The Features of Personal Self-organization of Future Teachers with Different Attitudes Towards Distance Learning *

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Abstract

The following article summarizes empirical study results on characteristics of personal self-organization of future teachers declaring different attitudes towards distance learning. It is discovered that an attitude towards distance education is mainly influenced by self-images of themselves at in-person (traditional)/distance education situations, disciplinary and communicative skills, attitude to innovation and tolerance to uncertainty.

Keywords: *personal self-organization, future teachers, attitudes towards distance learning, self-image, disciplinary skills, communicative skills, attitude to innovation and tolerance to uncertainty*

1 Introduction

The severe implementation of digital technologies is a key direction of modern education nowadays. Studying within digital education environment makes it possible to create specialists of new type, labor market competitive and able to solve current digital economic issues [Strokov, 2020]. Switching to e-learning provides for substantial changes of professional training of a teacher [Noskova et al., 2018]. New educational conditions linked to the rise of distance learning resources and development of digital tools make it necessary for a teacher not only to be familiar with digital technologies but also to develop students' cognitive skills, their ability for self-organization and self-control, making their individual learning paths and developing within media space.

Use of remote technologies while learning creates conditions for the teachers to prepare to their professional life within digital educational space.

Positive background in distance education experienced while studying facilitates deep understanding of new possibilities for digital technologies' implementation and helps to reveal one's own potential of self-control and self-organization. At the same time, not only rewards of digital education but also its risks should be considered [Panferov et al., 2020]. Negative attitude towards distance education and failure in self-organizational studying process leads to both reducing of academic results and difficulties in implementation of online technologies at work. Moreover, excessive immersion into media space together with low level of self-organization is a factor of emerge of internet-addictions [Khodakovskaia, et al, 2018]. Therefore, it is an important phycological-pedagogical task to trace

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the attitude of future teachers towards education within e-learning and defining their personal self-organization characteristics mediating their satisfaction with distance education.

2 Personal self-organization and its role at distance education of future teachers

The success of distance education is mainly determined by students' ability to personal self-organization. Personal self-organization is an integral property meaning optimal employment of resources to reach a goal, time management and scheduling, self-control, choice and update of modus operandi, commitment to development of abilities supporting solving of educational, personal and professional tasks altogether. Personal self-organization involves responsibility, efforts, open-mindedness, reflective abilities, self-control, self-analysis, dedication, ability to function at uncertain situations [Pakhmutova, 2013], [Malova, 2019], [Human world. . . ,2019].

Self-regulated learning assumes active control of educational process with a focus on educational goals [Zimmerman & Schunk, 2011]. Self-regulation within the online-learning is carried out through communication with content as well as with a teacher/other student. High level of self-control during learning process, self-efficacy in searching through the web, a habit to self-interaction with educational content and interactive communication with a teacher/other students serve as key features for successful education and satisfaction [Moon-Heum Cho & YoonJung Cho, 2017], [Hamdan et al, 2021]. Students with high level of self-organization during online studying tend to understand deeply the content and to have a fresh look at training material [Tao et al, 2020]. Meanwhile, students may greatly vary in self-organizational skills, therefore having substantial differences in academic success of distance education. Thus, a study by Vanslambrouck et al [Vanslambrouck et al, 2019] reveals three types of online-students, i.e. with high, medium and low abilities to self-regulated learning. It also proves, high level of self-organization is linked to students' motivation for success as well as to their personal qualities. Similar results are shown by Viberg и Andersson in terms of using remote educational technologies [Viberg & Andersson, 2019]. These authors both make it clear, that highly self-organized students use more effective learning strategies, tend to have skills to goal-setting, time management and scheduling, ability to data structuring, higher evaluation of distance education effectiveness. Self-control also plays an important role while learning at Massive Open Online Course. According to Reparaz et al, MOOC-educated students have an advanced ability to control themselves, most notably in goal-setting, interest for tasks and discipline [Reparaz et al,2020].

The subject of personal self-organization while learning came to the forefront during the COVID-19 pandemic, when huge worldwide transition to online-education took place. Distance education as a desperate measure demanded more self-organizational skills, emotional control, self-reflection, goal-setting, scheduling, abilities to individual work and data structuring [Carter et al,2020]. In terms of distance education, teachers' functions undergo substantial changes accordingly. One of the most important tasks of a remote teacher is to support students' self-efforts and to teach them basic strategies of self-organization [Pisareva and Tryapitsyna, 2020]. Also, a role of a teacher is changing: such functions as course designer, knowledge navigator, facilitator step forward. Pedagogical activity also involves the implementation of new educational technologies, acting confidently at uncertain conditions, being flexible at communication with students and building individual educational strategies according to their peculiarities [Setkova, Lukina, and Volkova, 2021]. Being ready to work as a remote teacher includes not only information competencies but also motivational and semantic ones. First of all, a high level of self-control and self-organization, responsibility, positive attitude towards innovation, time- and resources management, leadership, ability to work at uncertain and unpredictable situation [Leyfa and Pavlova, 2020].

Therefore, studying within online space opens up new possibilities for professional training of a teacher nowadays. Digitalization of Teacher Education creates perspectives for development of such

professional competences of a teacher providing for giving a proper education to an individual of a digital era, search for brand-new educational strategies, integration of formal and informal education [Makarenko et al, 2020].

Personal experience of use of remote technologies and immersion into online space during education is an essential condition necessary to get ready to an innovative activity, to become motivated to use e-learning modalities and serves as a source for self-reflection and analysis of own activity. Distance education experience cultivates skills of scheduling and right behavior within info space, self-criticism, self-independence at working with data, ideational fluency. The interaction between a teacher and other students within online space is a key to the partner-based behavior and it helps to learn how support and accompany students within e-space. In the meantime, students at Teacher Education often face difficulties when entering digital space. The abrupt transition to remote education due to anti-epidemic measures served a source of significant stress for many students. According to them, typical issues of distance education are connected to a low level of self-organization within new conditions, i.e. reduction of effectiveness, working and motivation efficiency; lack of self-confidence; fear of the future; general negative emotions during remote education [Aleshkovskiy et al, 2020]. Therefore, analysis of personal self-organization of future teachers in terms of attitude towards distance education becomes highly relevant and useful.

3 Research Questions

With accordance to the above mentioned, the following research questions appear:

1. Which qualities and characteristics of personal self-organization of Teacher Education students designate their attitude towards remote education?

2. What is specific for personal self-organization of future teachers with mainly positive and mainly negative attitudes towards remote education?

4 Methods

4.1 Participants

171 students (70,2% female and 29,8% male) took part into the current study. Average age of those surveyed is 20,7 years old. Students of different specializations of Teacher Education including math, biology, geography, philology, history, law, social economics, technology, pedagogic, elementary education were chosen with the purpose to avoid influence of their profile to the final satisfaction from remote form of education.

4.2 Measures

In order to define the attitude of future teachers distance education we used an essay which is a free autobiography description of pros and contras of this particular form of studying. We took the Questionnaire of self-organization by Mandrikova E.Y. to determine peculiarities of time management, goal-setting and scheduling [Mandrikova,2010] which consists of 25 statements and allows answering them with agree/disagree by 7-grade scale. There are following scales:

1. Regularity.

2. Goal commitment.

3. Insistence.

4. Sticking to activity structuring.

5. Self-organization via external tools.

6. Commitment to the present.

Inner coherence of the scales makes sense within Cronbachs alpha range 0,50 to 0,80. To determine attitude towards uncertainty we used New questionnaire of tolerance to uncertainty by Kornilova T.V. [Kornilova,2010] which includes 33 statements. Level of agreement should be rated by 7-degree scale from "fully agree" to "fully disagree". These are the scales:

1. Tolerance to uncertainty.

2. Lack of tolerance to uncertainty.

3. Interpersonal lack of tolerance to uncertainty.

Inner coherence of the scales makes sense within Cronbachs alpha range 0,69 to 0,72. To determine attitude to innovation we used a method of study of characteristics of innovative personal potential by Vlasenko Y.A. and Kalin V.K. [Vlasenko, 1999]. It consists of 36 paragraphs with a 5-grade scale. Scales are:

1. Integrated index of innovative personal potential

2. Blend composition of innovative personal potential:

   - Possibility to find new media space and navigate therein (gnoseological component);
   - Possibility to evaluate relevantly new phenomenon (axiological component);
   - Possibility to act effectively within new situation;

3. Types of realization of different innovative possibilities:

   - Intensive
   - Cumulative
   - Differential
   - Generic
   - Transforming
   - Accommodative

4. Meaning of innovative personal potential at different level of person-world interaction:

   - Environmental,
   - Cultural,
   - Organizational in terms of one's own life Environmental,
   - Cultural,
   - Organizational in terms of one's own life Environmental,
   - Cultural,
   - Organizational in terms of one's own life.

Safety factor of test-retest of the method is 0,83. To diagnose an attitude towards themselves in terms of traditional and distance education we used a psycho-semantic method of Personal differential [Personal differential..., 1983]. Those surveyed were offered to evaluate themselves at traditional and distance education by 21 pairs opposite personal characteristics. Scales are: 1.

1. Valuation – level of self-respect and attraction by other people

2. Strength – self-esteem of self-confidence

3. Activity – self-esteem of extroversion of communicative activity

To detect personal characteristics we used Short questionnaire of the Big Five (TIPI) by Kornoliva T.V. Chumakova M.A. It includes the list of 10 pairs of personality traits and responder evaluates whether he's described by each characteristic by 7-grade scale:

1. Extroversion.

2. Agreement.

3. Trustworthiness.

4. Emotional stability.

5. Openness to new experience.

Inner coherence of the scales makes sense within Cronbachs alpha range 0,32 to 0,81 being enough for a study tool [Kornoliva & Chumakova,2016].

4.3 Data Analysis

The processing of the results included content analysis of students' self-descriptions, correlation analysis using Pearson coefficient of correlation, analysis of statistical significance of average characteristics using Student's t-test. Based on the results, indexes of a positive and negative attitude towards distance education were calculated. Statistical analysis was elaborated using STATISTICA, ver. 10.0 software

5 Results

Let us see the results of a correlation analysis (table 1). As we can see from the data, positive attitude is typical for those future teachers who are less characterized by lack of tolerance to uncertainty, goal commitment, commitment to the present, formal-cumulative, negatively-generic, active-transforming attitude to innovation.

Negative attitude of future teachers towards distance learning is mostly connected to a high level of agreement at communication, low self-esteem of personal characteristics at distance education and positive evaluation of activity during traditional education.

In order to get more detailed analysis of personal self-regulation peculiarities out of general sample, we took a group of students with clearly positive (28 ppl) and clearly negative (29 ppl) attitudes. Then we conducted analysis of statistical significance of average personal self-organization criteria via Student's t-test (table 2).

Table 1: Statistically significant correlations between personal self-organization marks and attitude towards distance education of future teachers (n=171, p $\leq 0,05$)

Personal self-organization criteria	Attitude towards distance education	
	Positive	Negative
Lack of tolerance to uncertainty	-0,16	
Goal-commitment	-0,16	
Commitment to the present	-0,16	
Formal-cumulative type of innovative possibility realization	-0,19	
Negatively-generic type of innovative possibility realization	-0,22	
Active-transforming type of innovative possibility realization	-0,17	
Agreement		0,23
Self-esteem at distance education		-0,17
Strength at distance education		-0,26
Activity at distance education		0,16

Table 2: Statistically significant differences at average characteristics of personal self-regulation criteria in groups with positive and negative attitudes towards distance education

Criteria	Positive attitude		Negative attitude		df	t	p≤
	M	SD	M	SD			
Positive attitude index to the distance learning	15,11	4,43	5,70	1,96	55	10,43	0,001
Negative attitude index to the distance learning	5,27	3,26	17,90	4,34	55	-12,37	0,001
Trustworthiness	7,89	1,20	8,72	1,71	55	-2,12	0,05
Strength at distance education	3,36	6,14	-0,14	5,66	55	2,24	0,05
Activity at distance education	1,07	5,67	-2,86	4,56	55	2,89	0,01
Strength at traditional education	1,18	6,04	5,10	5,82	55	-2,50	0,01
Activity at traditional education	0,82	5,45	4,52	5,63	55	-2,52	0,01
Self-esteem at traditional education	5,79	6,07	8,48	4,01	55	-1,99	0,05

As table states, we detected statistically significant differences in positive and negative attitude indexes, thus proving the right for dividing into such groups. Those with positive attitude towards distance education are characterized by higher criteria of self-esteem and communication activity within distance format; while those with negative attitude characterize themselves as more trustworthy and more successful within traditional education.

6   Discussion

The results prove that features of personal self-organization influence emotional. However, they suppose they are not able to show fully their responsibility attitude of future teachers towards distance education. Mainly negative attitude is typical of those Teacher Education students who appreciate face-to-face interaction, direct contact, emotional acceptance and agreement with other people. They are more conformal, trustworthy and hardworking performing their duties. They appreciate their communicative activity, other characteristics approved by the society in general and strength within traditional education, attractiveness, friendliness, kindness, honor etc. within online communication. They do not like themselves within distance communication with teacher/other students, not sure of their possibilities, evaluate their self-control and independence quite low, demonstrate themselves as passive and close persons.

Those with positive attitude are more tolerant to uncertainty. They are ready to work within circumstances of contrary/lack of information, feel themselves confident at unpredictable situations,

accept different points of view and opinions. Meanwhile, these students are flexible at goal-setting, less focused on the future and tend not to apply efforts to get certain result. They appreciate more the past and the future comparing to the present. Their attitude towards innovation is more connected to understanding new information rather than to accumulation and evaluation. Meanwhile, they do not tend to display transforming activity but prefer to act under current circumstances. Within distance education they show will activity and self-organization, sociability, positive personal qualities, are satisfied with own behavior and communication within e-educational environment. One can assume, for this type of students it is more important to comprehend new experience within uncertainty rather than to get cliched success and life according to social norms. They feel themselves confident in online communication and can make their positive personal qualities visible within online space.

Conclusions

Therefore, main issues of personal self-organization influencing and forming a negative attitude towards distance education are lack of self-satisfaction within distance learning process as well as outspoken need for face-to-face contacts along with high standards of own activity results. Resources for personal self-organization at positive attitude are tolerance to uncertainty, flexible goals, positive attitude to innovation along with low importance of formal criteria of success, perceptual unity of own life, high self-esteem inside distance learning process. Revealed features of personal self-organization of students with different attitude towards educational format may shape a cornerstone for a differential approach to use of digital educational technologies at Teacher Education.

Acknowledgements

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