Do 21st Century Teachers Know about Heutagogy or Do They Still Adhere to Traditional Pedagogy and Andragogy?

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Abstract

There are revolutionary changes in the field of education to keep up with the benefits of globalization (Hase & Kenyon, 2014). The necessity of taking the learner to the center within the framework of Roger's (1951) humanistic psychology is also supported by educationalists (Hase & Kenyon, 2014; King, 1993; Novak & Gowin, 1984). If this educational change is applicable to all grades and disciplines then permanent solutions can be reached. Examining the researches, it is observed that heutagogy is a useful strategy to make the learners self-determined ones in their learning process especially in higher education. This paper presents the participants perceptions on heutagogical implementation and its practicality. It will contribute to the field for a number of reasons. Firstly the perceptions of the teachers who have also an administrational role such as directors or vice directors at their schools on this issue have not been studied before. Secondly, their views are of great importance, since high schools are the last steps before higher education. So the attitudes and views of teachers on this grade are important for students' readiness for the next step. Lastly it has some contributions for the heutaogy model in educational settings.

Keywords: Heutagogy, Self-determined Learning, Double-loop Learning, Student-centered Teaching

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INTRODUCTION

For more than a century education has suffered due to the behavioristic approach which has taken learning as just a change in behavior (Novak & Gowin, 2004). Rejecting this view, educators today are tasked with helping the learners to survive in the ever changing lifelong path. Since, there is a revolutionary change in human learning. This change has affected the whole education system in twenty-first century. There are no barriers to be an effective learner any more (Blaschke & Hase, 2014). Education is now an adventure which has no limits to the power of human mind to construct knowledge (Novak & Gowin, 2004). In order to construct knowledge and to be capable lifelong learners they need to be the agents in their own learning. Hence, they need more than what pedagogy and andragogy offer. They both are not qualified enough in developing self- determined learners (Blaschke, 2012; Hase & Kenyon, 2000; 2007). Heutagogy on the other hand, is the holistic model of self-determined learning defined by Hase and Kenyon in 2000. It has principles rooted in andragogy or self-directed learning so can be defined as extension of it (Blaschke & Hase, 2015). It is clear that the pedagogy and andragogy are not able to meet the needs of the learners of twenty-first century especially in higher education. Since, it is easier to develop self-directed capability in learners and it requires minimum effort comparing to the previous steps of education (Patel, 2019). Up to higher education students should have learnt how to learn, in this way they can improve themselves to be self-determined learners.

This paper therefore has investigated the views of the administrator teachers who have been working in secondary education, on heutagogy. Their views are thought to give the readers an idea that whether teacher administrators in secondary education are aware of students' self-determined role on learning, or not. Since secondary education is the last step before the higher education and the readiness of students for the latter step depends on the perspective and practices of secondary school teachers. This paper is thought to light the new ways to new researches on how to find ways to implement heutagogy in education.

The literature on pedagogy, andragogy, heutagogy, PAH (Pedagogy-Andragogy-Heutagogy) continuum; purpose of the study; methodology used in this study; findings; discussion and conclusion are presented respectively.

Literature Review

Pedagogy

The term pedagogy roots from the Greek word '*paidagogos*' which means leader of a child (Knowles, 1973). It emerged in schools of monastery of Europe. Thus its assumptions were based on the observations of monks in teaching skills to children from 7th to 12th century (Holmes & Abington Cooper, 2000). By spreading of elementary schools in 18th and 19th centuries the assumptions of the monks were reinforced. By 20th century psychologists started to study the actions of children, which gave way to the concept of pedagogy (Knowles, 1980). By the arrival of educational psychology as a scientific branch in 20th century, scholars gave a new way to their research on reactions of children during systematic instruction. It was pedagogical model (Knowles, 1980). In recent years the term has been defined as 'art and science of teaching' (The Merriam Webster Online Dictionary, 2014). In traditional education, it is a well-known fact that teacher centered approaches are more popular than the learner centered ones (Hase, 2011). So in early ages of students, pedagogical models are rather preferable in traditional education.

Pedagogical models assign a duty to teachers because teachers are the ones who decide the way to teach. Therefore, the learners in pedagogical model are more dependent on the teacher and the subject matter. In pedagogy, curriculum is constituted by subjects. The learners are supposed to learn in an organized way; hence, they don't have right to choose the subjects according to their experiences

in learning process (Eryaman, 2010). Their motivation sources are extrinsic such as grades and passing the exams (Knowles, 1980).

In the midst of 20th century researchers started to interrogate the validity of pedagogical assumptions for adults. Since those assumptions could not fit the needs of the adult learners and the teachers of adults detected some trouble in the process (Knowles, 1980, Holmes &Cooper, 2000). In addition to this, pedagogy was a teaching theory including transmission of knowledge. Thus andragogy appeared as a new model which was a learning theory (McAuliffe, Hargreaves, Winter & Chadwick, 2009).

Andragogy

Via drastic cultural change occurred during the 20th century, knowledge accelerated. Thus education can no longer be defined as transmitting knowledge within formal settings. Instead it should have been defined as a life-long questioning and learning how to learn as a self-directed process (Knowles, 1980). Thus the new term 'andragogy' was defined by Knowles as '*helping adults learn*' stressing the difference between pedagogy and andragogy (Davenport, 1987). In this model teacher is just a facilitator who helps the learner become self-directed in the learning path (Darkenwald & Merriam, 1982) whereas the learners are active in their learning identifying and planning their needs and also knowing how they will be satisfied. The role of the teacher has also been defined as tutor and mentor in terms of helping learners become self-directed individuals (McAuliffe, et. al., 2009). Self-directed learning can be taken as an attempt to extend the definition of learning as acquisition of knowledge and skills. It emphasizes the learners as independent factors in the learning experience (Stephenson, 1994). Rachal (1983) also indicated that self-directedness is essential due to the nature of adult learning process.

Comparing to pedagogy, the role and responsibilities of learners have been increased in the learning process such as establishing proper conditions for learning; planning the process: identifying his/her needs and objectives to satisfy them; designing the learning environment with suitable materials; evaluating his/her learning experience and establishing new learning requirements under the guidance of a teacher (Holmes & Cooper, 2000). In andragogy, students are empowered, nevertheless it still has attributions of teacher-learner relationship (Davis & Hase, 2001), since teachers are the ones who still establish the curriculum and the related issues (Blasckhe, 2012). Knowles (1980) summarized the four key characteristics of the learners in andragogic model as follows:

- Independency or self-directedness

- Using past experiences to construct learning

- Association with readiness to learn and social roles

- Changing educational perspectives from subject-centered ones to performance centered ones.

In andragogy learners are not transmitted knowledge as it is in pedagogy; instead the concern is facilitating learning as an active process (McAuliffe, et. al., 2009). However, in 21st century the control of learning must be in power of learners themselves not the teachers (Hase & Kenyon, 2013). Although andragogy has facilitated and improved educational methodology it has still has associations of teacher-learner relationship (Hase & Kenyon, 2000). Thus there is a need to address the deficiencies of pedagogical and andragogical methods by an innovative approach which is heutagogy (Hase & Kenyon, 2001).

Heutagogy

As in the metaphor explaining by Davis and Hase (2001) learning is a river not a stable lake. Hence it requires dynamism and continuous innovation. To catch up with this swift change in every aspect of life, educational process should be regulated accordingly and new models should be examined and carried out. One of these new models is heutagogy discovered by Hase and Kenyon (2000).

Novak and Gowin (2004) claimed that educators should help people learning how to learn. However Davis and Hase (2001) supported the idea that people lose the ability to learn how to learn at the age of five by the starting of formal education. Until that age they question the universe as excellent learners. Then, they forget it through traditional education process. In the circumstances, people still need to learn how to learn. While andragogy (Knowles, 1980) meets the needs of the learners to a great extend; it has still some gaps in terms of self-determinism which is an essential skill in 21st century (Hase & Kenyon, 2000).

Self-determination is a theory of Deci and Ryan (2002) which encourage learners in the continuing way of self-development both autonomously and socially. In self-determined learning all of the responsibilities of learning process are belong to the learner including what should be learnt and how it will be done. The instructor provides guidance merely; learner is the one also responsible of the time of the learning (Blaschke & Hase, 2019; Davis & Hase, 2001; Hase, 2011;Hase &Kenyon, 2000). Hase (2011) highlighted self-determinism concept indicating the difference between simple changes in behaviors and having new experiences by questioning. By the help of the latter, individuals go on investigating the universe in terms of their needs and construct new knowledge via their experiences. In this cyclic process learners may change their directions and address new questions. Patel (2019) claimed that implementation of self-determined learning first required teachers' changing their teaching ways into the ongoing guidance, giving feedbacks, providing resources and supporting their students in their own learning experiences.

In pedagogical and andragogical ways learners may have necessary competences such as knowledge and skills. However having competencies does not mean that having capabilities which is also an essential 21st century skill (Hase & Kenyon, 2007; Stephenson, 1994;). There is a need to establish the understanding of developing capable people. It is up heutagogy's alley, since a heutagogical approach may develop capability as well as competency (Hase & Kenyon, 2001). Capability is the ability to take effective action in proper conditions; to learn from his/her experiences and to work collaboratively with others as well as autonomously (Stephenson & Weil, 1992). In other words, capability is the capacity to use the competence in both familiar and new contexts (Hase, 2011, Hase &Kenyon, 2013). Capable people usually have self-efficacy, creativity, team-work skills and positive values (Gardner et. al., 2007;Hase & Kenyon, 2000). In this context, personal values are also essential in heutagogical approach.

Double-loop learning and self-reflection are other key concepts in heutagogy emphasizing the importance of personal values and assumptions. In double-loop learning, learners are required to engage in the process not only behaviorally but also psychologically so that they can test their personal beliefs and assumptions. That is to say, outcomes of the learning would affect both the actions and belief systems of learners (Arygris & Schön, 1978 as cited in Blasckhe &Hase, 2015). As for Eberle (2009) in double loop learning individuals use their right brain thinking system which includes goals, values and beliefs in addition to left brain one. Schön (1984) named individuals who reflect in and on-action as reflective practitioners. They discover the importance of talking on learning and determining their learning preferences in heutagogical models (Canning & Callan, 2010). The learner should reflect not only what s/he has learned but also how to learn (Blaschke & Brindley, 2011).

Flexible curriculum and assessment are also other prominent issues of heutagogy. Since the students are both directors and actors of their own plays, they should know what to learn and how to assess their learning outcomes. Eberle (2009) stated that more flexible curriculums are essential in

self-determined learning. Since, without the help of teachers the students should determine what to learn and learning material. They should also interrogate the importance of the subject for their own learning scheme. Hase and Kenyon (2007) on the other hand supported flexible assessment for heutagogical practices. They reported that students feel much more comfortable and motivated if they take the responsibility of their assessment since the threatening instructor's control factor is not existed in the process any more. Nevertheless, the assessment should have some measurable instruments such as rubrics in which outcomes are determined collaboratively by students and teachers. Especially for the assessment of projects parameters may be identified by instructors but students should determine the scope and creativity regarding their needs. Peer assessment is also another way suggested in heutagogical settings (Eberle, 2009). Learning contracts are also preferable ways in heutagogical process (Hase, 2009). These contracts should be designed to reveal whole learning process and assessment in heutagogical practices. In other words they should define what and how to learn as well as what and how to assess (Kenyon & Hase, 2010).

In the light of the above mentioned, the major principles of heutagogy are identified in Figure 1.

Figure1. Major principles of heutagogy (by McAuliffe et. al, 2011).

PAH (Pedagogy-Andragogy-Heutagogy)

Considering all the concepts related to heutagogy, it can be summarized that learners are the independent ones who has the power of learning and determine the whole process (Blaschke & Hase, 2019; Hase & Kenyon, 2013). Learners cannot achieve the independent level easily. As it is mentioned it is a continuous process from pedagogy to andragogy and then heutagogy PAH continuum is the process defined from traditional to self-directed and finally self-determined one (Eberle & Childress, 2009; Luckin et. al., 2011 as cited in Blaschke & Hase, 2019). In this continuum learners develop their learning skills as independent agencies (Blaschke & Hase, 2019). PAH continuum is not a compulsory linear process. Thus mix use of each element is possible. According to Garnett and O'Beirne (2013) in this continuum the features of pedagogy, andragogy and heutagogy

can be utilized in a mixed way in terms of the requirements of students and learning. Blaschke (2012) added some aspects to the graphic designed by Canning (2010) and suggested that learners can move among the steps corresponding to subject matter or content as well as intellectuality of the learners.
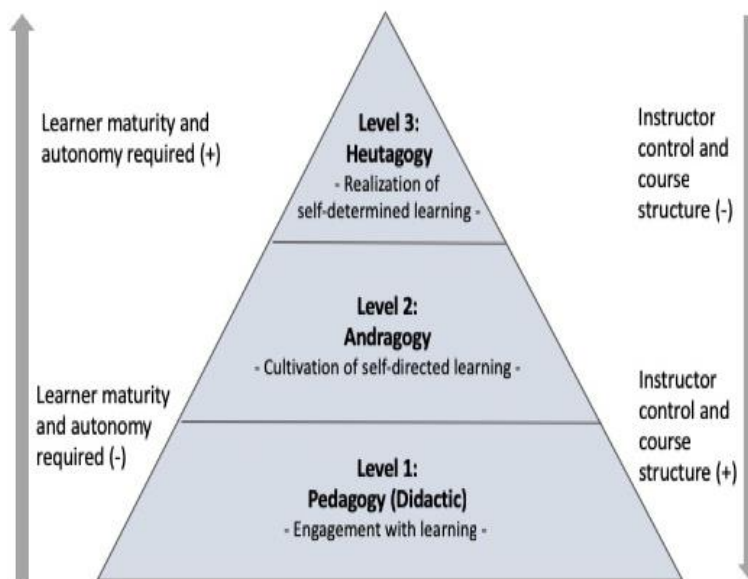

Figure2. Pedagogy-Andragogy-Heutagogy (PAH) Continuum (Blaschke, 2012, adapted from Canning, 2010).

Blasckhe and Hase (2019) also commented on the continuum in the same vein. They reported that whenever learner requires moving among the elements in the continuum depending on the context, it should be possible. Therefore the process should be defined as a circular instead of linear one.

To summarize, learning has become more learner-oriented in 21st century. In Blaschke and Hase's words there is a 'revolution' in learning. Thus not only learners but educators also should admit the active role of learners in the education settings (2014). Furthermore, education should not be limited in traditional settings; instead, it should be ubiquitous and life-long. In the circumstances, educators of this era should also be aware of the innovative models in education such as heutagogy which empowers learners in the life-long learning path. Therefore the perceptions of teachers and administrators on this new model are important as they are one of the major stakeholders in the process. Teachers are the ones helping learners to discover their strength in their own learning journey. There are a number of applied researches on heutagogy and modern technologies (Canning, 2010; Canning & Callan, 2010; Car, Balasubramanian, Atieno & Onyango, 2018; Carpenter &Linton, 2018 Kapasi & Grekova, 2018) and review articles on the current issue (Agonács &Matos, 2019 ; Blaschke, 2012; Bozkurt, 2015; Davis & Hase, 2001; Halsall, Powell & Snowden, 2016; Hase, 2011; McAuliffe, et. al, 2009). However there is no research to address the perceptions of the teachers and administrators on heutagogy. The present paper is thought to fill the gaps in this field.

Purpose of the Study and Research Questions

Given the issue to be addressed mentioned above, this study investigated three research questions.

1. What are the perceptions of teachers (with administrational role) on heutagogy?

2. What are the perceptions of teachers (with administrational role) on practicality of this new model in education?

3. What are the recommendations of teachers (with administrational role) on the ways to implement heutagogy to education?

METHODOLOGY

The current research was conducted with a qualitative research design within phenomenological model. To explore the central phenomenon in detail qualitative researches should be utilized (Creswell, 2011). Thus to reveal the perceptions of teachers (with administrational role) on a relatively new term heutagogy, the current study was designed as a qualitative research.

Participants

The selection of participants was random. 40 teachers (with administrational role) as participants took part in the current study. They were all attending the Educational Administration master program without thesis in Fırat State University, Elazığ, Turkey. All of the participants were male. %37.5 of the participants had 11-20 years of experience in teaching; %37.5 of them had more than 20 years in their teaching profession and % 25 of them had 1-10 years of experience. They all have been working in high schools.

29 of the participants were graduates of education faculties; whereas 11 of them of other faculties. In Turkey, graduates of other faculties also have similar rights as graduates of education faculties only if they have pedagogic formation certificate. However it is still a debatable issue that graduates of other faculties are competent enough in terms of educational issues as education faculties.

Table1. Features of Participants

Role in the Institution	Gender	Experience	Educational Background	Number	Percentage
Administrator/ Instructor	M	1-10 Years	Faculty of Education	8	
			Other Faculties	2	%25
Administrator/ Instructor	M	11-20 Years	Faculty of Education	9	
			Other Faculties	6	%37.5
Administrator/ Instructor	M	21-30 Years	Faculty of Education	12	
			Other Faculties	3	%37.5

Data Collection

The instrument of this study was interview forms prepared by the researcher investigating the related literature in detail. The researcher also consulted two professors in Education Faculty about the questions. Having their suggestions the form was revised. The forms were filled by the participants in a class hour time. The forms were prepared in mother tongue of the participants. Having a look at the questions nearly all of the participants notified that they have never heard heutagogy term before. Therefore the researcher explained the concept of heutagogy in detail to make it clear for them and emphasized that heutagogy approach is feasible for higher education. As they have been working in high schools and it is the last step before higher education, it is believed that they should be aware of the current approach to prepare their students for it. After the explanation, the participants answered the other questions easily.

Data Analysis

The written data were analyzed through qualitative content analysis. Content analysis is one of the ways that allows the researchers to expand the understanding of theoretical issues by extracting

written data into categories (Cavanagh 1997). Four main stages were followed as Berg (2001) recommended. The researcher identified the meanings first, included the content, identified codes as homogenous groups and lastly drew realistic conclusions by the help of calculated frequencies. To preserve the participants' privacy, codes were used to report their statements instead of full names such as P1-E-(15) and P3-O-(13). These codes stand for 1st participant graduating from an education faculty and having fifteen years of working experience and third participant graduating from other faculties having thirteen years of experience.

In qualitative researches validity and reliability are essential issues (Patton, 2002). Researchers should persuade his/her readers that the results of the study are worth paying attention to (Lincoln & Guba, 1985). To ensure validity for the current research the researcher explained the process, methods using in detail and gave direct quotations.

As for reliability, the researcher asked two professors of education faculty to read the answers and confirm the codes; identified the participants in the paper and preserved the data carefully. The forms were prepared and filled in Turkish as mentioned before. To provide reliability not only the researcher but two different English language instructors also translated the forms into English.

FINDINGS

Analysis of data revealed the perceptions of the participants on heutagogy, its practicality and ways to use it in education settings. The results of each research question were provided below.

RQ1. What are the perceptions of participants on heutagogy?

Regarding the first research question, an interesting finding was revealed. Thirty nine of the participants remarked that they have never heard the heutagogy term before. Just one of them (P2-E-(7)) stated to read about it in an article. In that case the researcher clarified the term in detail. Afterwards, most of them admitted that they knew the key terms related to the heutagogy concept such as knowing how to learn, self-determination, capability, double loop learning and self-reflection. However, they were not aware of its name and being a new approach in education.

RQ2. What are the perceptions of participants on practicality of this new model in education?

Findings related to the second research question were resulted into the categories and codes given in Table2.

Table2. Perceptions of Participants on Practicality of Heutagogy (N= 40)

Category	Code	F
Positive Attitudes	Practical for guiding teachers	21
	Practical for conscious students	21
Negative Attitudes	Negative impacts on teachers' role in classroom	16
	Negative impacts on the content of the course	12
	Negative impacts on assessment	8
	Having no idea	2

The analysis of data revealed two main categories for the second research question. In terms of positive attitudes toward the practicality of Heutagogy, two codes were identified. % 52.5 of the participants reported that heutagogical implementations are practical for teachers emphasizing if instructors adopt the role of facilitator and guide in their teaching profession. P17-O-(12) wrote "*If the teacher takes the role of guide in the classroom then heutagogical techniques may be applicable for the process. However we have to admit that most of the teachers prefer being an authority in the*

classroom and leading their students to what is right and easy for them. As you mentioned, it is not for high school students in traditional Turkish education system. However, as far as I observe higher education is a continuum of high schools and implementations are similar such as transmitting theoretical information in didactic ways." Another positive view P11-E-(7) on this code is *"We should be modern educators and help our students to be autonomous in their learning. Of course it is not easy to take a passive role in the classroom and make the students active and masters of their learning. However it is the only way to prepare our students for their future life*."

The other code of the category is its being practical for conscious students who know their competencies and limits. % 52.5 of the participants notified the importance of the conscious level of the students on practicality of the heutagogy approach. P21-O-(8) indicated *"I think it is up to the conscious level and competency of students. If they know about their abilities and competency then it is practical for them. Even being self-directed is not easy for our students, being self-determined is the highest level. Thus, a few students whom I know may utilize it during their learning process not most of them."*

With regard to negative attitudes towards practicality of the present approach three different codes were labeled. % 40 of the respondents addressed the negative effects of being self-determined, capable and self-reflective autonomous learners on the authority of teachers in the classroom. A very experienced teacher P32-E-(27) indicated his view on the issue in a strongly negative way as *"I think that our students are not ready for this approach. If we help them have the freedom in their learning you mention, then how about teacher authority in the classroom? Personally I do not want anything to weaken my strength in the classroom."* A milder view on the issue is P19-O-(22) *"In my opinion, all of the teachers know that students had better be empowered in their learning process in 21st century. Yet, we still have a relatively traditional education system which authorizes teachers. Thus it is not proper to give a full freedom to students in their learning path. They need us. And it will be the same in the future."*

% 30 of the participants stressed the estimated negative influences of heutagogical approach on the course contents. They generally reported the possible negative impacts of being self-determined about what and how to learn on the course contents. A teacher P3-E-(20) stated *"Secondary education in Turkey is severely curriculum based. Program designers determine what and how to learn according to students' needs. So our students are also accustomed to be directed by a curricular system. Graduating from secondary education, students are not easy to change their way of learning and to have all the responsibilities of learning. Therefore they remain passive recipients in higher education as they were in the previous step. Supposing that they are given the chance to determine about their learning, in the latter step, it will most likely affect the content of the courses. They may not determine what to learn correctly, since they are not aware of their needs and requirements of their future career."*

% 20 of the teachers reported their negative perceptions about assessment process in heautagogical approach. They generally wrote about the possible ambiguity in assessment process in heutagogical way. They mostly discussed the measurability features of heutagogic assessment. P6-E-(18) preferred asking question to the researcher indicating his doubtful manner *"How does a student assess himself if he is the only one to determine what to learn? And is this kind of assessment valid and reliable? How can teachers monitor the improvement of students in case they are not competent enough on the issue his/her student prefers to study and learn?"* Another participant also wrote his views in a similar questioning way: P29-O-(13) *"Assessment process should be determined and controlled by instructors not students. Otherwise, how can it be in line with the other students? Some of them can assess themselves honestly and strictly but is it the same for all of the students? Control is obligatory in education settings."*

Two out of forty participants indicated having no useful ideas about the practicality of the current approach.

RQ3. What are the recommendations of participants on the ways to implement heutagogy to education?

Findings related to the third research question were resulted into the categories and codes given in Table3.

Table3. Recommendations of Participants on Heutagogical Models

Category	Code	F
	Reduction in level of authority/being guide on the side	24
Changing the Way of Teaching	Utilizing more student-centered methods	18
	Being reflective teachers	12
	Letting them aware of themselves/Knowing how to learn	19
Coaching Students	Letting students use complex thinking systems	14
	Improving the level of problem solving skills	9
	Improving the level of reflective thinking	8
	Blended Learning	12
Technology Integrated Teaching	Social Media	10
	Having No Idea	13

Asking the participants about the possible ways in education settings to facilitate heutagogical models, three categories were attained. Within the framework of the first category 'Changing the Way of Teaching' four codes were identified. % 60 of the respondents admitted that authoritative role of teachers in the 21st century should be changed into guide and facilitator teachers. One of the teachers commented as P7-E-(8) "*As traditional teachers we feel ourselves comfortable and superior in the classroom. We have the power in the classroom indisputably. However in 21st century, we have to keep up the change, thus, we have to break the habit of being the sole authority in the classroom.*" The participants mentioned the necessity of giving responsibility of learning to learners within the same code. P11-E-(7) stated, "*Change is inevitable. As educators we also change our responsible manner and give all the liabilities to the learners. They should be active and responsible during their life-long way. As it is mentioned, education is not limited to the school settings, so, if the learners have their responsibilities their way will be smooth and full of success.*" % 45 of the teachers noted the need of using student-centered methods in the classrooms in terms of heutagogy. P24-E-(8) reported "*Useful projects should be utilized in various disciplines. Learning via projects makes students active and self-determined if the instructor gives all the responsibility of the project to the student.*" P10-E-(10) "*Problem based learning may be used in education. Giving a problematic case to the students and making them creative and autonomous problem solvers is one of the ways*." P33-O-(20) "*I think techniques requiring collaboration can make students autonomous within the group. Group works should be one of the ways making students self-determined in the classroom.*" % 30 of the respondents referred to the need of being reflective teachers. P16-E-(9) stated "*Only if we transform ourselves to the reflective teachers we can interrogate our teaching and find the right way. So it is essential to be reflective teachers to be aware of ourselves and then help our learners in their learning way.*"

As for the second category 'Coaching Students', four codes were formed. In the general framework of guiding and helping students find their way, the first code 'letting them aware of themselves' was formed by %55 of the participants. Commenting in this manner P39-E-(9) expressed "*Letting students find their right way to learn is the best help. If they become autonomous learners in higher education, we teachers, should help them find themselves. So they can go on learning without needing assistance.*" %35 of the teachers claimed that helping students have a complex thinking system is the best way for heutagogical approach. P40- E- (23) noted "*Students should use not only knowledge, comprehension and understanding levels but analyzing, synthesizing and evaluating steps are necessary as well. They are not easy to develop, they require time and efforts. However they are*

not impossible to have. If teachers guide students finding their ways and so having high level of thinking system, they can adapt new approaches such as heutagogy." % 22.5 of the respondents put emphasis on improving problem solving skills of students. P33-O- (20) indicated "*Students should solve both team and individual effort problems logically and creatively. It means in an educational environment there should be both team and individual works which requires logic and imagination. Students should be motivated to solve all of the problems in a flexible manner. So they may be ready for not only familiar but also new cases in their future life.*" % 20 of the teacher administrators remarked the reflective thinking skills of students as an important factor. P4-E-(13) stated "*Teachers should guide their students to question their aims and values. If they become reflective learners they may find their best way to learn and lead their own learning and do not need any assistance.*"

The last category of the third research question is Technology Integrated Teaching. Within this category two codes were comprised. To liberalize students in their learning life, technology integrated ways were offered. The suggestion of the %30 of the participants is using blended learning in higher education. P27-E- (16) claimed "*Technology should be integrated into the education system in 21ˢᵗ century. I cannot imagine a teacher who is not able to use technology effectively for the sake of students. Teachers should know how to use technology and how to integrate it to their teaching. By this way students will be accustomed to use technology for their learning process. There is a new trend as blended learning. In traditional secondary state schools we cannot use it. However in higher education professors and students may utilize it. And students become more independent. Instructors may prepare videos on various topics. Students may prefer what, when and where to watch them.*" % 25 of the respondents offered using social media to decide what to learn. P5-E- (10) stated "*It may not be convenient for secondary education. In secondary education we have to follow a curriculum and students need our assistance to learn. They are not ready to be independent in this stage. However the case is not same for higher education. In higher education students are more mature and ready to be an autonomous individual in their own learning. For instance, in higher education students may choose what to learn following well-known professors in social media. They may make their preferences according their needs and interests. Since, they have a sufficient background to be an independent learner.*"

DISCUSSION

Although there are a number of papers and books on heutagogy as a new approach in various disciplines (Bhoyrub, et al., 2010; Blaschke & Hase, 2015; Blaschke & Hase, 2016; Canning, 2010; Canning & Callan, 2010; Eberle, 2009; Garnett & O'Beirne, 2013; Hase, 2009; Hase & Kenyon, 2001; Kenyon & Hase, 2002; Kerry, 2013; Narayan & Herrington, 2014) and its implementations (Ashton & Elliot, 2007; Carpenter & Linton, 2018; Cochrane et al., 2012; Hase, Tay & Goh, 2006; Narayan, 2017) the familiarity of the term in traditional education settings and perceptions of teachers on this term have not been previously addressed. This research fills the gap in the field by reporting on the perceptions of teacher administrators regarding the heutagogy. All of the participants except one, admitted not to hear this term before. It is a notable fact that all of the participants were attending master degree courses in Faculty of Education but were not aware of a relatively new concept in the field. Therefore the answers to the first question were not satisfactory with regard to 21ˢᵗ century requirements. It may be interpreted as heutagogy has not been sufficiently introduced to educators or educators in Turkey do not follow the novelties in their fields. The previous prediction is more possible, since nearly all of them has declared being aware of the terms pedagogy and andragogy.

Regarding second research question, two general categories were composed. 'Positive Attitudes' category was attributed more than 'Negative Attitudes' category. The categories may firstly be discussed in terms of experience and faculty of graduation. Although more of the participants declared their positive views on the practicality of the current term negative views were also in considerable amount. For the positive attitudes category total frequency value was f=42. When examined regarding with experience, the participants wrote in this category were relatively young teachers. 21 teachers who declared positive opinions were in between 1-20 years of experience. As for faculty graduation, 12 teachers were graduates of education faculties. Regarding with the negative

attitudes category, the findings indicated the same vein (f=36). 12 out of 16 participants were in between 20 and 30 years of experience. In terms of faculty education, 10 out of 16 teachers were education faculty graduates. Observing these variables it can be inferred that young teachers independent from faculties are open to change. They are more adoptable than older teachers for new implementations and opinions. This finding of the study appears to be in line with the research that supported young teachers were more enthusiastic about change than their older colleagues (Hargreaves, 2005). Faculty graduation has no importance, because positive and negative viewers were in the similar rates of faculties. (Positive views% 57.5 education faculties; negative views %62.5 education faculties) Our finding aligns with some researches which investigated the difference between attitudes of education faculty graduates and other faculty graduates who have pedagogic formation certificate toward teaching practices in various disciplines (Bahçeci,Yıldırım, Kara & Keskinpalta, 2015; Bozkırlı & Er, 2011; Ocak & Demirdelen, 2008).

Furthermore for the second research question, there are 16 views out of 36 negative ones related to the authority of teachers and 12 to the content of the course. It can be inferred from this result that teachers still accept authoritative theories in their teaching and they strictly adhere to the curriculums as in traditional pedagogy model. Ashton and Elliot (2007) stated that global learners should catch up with the swift change and it is not possible by traditional pedagogical models especially in higher levels of education. As McAuliffe, et al. (2009) reminded their readers that theories should not be static in a rapidly changing educational system. Thus educators should move on more student-centered learning models from teacher-centered teaching ones. However they admitted in line with our finding that instructors even in higher education cannot implement andragogical and heutagogical principles in their teaching, instead, they prefer reverting pedagogical models. Moving towards andragogy and heutagogy is a challenge for educators, because transmitting knowledge is still more comfortable even in 21st century.

'Negative impacts of assessment' is the last code for negative attitudes category. Negative impacts of heutagogical assessment are emphasized byeight teachers. They traditionally thought that assessment should be done under the strict control of teachers. Otherwise it does not work effectively. In fact, assessment in heutagogy is thought to be flexible and student-directed (Eberle, 2009; Hase & Kenyon, 2007; Hase & Kenyon, 2010). It can be commented that some of the teachers are still dissenter towards the novelties in the system. They still think that assessment particularly, should not be transformed to student-determined ones. This finding of the research is similar to the views of McAuliffe, et.al (2009). They expressed their view about heutagogical teaching as a challenge for teachers.

In respect to the third research question, three useful suggestion categories were formed. They are 'Changing the way of teaching', 'Coaching students' and 'Technology integrated teaching' respectively in terms of the calculated frequencies. It should be noted that the answers of this category are given mostly by the positive attitude teachers and some of these participants wrote more than one suggestion.

As for the first category, 24 views were coded on altering teachers' role to guide; 18 ones on using student-centered methods and 12 views on being reflective teachers. It means % 60 of the participants thought the best way to implement heutagogy in education settings was changing from authoritative teachers to facilitators. This finding appears to be consonant with the views utilized to write this paper (Hase & Kenyon, 2000; Davis & Hase, 2001; Eberle, 2009; Hase, 2011; Blaschke, 2012; Blaschke & Hase, 2019; Patel, 2019). It can be inferred that having positive attitudes toward the heutagogical implementations teacher administrators suggested being guide in the modern classroom as characterized by heutagogy. They reported that modern teachers should not be '*sage on the stage*' as King (1993) referred to the traditional teachers who simply transmit knowledge to the brains of students like pouring into empty vessels. Instead teachers had better facilitate the learning letting their students to be full responsible of their learning. Blaschke (2012) emphasized the fact that teachers had better give the ownership of learning to the learners themselves.

18 views were recorded for the code of 'utilizing more student-centered methods'. The participants generally stated that students should be engaged in their own learning process via student-centered methods such as projects, problem based learning and collaborative group works. Project-based learning has a lot of definitions. One of them has all the major qualities of heutagogy given by Moursund (1999) such as teacher guiding not direction, individual content, and assessment. As for Bell (2010) it is a student-centered rather than teacher-directed approach. By looking at these qualities it can be indicated that projects are convenient tasks in heutagogical approach. Eberle (2008) claimed the use of projects in heutagogical learning environments were beneficial. The researcher thought students will be done more work and progress by the help of projects. David and Hase (2002) and Hase (2009) recommended utilizing team-works in learning environments. Canning and Callan (2010) also declared that collaboration is an essential element in heutagogical methods. When learners work together they may reflect and it may help them to think about how they learn better. In the research of Ashton and Elliot (2007) the initial finding supported the idea of collaboration in heutagogical learning environment.

%30 of the respondents mentioned about the necessity of being reflective teachers in heutagogical education. It is clear that participants who made comments about teachers' reflectivity as a useful way for heutagogy, believed the necessity of teachers' changing through traditional sages to self-confident guides. Reflective teachers are the ones who reflect on their experiences and learn from them continuously for their professional development (Henderson, 1992). At first glance, this finding may be seen as an irrelevant suggestion for a student-centered learning theory. Since the researches on the relevant field reveal the need for reflective students and process (Ashton & Elliot, 2007; Ashton & Newman, 2006; Canning, 2010; Singh, 2003; Wenger, 2002). However some other researchers (Schugurensky, 2002; Mezirow, 2003) in line with the current finding, claimed that both instructors and learners needed to be reflective to provide an effective learning community. So it may be inferred that if the teachers are eager to question themselves, challenge in the process and seek out opportunities for their students then learning environments will be better places in terms of heutagogy. 12 of the respondents thought in the same vein and suggested being reflective teachers in the process to make the learners more autonomous and self-determined.

In terms of 'coaching students' category four codes were formed. First of all, %47.5 or the participants noted that letting students know how to learn was the best way in heutagogical approach. Aforementioned in the paper, knowing how to learn is one of the prominent features of heutagogy (Argyris & Schön, 1978, as cited in Hase, 2009; Blaschke, 2014; Canning & Callan, 2010; Hase, 2009; McAuliffe, et. al., 2008). The researchers supported the necessity of knowing how to learn for different aspects of heutagogy. As for Argyris & Schön (1978), it was for double-loop learning; for Hase (2009), it was essential for reflective practice; For Canning and Callan (2010), it was important for collaborative learning and for McAuliffe, et.al. (2008) it was for being more self-determined learners. As seen, the present finding of the research is harmonious with the others in terms of having the self-knowledge of learning.

%35 of the respondents recommended helping students use their high level of thinking systems. Heutagogy has been viewed as the self-determined learning process challenging the traditional transmitting knowledge issue. Therefore students need to construct their knowledge in an analytical, evaluative and synthesizing way (Blaschke & Hase, 2015; Crawford, Young Wallace & White, 2018).

%22.5 of the teacher administrators suggested improving the level of problem solving skills of students to comply with heutagogical approach. To become life-long and capable learners, individuals should also have the ability to solve problems to cope with familiar and new cases (Cordon, 2015; Eberle, 2009; Gerstein, 2014; Hase & Kenyon, 2003; Riedler & Eryaman, 2016).Therefore this finding may also be taken as one of the useful ones in heutagogical learning. To improve the problem solving skills of students facilitates them to be adapted new circumstances not only in their educational but also working life. According to Blaschke (2014), employees are required to have 21st century skills such as problem solving, creativity, innovativeness and some cognitive/metacognitive skills.

%20 of the participants particularly emphasized the reflective thinking as a requirement for heutagical practice. As discussed within the previous category, reflective thinking is one of the prominent features of heutagogy. And so many researchers are in the same idea of the necessity of reflective thinking regarding with students and the learning process (Ashton & Elliot, 2007; Ashton & Newman, 2006; Canning, 2010; Singh, 2003; Wenger, 2002).

The last category of the third research question is 'Technology Integrated Teaching'. %55 of the participants recommended utilizing technology to be heutagogical learners. 2 different codes were labeled within this category. The first one recommended by 12 respondents is using blended learning. This finding aligned with the research by Ashton and Elliot (2007). They also proved that blended learning was an effective and enjoyable way in heutagogical learning although it had some challenges for both learners and educators. Singh (2003), Canning (2010), Ashton and Newman (2006), Narayan and Herrington (2014) are the other researchers thought that blended learning is one of the main tenets of heutagogical approach. It may be as a result of the fact that blended learning provides learners a more independent environment to be self-determined ones. Since, the high quality of experiences may be attained through information and communication technologies rather than traditional methods used in the classrooms (Williams, 2002).

%25 of the teacher administrators suggested using social media as an effective tool for heutagical learning. The last finding of the current study was in line with a number of researches (Blaschke, 2012; Blaschke, et.al, 2010; Junco, Heiberger & Loken, 2010; Naqvi & Parvez, 2019; Narayan, 2017). A study showed that students who used social media such as Twitter had more active role in their learning process comparing to the ones who did not use it (Junco, et.al., 2010). Others remarked that if the learners generated their content by use of social media it would help the development of cognitive and metacognitive skills (Blaschke, et. al., 2010). The other researcher declared in his thesis that social media was one of the useful tools to change traditional pedagogical approach (Narayan, 2017). One of the latest researches also indicated that the use of social media supported self-determined learning (Naqvi & Parvez, 2019).

CONCLUSION

There is a revolution in learning and it affects the whole education system inevitably (Hase & Blaschke, 2014). In other words in a world of swift change of information every particle belonging to the system will be affected and changed accordingly. To keep up with the change in education, individuals need to transform from traditional to more modern ones. Therefore educators and learners should adapt new approaches and methods open-mindedly. According to Blaschke and Hase (2015) there is a need for life-long and capable learners to cope with the rapid change in 21st century.

Heutagogy is one of the innovative ways evolving learners '*from passive recipients to analysts and synthesizers*' (Blaschke & Hase, 2015) as an extension of pedagogy and andragogy (Hase & Kenyon, 2001). As Patel (2019) suggested the use of heutagogy in higher education is more convenient for students. Therefore the readiness of students for higher education and heutagogy is an important issue for high school teachers and administrators. To reveal the perceptions of teacher administrators on heutagogy/self-determined learning, the current research was conducted. The participants reported their views on heutagogy, its practicality on educational environment and recommendations for heutagogical implementations.

As a conclusion, it may be reported that teacher administrators were not sufficiently aware of the innovative approaches in education. Even if they did not know the name of the approach as heutagogy they knew the related issues such as self-determinism, life-long learning, capability, double-loop learning and self-reflection. Thus they gave useful opinions about the practicality of the issue and some recommendations as well as some negative ones. While there were a number of participants who believe the necessity to make the learners active leaders of their own learning; some of the respondents still supported teacher centered approaches in spite of the fact that they knew the requirements of the 21st century. It can be inferred that some teachers still have a tendency to be the

authority in the classroom and reject using learner-centered approaches. However the critical majority support the necessity of utilizing more student-centered ways in educational settings.

All in all, heutagogy as an innovative approach in 21st century, should be introduced to educators and students much more than today. Since not only educational but also technological developments empower the learners. The education process as Davis and Hase (2001) explained with a vivid metaphor was like a dynamic river rather than a stable lake. So, if educators really want to help learners to keep up with the 21st century requirements of education, they should follow and adapt the innovations.

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