneurship and Leadership [η=1, 4.2%], Personal Characteristics [η=1, 4.2%], Social Skills [η=0] groups.

Table 4. Cognitive constructs and groups

AFFECTIVE COMPETENCY								
Cognitive construct	**Participant no/order of importance**	**Relative importance level**	**Cognitive construct**	**Participant no/order of importance**	**Relative importance level**	**Cognitive construct**	**Participant no/order of importance**	**Relative importance level**
Democratic	[15/10]	250	Tolerant	[17/7]	161	Emotional	[3/5]	95
Patient	[8/8]	232	Humanist	[5/7]	161	Optimist	[5/4]	92
Well-intentioned	[9/10]	230	Respectful	[6/7]	161	Patient	[6/4]	88
Modest	[21/9]	216	Humble	[9/8]	160	Understanding	[7/4]	76
Humanist	[15/9]	216	Democratic	[12/9]	153	Understanding	[20/4]	72
Unconditional acceptance	[4/9]	216	Democratic	[2/6]	150	Altruistic	[15/3]	72
Respectful	[2/9]	216	Democratic	[14/6]	150	Sincere	[18/4]	72
Respectful	[14/9]	216	Libertarian	[15/6]	150	At peace with oneself	[7/3]	63
Respectful	[17/8]	216	Understanding	[14/7]	144	Sincere	[23/3]	57
Democratic	[21/10]	210	Understanding	[18/6]	144	Democratic	[3/3]	51
Sincere	[2/10]	210	Respectful	[1/6]	138	Tolerant	[7/2]	48
Sincere	[14/10]	210	Understanding	[6/6]	132	Patient	[9/2]	46
Respectful	[19/10]	210	Coherent	[19/6]	126	Tolerant	[21/2]	40
Understanding	[23/9]	207	Helpful	[5/5]	126	Adaptable	[17/2]	38
Sincere	[22/9]	207	Understanding	[9/5]	120	Sincere	[3/2]	34
Humble	[22/8]	200	Respectful	[21/6]	120	Humanist	[16/1]	25
Without complexes	[13/10]	190	Respectful	[23/6]	120	Humanist	[7/1]	24
Open-minded	[5/8]	184	Helpful	[9/6]	120	Modest	[1/1]	23
Understanding	[2/7]	168	Humble	[8/6]	114	Understanding	[8/1]	23
Devoted	[19/8]	168	Respectful	[4/4]	112	Humanist	[21/1]	23
Respectful	[11/7]	168	Tolerant	[23/5]	105	Humanist	[4/1]	22
Understanding	[21/6]	162	Tolerant	[10/6]	102	Flexible	[14/1]	18
ETHICAL ATTITUDE AND BEHAVIOR								
Fair	[24/10]	340	Fair	[12/10]	200	Reliable	[18/5]	115
Reliable	[8/9]	252	Egalitarian	[4/8]	200	Egalitarian	[12/6]	114
Fair	[17/10]	250	Responsible	[7/7]	196	Fair	[7/5]	105
Fair	[2/8]	240	Ethical	[23/8]	192	Impartial	[1/5]	95
Fair	[14/8]	240	Fair	[10/10]	190	Impartial	[11/4]	84
Impartial	[5/10]	220	Impartial	[19/9]	189	Just	[21/4]	84
Impartial	[17/9]	216	Fair	[11/9]	189	Impartial	[8/3]	81
Reliable	[16/8]	208	Impartial	[18/7]	161	Reliable	[17/3]	69

(*Contd...*)

Table 4. (*Continued*)

AFFECTIVE COMPETENCY								
Cognitive construct	**Participant no/order of importance**	**Relative importance level**	**Cognitive construct**	**Participant no/order of importance**	**Relative importance level**	**Cognitive construct**	**Participant no/order of importance**	**Relative importance level**
Impartial	[6/9]	207	Ethical	[21/7]	154	Reliable	[5/2]	42
Egalitarian	[13/9]	207	Impartial	[9/7]	140	Principled	[2/1]	18
Impartial	[16/10]	200	Responsible	[21/8]	136			
ENTREPRENEURSHIP AND LEADERSHIP								
Leader	[24/9]	261	Idealist	[22/6]	132	Determined	[18/3]	75
Motivating	[22/10]	260	Inspiring	[20/6]	114	Determined	[10/3]	66
Eager	[7/9]	198	Motivating	[13/4]	112	A good advisor	[4/3]	60
Excited	[7/8]	176	A good advisor	[15/5]	110	Authoritative	[23/2]	60
Idealist	[3/10]	170	Effective	[19/5]	105	Encouraging	[13/2]	50
A good advisor	[13/6]	156	Far-seeing	[2/5]	105	A good model	[12/2]	38
Effective	[20/7]	154	Far-seeing	[14/5]	105	Idealist	[11/1]	21
DISCOVERY AND INTEGRATION								
Inquisitive	[1/10]	270	Scientifically-thinking	[12/7]	161	Critical	[12/4]	80
Practitioner	[20/9]	225	Curious	[22/5]	130	Interested	[23/4]	68
Inquisitive	[6/10]	200	Intelligent	[3/7]	126	Up-to-date	[9/3]	66
Intellectual	[3/9]	198	Up-to-date	[16/5]	105	Integrative	[22/2]	52
Up-to-date	[6/8]	184	Inquisitive	[22/4]	104	Intellectual	[8/2]	40
Up-to-date	[12/8]	184	Creative	[3/6]	102	Interested	[20/2]	40
Innovative	[16/9]	171	Inquisitive	[20/5]	100	Critical	[10/1]	25
Up-to-date	[1/8]	168	Contemporary	[12/5]	90	Innovative	[18/1]	24
Interrogative	[7/6]	162	Realistic	[10/4]	84	Inquisitive	[12/1]	18
PERSONAL CHARACTERISTICS								
Hardworking	[8/10]	280	Honest	[16/4]	96	Hardworking	[6/2]	46
Disciplined	[18/10]	220	Cheerful	[17/4]	96	Disciplined	[10/2]	46
Systematic	[18/9]	207	Hardworking	[9/4]	88	Hardworking	[16/2]	44
Enlightened	[3/8]	192	Courageous	[19/4]	84	Calm	[19/2]	42
Hardworking	[5/9]	189	Traditionalist	[3/4]	84	Cheerful	[1/2]	40
Hardworking	[4/7]	168	Disciplined	[22/3]	75	Hardworking	[3/1]	27
Gentle	[19/7]	147	Disciplined	[12/3]	72	Energetic	[15/1]	25
Disciplined	[17/6]	144	Honest	[21/3]	69	Honest	[6/1]	23
Hardworking	[10/5]	135	Cheerful	[8/4]	68	Disciplined	[5/1]	21

(*Contd...*)

Table 4. (*Continued*)

AFFECTIVE COMPETENCY								
Cognitive construct	**Participant no/order of importance**	**Relative importance level**	**Cognitive construct**	**Participant no/order of importance**	**Relative importance level**	**Cognitive construct**	**Participant no/order of importance**	**Relative importance level**
Honest	[5/5]	120	Polite	[5/3]	63	Cheerful	[19/1]	21
Polite	[1/4]	100	Self-confident	[19/3]	63			
EXPERTISE IN THE FIELD								
Equipped	[23/10]	340	Equipped	[20/8]	184	Connoisseur in one's field	[16/3]	78
Well-informed	[1/9]	279	Well-informed	[4/5]	180	Having control in the classroom	[2/3]	57
Caring about profession	[4/10]	270	Caring about students	[10/8]	176	Having control in the classroom	[14/3]	57
Expert	[11/10]	240	Caring about students	[9/9]	171	Effective instructor	[13/3]	54
Equipped	[7/10]	240	Instructive	[23/7]	168	Effective instructor	[24/2]	48
Caring about profession	[20/10]	240	Connoisseur in one's field	[15/7]	154	Effectively using materials	[2/2]	40
Caring about profession	[10/9]	234	Successful	[8/7]	154	Effective instructor	[4/2]	40
Interactive teaching	[13/7]	217	Caring about the job	[24/5]	150	Effective instructor	[14/2]	40
Capable	[24/7]	210	Effective instructor	[24/6]	150	Connoisseur in one's field	[11/2]	38
Well-informed	[10/7]	210	Well-informed	[16/6]	144	Speaking foreign languages	[23/1]	26
Internationally recognized	[24/8]	208	Facilitating	[11/6]	126	Facilitative	[13/1]	22
Meticulous	[[16/7]	196	Caring about students	[13/5]	120	Instructive	[20/1]	21
Successful	[18/8]	192	Caring about students	[11/5]	115	Well-informed	[9/1]	20
Well-informed	[11/8]	184	Connoisseur in one's field	[24/3]	93			
SOCIAL SKILL								
Using the I-language	[15/8]	192	Sweet talker	[24/4]	104	Effective communication	[20/3]	63
Effective communication	[13/8]	192	Affectionate	[15/4]	100	Positive	[1/3]	57
Effective listener	[22/7]	168	Sympathetic	[8/5]	95	Genial	[15/2]	56
Cold-blooded	[1/7]	161	Empathetic	[2/4]	68	Amusing	[18/2]	40
Genial	[17/5]	130	Empathetic	[14/4]	68	Witty	[22/1]	28
Empathetic	[4/6]	126	Genial	[6/3]	66	Witty	[24/1]	25
Effective communication	[6/5]	105	Empathetic	[11/3]	63	Extrovert	[17/1]	23

* The first number in square brackets indicates the order of participants and the second number indicates the order of importance of the ideal academic qualification determined by the participant

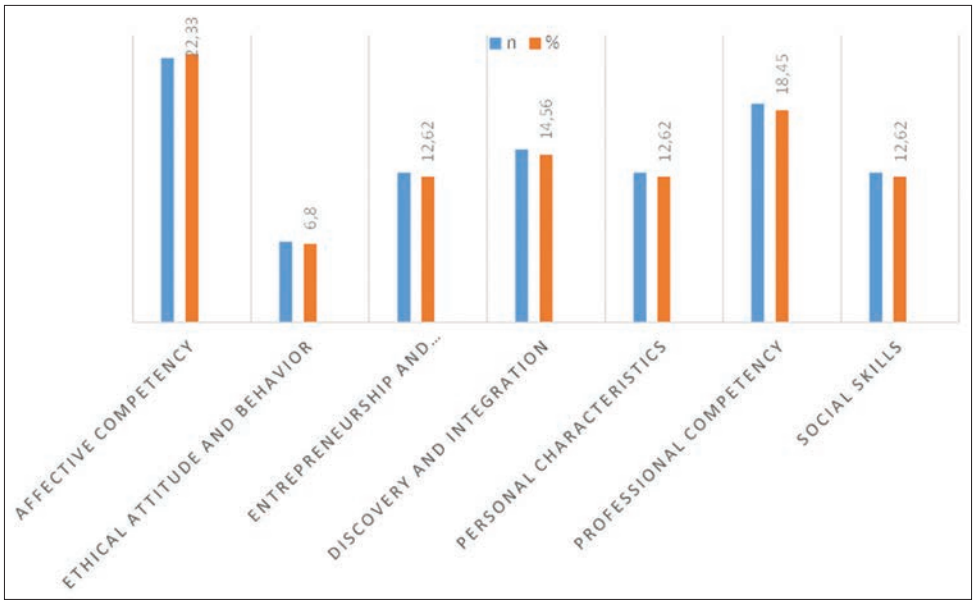

Figure 2. The number and percentages of participants in cognitive construct groups

Table 5. The relative importance level of cognitive construct groups

Teacher candidates	Affective competency	Ethical attitude and behavior	Entrepreneurship	Discovery and integration	Personal characteristics	Expertise in the field	Social skill
1	161	95		438	140	279	218
2	844	258	105			97	68
3	180		170	426	303		
4	350	200	60		168	490	126
5	563	262			293		
6	381	207		384	69		171
7	211	301	374	162		240	
8	369	333		40	348	154	95
9	532	140		66	88	191	
10	102	190	66	109	181	620	
11	168	273	21			703	63
12	153	314	38	533	72		
13	190	207	318			413	192
14	738	240	105			97	68
15	688		110		25	154	346
16	25	408		276	140	418	
17	415	535			240		153
18	216	276	75	24	427	192	40
19	504	189	105		357		
20	72		268	365		445	63
21	771	374			69		
22	407		392	286	75		196
23	489	192	60	68		534	
24		340	261			859	129
Total	8529	5334	2528	3177	2995	5886	1928
Mean	355.3	222.2	105.3	132.3	124.7	245.2	80.3

When Table 5 is examined, the total and mean values are found in 12 rows. These values represent the relative importance level of teacher candidates in each cognitive construct group. According to mean scores, these groups

are ranked as follows: Affective Competency [$\bar{x}$=355.3], Expertise in the field [$\bar{x}$=245.2], Ethical Attitude and Behavior [$\bar{x}$=222.2], Discovery and Integration [$\bar{x}$=132.3], Personal Characteristics [$\bar{x}$=124.7], Entrepreneurship and Leadership [$\bar{x}$=105.3], Social Skills [$\bar{x}$=80.3] groups.

DISCUSSION

A total of 240 cognitive constructs were obtained in the present study where the aim was to present cognitive constructs of teacher candidates on ideal qualifications of the academicians. When the frequency of referring to cognitive constructs considered, it has been understood that teacher candidates expect academicians to have values such as respect, justice, democratic position, and impartiality, to have an understanding, sincere, tolerant, humanist, and reliable profile in their relations, to attach importance to several features such as being disciplined, well-informed, effective instructors, researchers, and up-to-date while fulfilling their duties.

The 240 cognitive constructs obtained in the study were classified into 7 main construct groups: affective competency, ethical attitude and behavior, entrepreneurship and leadership, discovery and integration, personal characteristics, expertise in the field, and social skills. In a study conducted by Aljubail (2010) on the same subject in two different countries, it was observed that pedagogical features were grouped under two main themes as interpersonal and personal features as well as eight subthemes based on these themes. In a similar study conducted by Aslan and Yakar in 2012, following the same methodology, ideal qualifications of academics were analyzed under 13 categories: communication skills, social adaptation, discipline/rationality, social sensitivity, innovativeness, expertise in the field, compassion/geniality, teaching professional skills, honesty, justice, approach to students, respect, humanistic/intimacy. In a similar study conducted by Sezer (2017), ideal qualifications of academicians were analyzed under these categories: personal features, academic effectiveness, professional competence, communication skills, student centeredness, motivation, professional ethics, and democratic behavior. Research findings in these studies show similarities on a large scale. However, there are some differences in some themes.

Main structure groups were examined and the results obtained were summarized as follows;

The affective competency theme with the highest number of participants and cognitive constructs, ranks also first in terms of the relative importance level of cognitive construct groups. Cognitive constructs in the cognitive competency theme demonstrate that teacher candidates believe that an ideal academician should respect freedom and equalities. They should not be judgmental and should have a deep tolerance. In fact, cognitive constructs being democratic, patient, well-intentioned, modest, and respectful are remarkable in the affective competency theme.

In affective competency theme, it can be said that teacher candidates expect academicians to be understanding and flexible for mistakes deriving from their inexperience. In other words, teacher candidates have idealized academicians who unconditionally accept them and try to help them. The reason behind this is that they could have the opportunity to improve their experience and university life without fear of making mistakes in such an environment. This common understanding could only be achieved through academicians who have high levels of affective competency. Kumral (2009) concluded that valuing and respecting the students were among the positive behaviors of academicians as stated by teacher candidates. Fidan, Duban, Yüksel, Kasapoğlu and Yamaç (2013) found that an academician was expected to be democratic. In their study Karakütük, Tunç, Özdem and Bülbül (2008) suggested that academicians attached the utmost importance to democratic values. Kasapoğlu (2017) revealed that teacher candidates strongly agreed that academicians "value and respect human beings". In a study conducted with teacher candidates, Polat, Basit and Akcan (2019) concluded that being understanding was among the ideal qualifications of academicians. It was observed that academicians were expected to have certain qualifications such as being open to student communication, cooperating with the student and creating sincere environment, and being fair and unprejudiced. Ergün, Duman, Kıncal and Arıbaş (1999) concluded that not belittling, despising, and humiliating the student in class, and creating an environment where the student could ask questions easily among were among the ideal qualifications of academicians. Douna, Kyridis, Zagkos, Ziontaki and Pandis (2015) suggested that students attached the utmost importance to the ability to speak with the student and to care about their opinions of academicians as well as being sincere and accessible. All the aforementioned studies are found to be in consistency with the results obtained in the present study.

Although the ethical attitude and behavior theme has the lowest number of participants, it ranks third in terms of the relative importance level of cognitive construct groups and creating the highest number of cognitive constructs. Accordingly, it is believed that some participants are more sensitive to ethical issues. Characteristics such as being fair, egalitarian, impartial, and reliable, demonstrate that they occupy an important place in the typology of academicians that teacher candidates have idealized.

In the ethical attitude and behavior theme, teacher candidates think that it is important for academicians to have an integrity and coherence in their attitude and behavior, and to be reassuring. The ideal qualifications of academicians stated by teacher candidates have an impact on their experience. It could be regarded as an indicator suggesting that teacher candidates suffer from discrimination, and unfairness and incoherent practices. This could suggest that some academicians use the power in their hands without respecting code of ethics. Ergün, Duman, Kıncal and Arıbaş (1999) concluded that an ideal academician should be impartial, respectful towards any kind of opinion, and should avoid discrimination among students. In a similar study, Aslanand Yakar (2012) observed that honesty, justice, and respect were behaviors that teacher candidates expected from academicians. When the literature is reviewed, it can be seen that having ethical attitude and behavior is an important feature expected from academicians.

The entrepreneurship and leadership theme in which more than half of the participants stated their constructs, ranks second in terms of the relative importance level of cognitive construct groups. According to teacher candidates, an ideal academician should have the following features that could be regarded in terms of entrepreneurship and mostly leadership: being motivating, visionary, self-confident, active, eager, assertive, and guiding. In entrepreneurship and leadership theme, teacher candidates underlined the aspect of being open to be directed and guided and noted that academicians should have an energy that could motivate the students. In the study conducted by Birch (2012), it was concluded that academicians should be in cooperation and form opportunities about information literacy for the students to be raised as individuals with research skills using knowledge effectively and by considering the ethical elements.

The ability to conduct activities that could motivate students is one of the competencies of academicians in terms of the development of students(Karakütük, Tunç, Özdem and Bülbül, 2008).In a study, Kasapoğlu(2017) concluded that teacher candidates had positive opinions on the leadership skills of academicians. In their study, Polat, Basit and Akcan (2019) concluded that teacher candidates expected academies not to feel burnout, to conduct studies that would uplift the society, to guide students, and to use more practices in classes. In a metaphorical study, Güner, Tunca, Şahinand Oğuz (2015) found that being instructive, hardworking, being a role model, and being able to shape the future were among positive behaviors of academicians. In another study, Fidan, Duban, Yüksel, Kasapoğlu and Yamaç (2013) stated that an academician should be an efficient role model for teacher candidates and should support the development of teacher candidates. Studies in the literature confirm that entrepreneurship and leadership are among the ideal qualifications of academicians.

In the discovery and integration theme, ranking in the middle in terms of the relative importance level of cognitive construct groups, teacher candidates expect an ideal academician to have intellectual skills such as interrogation and critical thinking, to be innovative, to have access to up-to-date information and to use this information. In discovery and integration theme, where more than half of the participants stated their constructs, being inquisitive and up-to-date are remarkable. Teacher candidate do not approve an academician's profile not renewing himself/herself, not following developments in life, and not being inquisitive. According to teacher candidates, an ideal academician is an information literate person who realizes the information s/he needs, determines the place of this information, can evaluate the information and use the information s/he needs efficiently (Bawden, 2001; Burnhein, 1992). According to Karakütük, Tunç, Özdem and Bülbül (2008) an academician should be able to associate information in their field of expertise with other fields and daily life. They should closely follow developments in their field of expertise and should be able to renew themselves using the information and skills. In a study revealing metaphors of teacher candidates on academicians, Polat, Apak and Akdağ (2013) concluded that being critical, guiding, being the source and producer of information were among the qualifications of academicians. In a study conducted with teacher candidates, Polat, Basit and Akcan (2019) found that being open to innovations and change, having a regular research system, and being interested in conducting studies were among ideal qualifications of academicians. In a similar study conducted by Aslan and Yakar (2012), it was stated that being innovative was an ideal qualification of academicians. In their study, Douna, Kyridis, Zagkos, Ziontaki and Pandis (2015) concluded that students expect academicians to encourage critical thinking, non-traditional practices, and innovative activities. Studies in the literature support the ideal qualifications of an academician stated in the discovery and integration theme in the present study.

The personal characteristic theme expressing the constructs stated by more than half of the participants ranked the third in terms of the relative importance level of cognitive construct groups. Underlining personal characteristics such as being hardworking, systematic, and disciplined, teacher candidates demonstrated that they paid attention to fulfilling their responsibilities. On the other hand, underlying certain personal characteristics of academicians such as being honest, gentle, and cheerful, teacher candidates stated that academicians should have certain characteristics in human relations. The fact that academicians have some personal characteristics will contribute greatly to the functioning of learning processes based on human interaction in a more efficient manner. Qualifications such as being genial, sincere, cordial, honest, and disciplined are evaluated in the context of ideal qualifications of academicians (Ergün, Duman, Kıncal and Arıbaş, 1999).

The expertise in the field theme in the second place in terms of the relative importance level of cognitive construct groups, are the second most participated and the theme with the second most cognitive constructs. In this theme, teacher candidates suggest that an ideal academician should have cognitive accumulation and certain affective features in terms of expertise in the field. They also expect academicians to have expertise in their field, to be a good instructor, to care about their profession as well as their students. The structures stated in the theme of expertise in the field could be interpreted as teacher candidates are positively affected by academicians as experts in their field while they are negatively affected by academicians who are not at peace with their profession and who do not care about students. According to Karakütük, Tunç, Özdem and Bülbül (2008), academicians should have expertise in their field. In a study conducted by Kumral (2009), lack of expertise in the field and formation skills of academicians were regarded as negative aspects. In a study conducted with teacher candidates, Polat, Basit and Akcan (2019) concluded that providing good lectures was among the ideal qualifications of academicians. In fact, in a similar study, Aslan and Yakar (2012) have stated that an ideal academician should have academic competence and professional teaching skills.

Social skills, ranking in the last place in terms of the relative importance level in cognitive construct groups, are

the theme with the lowest number of cognitive constructs. In this theme, teacher candidates claim that an ideal academician should have some social skills. These social skills are mostly associated with efficient communication skills such as "empathetic, efficient listener, and using the me-language" and personal characteristics related to being extroversion such as "genial, affectionate, sympathetic, and witty". When the cognitive fictions are considered in social skills dimension, it could be noted that teacher candidates think that it is more desirable to have lectures with academicians who have high levels of communication skills and an extrovert personality. Akgün (2016) stated that an academicians should be sympathetic, affectionate, and genial. In another study, Aslan and Yakar (2012) concluded that being affectionate and genial were among ideal qualifications of academicians. In their study, Douna, Kyridis, Zagkos, Ziontaki and Pandis (2015) revealed that students would like to see academicians friendly, sincere, close with students, and being able to understand their lifestyle.

CONCLUSION

In the light of the discussion given above, the results of the study can be summarized as follows.

- It is seen that ideal qualifications of academicians determined according to the opinions of candidate teachers have been similar to the other studies. This similarity gives important clues about the reliability of the findings and the skills necessary for the professional development of academicians.
- Candidate teachers agree that an ideal academician should have the emotional capacity to create an appropriate communication environment.
- Some candidate teachers are extremely sensitive about ethical attitude and behaviour. Academicians are expected to be fair and reassuring for a more inclusive and effective teacher education.
- It was concluded that candidate teachers need an active guidance and direction in terms of their professional development.
- It has been concluded that the followings are prominent qualifications of candidate teachers; academicians as the source of knowledge and change, staying up to date and adapting this information to the life.
- Candidate teachers expect academicians to have positive personality traits such as responsibility, harmony, and extraversion.
- Candidate teachers think that the academicians should be qualified to do their job well and love their jobs.
- An ideal academician should have effective communicative and social skills.

Based on the results obtained in the present study, the researchers made the following suggestions:

- Studies on academic and human competencies that academicians should possess could be conducted using different measurement tools or techniques, and results could be compared with previous research results in the literature.
- Cognitive constructs of academicians on teacher candidates or university students could also be examined as well as cognitive constructs on the ideal qualifications of academicians.
- According to the relevant literature, a fit model on the ideal academician academic could be designed based on the expectations of a fourth industrial society and this could be presented for the attention of the researchers.
- This study was limited with the opinions of undergraduate students as the participants of the study. The results obtained have mostly revealed the educational aspect of academicians. A more comprehensive study could be carried out on the qualifications of an ideal academician by receiving the opinions of the post-graduate students.

REFERENCES

Akgün, M. (2016). Yüksek öğretimde ideal öğretim elemanı nasıl olmalıdır? *Uludağ Üniversitesi Fen-Edebiyat Fakültesi Felsefe Dergisi*, *26*, 197-204.

Aljubaily, H. Y. (2010). *Measuring university students' perceptions of characteristics of ideal university instructor in saudi arabia and the united states: An application of nonparametric item response theory study* [Doctoral Dissertation]. Available from ProQuest Dissertations and Theses database. (UMI No. 3434898).

Arı, M. (2018). Akademisyen olmak: Genç akademisyenlere öneriler. *Erken Çocukluk Çalışmaları Dergisi,* Cilt 2 Sayı 2, 450-455.

Aslan, M., & Yakar, A. (2012). Öğretmen adaylarının öğretim elemanı niteliklerine ilişkin bilişsel kurguları: karşılaştırmalı bir inceleme. *İlköğretim Online, 11*(4), 1036-1052.

Aydın, İ. (2016). *Akademik etik*. Ankara: Pegem Akademi.

Babacan, A., Kozak, M., Babat, D., & Kulakoğlu, N. (2012). Akademisyen kimliğindeki dönüşüm ve bilimsel araştırma faaliyetinin sürekliliği: turizm akademisyenleri üzerine bir değerlendirme, *VI. Lisansüstü Turizm Öğrencileri Araştırma Kongresi:* s.95-110, 12-15 Nisan, Kemer- Antalya.

Bahar-Güner, H. Ö., Tunca, N., Alkin-Sahin, S., & Oguz, A. (2015). Ögretmen adaylarinin ögretmen egitimcisine ılıskin metaforik algilari. *Pegem Journal of Education and Instruction, 5*(4), 419.

Bawden, D. (2001). Information and digital literacies; a rewiew of concepts. *Journal of Documentation, 57*(2), 218-259.

Behrens, S. J. (1994). A conceptual analysis and historical overview of ınformation literacy. *College & Research Libraries, 55*(4), 309- 322.

Bell, R. C. (2005). The repertory grid technique. F. Fransella (Ed.). *The essential practitioner's handbook of personal construct psychology*, New York: John Wiley & Sons

Birch, R. G. (2012). *The impact of information literacy instruction on the library anxiety and information competency of graduate students* [Unpublished doctoral dissertation]. Olivet Nazarene University, Illinois.

Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Princeton University Press, 3175 Princeton Pike, Lawrenceville, NJ 08648.

Burnhein, R. (1992). Information literacy - A core competency. *Australian Academic and Research Libraries, 23*(4), 188-196.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. (2nd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W. & Plano Clark, V. L. (2014). Karma yöntem araştırmaları: Tasarımı ve yürütülmesi. (Y. Dede & S. B. Demir, Çev. Ed.). Ankara: Anı Yayıncılık.

Çepni, S., Küçük, M. & Gökdere, M. (2002). Hizmet öncesi öğretmen eğitimi programlarındaki araştırmalara yönelik derslerin incelenmesi, *V. Ulusal Fen Bilimleri ve Matematik Eğitimi Kongresinde Sunulan Sözlü Bildiri içinde* (s. 67-75), 16-18 Eylül 2002, ODTÜ Kültür ve Kongre Merkezi, Ankara.

Douna, P., Kyridis, A., Zagkos, C., Ziontaki, Z., & Pandis, P. (2015). The ıdeal university teacher according to the views of greek students. *International Journal of Higher Education, 4*(2), 145-158.

Doyle, C. S. (1994). Information literacy in an ınformation society: A concept for the ınformation age [e-kitap sürümü]. https://books.google.com.tr adresinden edinilmiştir.

Erdem, A. R. (2008). Öğretim üyesi akademisyen midir? Bilim adamı mıdır? *Akademik Dizayn Dergisi, 2*(2),83-85.

Ergün, M., Duman, T., Kıncal, R. Y. & Arıbaş, S. (1999) İdeal bir öğretim elemanının özellikleri *Afyon Kocatepe Üniversitesi Sosyal Bilimler Dergisi, 3*, 1–11.

Etzkowitz, H. (2004). The evolution of the entrepreneurial university. *International Journal of Technology and Globalisation, 1*(1), 64-77.

Fidan, N., Duban, N., Yüksel, A., Kasapoğlu, K., & Yamaç, A. (2013). Sınıf öğretmeni adaylarının gözüyle öğretmen eğitimcilerinin özellikleri. *Kuramsal Eğitimbilim Dergisi, 6*(1), 136-159.

Froman, L. (1999). The university as learning community. *Journal of Adult Development, 6*(3), 185-191.

Gibbs, G. (2007). *Analysing qualitative data*. New York: SAGE Publications Ltd.

Hattie, J. & Marsh, H. W. (2002). The relation between research productivity and teaching effectiveness: Complementary, antagonistic, or independent constructs? *The Journal of Higher Education, 73*(5), 603-641.

Hesse-Biber, S. N. (2010). *Mixed methods research: Merging theory with practice*. Guilford Press.

Jankowicz, D. (2004). *The easy guide to repertory grids*. New York: John Wiley & Sons.

Karaçay, G. & Alpkan, L. (2019). Dijital dönüşümün işgücü piyasalarına etkileri: türkiye işgücü piyasası için sosyal politika önerileri. *Türk İdare Dergisi, 91*(488), 345-373.

Karadağ, E. (2011). Okul müdürlerinin niteliklerine ilişkin olarak öğretmenlerin oluşturdukları bilişsel kurgular: Fenomenolojik bir çözümleme. *Eğitim ve Bilim, 36*(159), 25-40.

Karakütük, K., Tunç, B., Özdem, G. & Bülbül, T. (2008). Eğitim fakültelerinin öğretim elemanı profili. Ankara: Ankara Üniversitesi Yayınları.

Karasar, N. (2007). *Bilimsel araştırma yöntemleri* (17. baskı). Ankara: Nobel Yayıncılık.

Kasapoğlu, H.(2017) Öğretmen adaylarının görüşlerine göre eğitim alan dersi öğretim elemanlarının liderlik düzeyleri. *Bayburt Eğitim Fakültesi Dergisi, 12*(24), 635-648.

Kelly, G.A. (1955). The psychology of personal constructs. New York: W.W. Norton. Erişim linki: https://www.infoamerica.org/documentos_pdf/kelly02.pdf Erişim tarihi: 19.02.2019

Kumral, O. (2009). Öğretmen adaylarının öğretim elemanlarının davranışlarına yönelik algıları. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 25*(25), 92-102.

LeCompte, M. D., & Goetz, J. P. (1982). Problems of Reliability and Validity in Ethnographic Research. *Review of Educational Research, 52*, 31-60.

McMillan, J.H. and Schumacher, S. (2006). *Research in education evidence-based inquiry*. New York: Pearson Education.

Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis*. Thousand Oaks, CA: Sage Publications.

Odabaşı, F., Fırat, M., İzmirli, S., Çankaya, S. & Mısırlı, A. (2010). Küreselleşen dünyada akademisyen olmak. *Anadolu Üniversitesi Sosyal Bilimler Dergisi, 10*(3), 127–142

Özgüngör, S. & Duru, E. (2014). Öğretim elemanları ve ders özelliklerinin öğretim elemanlarının performanslarına ilişkin değerlendirmelerle ilişkileri. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi 29*(2), 175-188

Palmisano, V.B. (2007). *A phenomenological exploration of crisis intervention counseling as experienced school counselor* [Unpublished Phd Thesis]. University of New York at Buffalo, USA.

Patton, M. Q. (2014). Nitel araştırma ve değerlendirme yöntemleri. (M. Bütün & S. B. Demir, Çev.). Ankara: Pegem Akademi.

Pinto, M., Cordon, J. A., & Diaz, R. G. (2010). Thirty years of information literacy (1977—2007): A terminological, conceptual and statistical analysis *Journal of Librarianship and Information Science 42*(1), 3-19.

Polat, C. (2004). Üniversitelerde bilgi okuryazarlığı programlarının geliştirilmesi: Hacettepe üniversitesi örneği. *Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü Bilgi ve Belge Yönetimi Bölümü Yayınlanmamış Doktora Tezi*. Ankara

Polat, E., Basit, O.& Akcan, A.(2019). Okul öncesi eğitimi öğretmen adaylarının akademisyen algısı. *VI. Yıldız uluslararası sosyal bilimler kongresi* 12-13 Aralık, İstanbul: Yıldız Teknik Üniversitesi Sosyal Bilimler Enstitüsü.

Polat, S., Apak, Ö. & Akdağ, M. (2013). Sınıf öğretmeni adaylarının akademisyen kavramına ilişkin algılarının metafor analizi yoluyla incelenmesi. *İnönü Üniversitesi Eğitim Fakültesi Dergisi*, *14*(2), 57-78.

Sanders, P. (1982). Phenomenology: A new way of viewing organizational research. *The Academy of Management Review,7*(3), 353-360. Retrieved July 1, 2020, from www.jstor.org/stable/257327

Schwab, K. (2016). Dördüncü Sanayi Devrimi. (Zülfü Dicleli). İstanbul: Optimist yayınları.

Sezer, Ş. (2016). Okul yöneticilerinin ideal öğretmen niteliklerine ilişkin bilişsel kurguları: repertory grid tekniğine dayalı fenomenolojik bir çözümleme. *Eğitim ve Bilim, 41*(186), 37-51.

Sezer, Ş. (2017). Candidate teachers' cognitive constructs related to ıdeal lecturer qualifications: a case study based on repertory grid technique. *AC-EITAI 2017*, 460.

Shapiro, J. J., & Hughes, S. K. (1996). Information literacy as a liberal art: enlightenment proposals for a new curriculum. *Educom Review, 31*(2), 31-36.

Snavely, L. & Cooper, N. (1997). The ınformation literacy debate. *The Journal of Academic Librarianship, 23*(1), 9-13.

Spitzer, K. L., Eisenberg, M. B. & Lowe, C. A. (1998). *Information literacy: Essentials skills for the ınformation age* (2nd end). New York: Syracuse university, Center for science and technology.

Yaman, Ş. (2008). A case study of an efl teacher's personal & professional development: employing repertory grid elicitation technique. *Boğaziçi Üniversitesi Eğitim Dergisi, 25*(1), 25 - 41

Yıldırım, A. & Şimşek, H. (2013). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri* (8. Baskı). Ankara: Seçkin Yayıncılık.