# LEARNER IN THE CONTEXT OF THINKING SKILLS-REALITIES AND CHALLENGES FROM CLASSROOM

# Cristina TRIPON, PhD. Teacher Training and Social Sciences Department Politehnica University of Bucharest cristina.tripon@upb.ro

**Abstract:** Education must to prepare for successful lives as adult citizens. In order to achieve that huge challenge, schools need to have clarity about their roles, about the patterns of future needs, about the teachers needs to selling the learning and making it irresistible. One of the most common criticisms aimed at young learners new to the workplace is that they lack initiative. They cannot solve problems for themselves and constantly need to be told what to do. So, the important job of schools is to ensure that children feel that they are responsible for their development and that it is thay who have the power to control their own lives. The majority of children who struggle within the system do so because of an inability to understand their own feelings and a fundamental lack of self-worth. The main objective of the research was to identify the degree of autonomy of the adolescent students from the studied high school classes. At the same time, the aim was to ascertain to what extent the teachers contribute to the construction and stimulation of the autonomy of the students, by studying the term of autonomy from the perspective of the image that the students and teachers have.

**Keywords:** *autonomy; critical thinking; 21st century skills.* 

### 1. Introduction

A solid education must be built on the twin patterns of knowing how to learn and knowing how to think clearly, independently about the information with which word involves. Today's young learners will be working at jobs that even been invented and this is a challenge for over the teachers, if they will prepare the future adults for their remaining 50+ years.

Education must to prepare for successful lives as adult citizens. In order to achieve that huge challenge, schools need to have clarity about their

roles, about the patterns of future needs, about the teachers needs to selling the learning and making it irresistible.

One of the most common criticisms aimed at young learners new to the workplace is that they lack initiative. They cannot solve problems for themselves and constantly need to be told what to do.So, the important job of schools is to ensure that children feel that they are responsible for their development and that it is thay who have the power to control their own lives. The majority of children who struggle within the system do so because of an inability to understand their own feelings and a fundamental lack of self-worth.

The main objective of the research was to identify the degree of autonomy of the adolescent students from the studied high school classes. At the same time, the aim was to ascertain to what extent the teachers contribute to the construction and stimulation of the autonomy of the students, by studying the term of autonomy from the perspective of the image that the students and teachers have.

### 2. The autonomy skills in the context of 21st century skills

The existing literature of definitions created for the semnification of 21st century skills include a great number of studies, but there is no single approach to the one terminologies associated with the 21st century skills. The Partnership for 21st Century Learning(P21- Framework for 21st Century Learning) include the 4C in the competencies- Critical thinking, Communication, Collaboration and Creativity, Wagner et al.(2006) and also Stenberg and Subotnik(2006) refers to the 3Rs as skills sets- Reasoning ('analytical, critical thinking and problem-solving skills'); Resilience ('life skills such as flexibility, adaptability and self-reliance'); and Responsibility. To the other hand, Prensky(2012) and Care et.al.(2019) calls them the 3Ps-Passion (including character), Problem solving (including communication) and Producing what is required with creativity and skill'.

Regarding this literature, there is a relatively clear set of skills that are included in the semnification of 21st century skills, consolidated into five key skils: communication skills, collaborative skills, individual learning approaches, individual autonomy, ICT and digital skills (Voogt&Roblin, 2012; Scott, 2015; Chalkiadaki, 2018).

Scott (2015) refers to the 21st century skills like "the knowledge, skills and attitudes necessary to be competitive in the 21st century workforce, participate appropriately in an increasingly diverse society". The author separate them in four categories: learning to know, learning to do, learning to be, learning to live together(details in Diagram no1).

Diagram no.	1.	21st	century	skills	(Scott	,2015,	)

#### Learning Core subjects (Grammar, Reading or Language Arts; World Languages; Art; Mathematics; Economics; know Science; Geography; History; and Government and Civics, with a balance between education in technical and natural science subjects and culture and humanities) and four themes: global awareness; financial, economic, business and entrepreneurial literacy; civic literacy; and health literacy. critical thinking, problem solving, communication and Learning to do collaboration, creativity and innovation, information, media and technology literacy, information, communication and technology (ICT) literacy, social and cross-cultural skills, personal responsibility, Learning to be self-regulation and initiative, sense-making skills, metacognitive skills, entrepreneurial thinking skills, learning-to-learn and habits of lifelong learning Learning seek and value diversity, teamwork and to live together interconnectedness, civic and digital citizenship, global competence, intercultural competence.

According to the Chalkiadaki (2018)the skills that are included in 21st century needs are: creativity, divergent thinking, critical thinking, team working, work autonomy, developed cognitive and interpersonal skills, social and civic competences, responsible national and global citizenship, consciousness of interdepdence, acceptance and understanding of diversity, recognition and development of personal attributes, interactive use of tools, communication in mother tongue and foreign languages, mathematical and science competence, digital competence, sense of initiative and entrepreneurship, accountability, leadership, cultural awareness and expression, physical wellbeing (details in diagram no2).

Diagram no. 2. 21<sup>st</sup> century skills (Chalkiadaki, 2018).

Personal skills	1.Self-development and autonomy (self-management,								
	self-organisation, self-regulation, self-direction, self-								
	reflection, independent thought, autonomous acting,								
	ability to form and conduct life plans and projects and to defend/assert rights, emotional intelligence);								
	8 /								
	2. Creativity (curiosity, imagination, playfulness,								

creative production, co-creativity,innovation);

- 3.Problem-solving and critical thinking (in authentic learning environments, analytical thinking, analysis and evaluation of evidence, ability to provide solutions in given challenges, higher-order thinking, sound reasoning, informed decision-making, innovation); and
- 4. Presence in the globalised environment' (adaptability, agility, managing complexity, risk-taking).

#### Social skills

- 1. Communication and collaboration (oral and written communication, team-work, open-mindedness, conflict management);
- 2.Cultural awareness and global awareness (ability to appreciate the value of the varied cultures and to intentionally construct cross-cultural relationships and networks); and
- 3.Leadership (self-motivation, initiative taking, entrepreneurship, leading by influence).

# **Information** and knowledge

- 1.Learning (self-reflection, self-assessment, self-improvement, metacognition, e-learning, self-directed learning, independent learning, knowledge construction, social and collaborative learning, intellectual risks);
- 2.Information management (information literacy, data access and analysis, managing multiple streams of simultaneous information, applying knowledge to new situations, creating new knowledge, content knowledge).

# **Digital literacy**

Rolleston (2018) suggest that, in the context of globalization and increasing competition by upskilling and the current needs of workforce, the demand for 21st century skills can be particularly challenging. The same author believes that only 20% of currently jobs require non-rutine skills, associated with the 21st century skills, but, in the future, these issues is about to change.

Dewan and Sarkar (2017) considered the 21st century skills like a solution to the problem regarding to the deficiency in preparing future workers and slow economic growth. Most countries agree on the need for

inclusion these skills in their education curricula, but Jaberianet al. (2018) thinks that this is not enough and is necessary to get solutions for monitoring these implementation projects.

In support of this perception discussed, it is important to say that the autonomy skills are presented in all categories, attributed on 21st century skills, by a significant author. However, the learner autonomy skills are correlated to the self-management, self-organisation, self-regulation, self-direction, self-reflection, independent thought, autonomous acting, ability to form and conduct life plans and projects and to defend/assert rights, emotional intelligence or personal responsibility, self-regulation and initiative, independent learning, knowledge construction.

## 2.1. Autonomy and critical thinking skills

During the last decade, autonomy concept is interpreted in various ways and terms such as self-direction, self-improvement, self-learning, independence, autonomous acting and others. Brindley (1990) define autonomy as the degree of responsibility learners to take action about their development.

According to Veugelers(2011) autonomy is not isolated individuality, is an interactive process between others under social relationships. Learning autonomy as helping learners understand the process of learning both inside and outside the classroom, that they have a role in their own learning, allows understanding their needs in order to set goals and decide what they should learn and how they should learn it

From the point of view of Paiva (2006), the concept of autonomy is related to a socio-cognitive system, that include the individual's mental states and processes but also an political, social and economic criteria" Autonomous learners take advantage of the linguistic affordances in their environment and act by engaging themselves in second language social practices". Murphy (2011) offered a variety factors that autonomy depends, such as learning context or learner characteristics.

Wenden (1998) is giving a number of main characteristics of an autonomous learner: have insights into their learning styles and strategies; take an active approach to the learning task at hand; are willing to take risks, to communicate to the others regarding to their ideas, are attend to form as well as to content, are reject hypotheses and rules that do not apply to the problems involved, have a tolerant and outgoing approach.

Considering these concepts of the term of autonomy, we will continue to use the term of autonomy with the sense of situation of a subject who has free will of his own, who has the possibility to realize and construct universally independent learning, within the moral values of the base. We consider that this definition can be adapted more easily to the concrete situations that appear in the educational process.

Critical thinking, as a part of 21 century skills, involves mangaging each steps that learners makes in his journey of learning. Facione(1990) spread about that critical thinkers refer to a person who have a common curiosity, have an independence to verify all the reasons of the arguments, have flexibility in thinking and an openness of thoughts and its focused in decision making, in examination the forms of conscious influence.

Simon and Kaplan (1989) suggests that critical thinking involves logical inferences, Stahl and Stahl (1991) said that learners needs to develop cohesive and logical reasoning patterns and Moore and Parker (1994) revealed the importance of determination to accept, reject or suspend judgment. Critical thinking involves evaluating the thinking process, that also can and should be an autonomous evaluation of factors considered in making a decision. Autonomy, as a part of critical thinking skills, is essentially to indulge learners more deeply and more thoughtful in education.

The article refers to the work of Pemberton and Nix(2012) proved the relation that critical thinking and autonomy seem to be linked to each other, "criticality and learner autonomy are both widely seen as desirable educational goals, and often understood as independent or even mutually indispensable attributes". In a different paper, Raya & Vieira(2007) and Little(1991) reports autonomy (and self-sufficiency) as an ability part of critical thinking skills and it seems that teachers are an important factor in learners progress to become autonomous critical thinkers.

An extensive body of literature exists about the effects of teacher's activities regarding to the learner's autonomy. As noted in a report, Bagheri and Aeen(2011) said that "a common argument for justifying learner autonomy... is that autonomous learners become highly motivated and the autonomy leads to better and more effective work...an extremely motivated learner is more initiative and creative in learning; consequently, they will make the classroom instruction more useful".

Chaffee (1992) mentions that autonomy, in relation with critical thinking, can be the most important argument to help learners to make "more intelligent decisions" and think about critical ideas about the world.

Autonomy, as a part of critical thinking skills, is essentially to indulge learners more deeply and more thoughtful in education. In a specific way, when we talk about the autonomy of adolescents, we cannot mention that it is considered a transition to adulthood and it's ressponsabillities. The situation of critical thinking, as Noom, Dekovic&Meeus (2001) said, includes stages of cognitive autonomy such as evaluative thinking, voicing opinions, comparative validation, decision-making, self-assessment.

There are numerous studies that reflect the importance factor of teacher in motivating learners to engage in different activities. In one of this studies, Ryan and Deci (2009) believes that supporting learners in learning process, overtime, can create a good manner to develop enthusiasm in learning and achieve more and more skills, for a sustainable education. Like those authors, Christenson et al.(2012) underlines this subject on the idea that being an enthusiastic teacher and create a continuous challenging learning associated with motivation. There are solid evidence which are being discussed by others researchers, like Hattie(2012), Skinner and Belmont(1993).

# 3. Research methodology

### 3.1. Research objectives

The main objective of the research was to identify the degree of autonomy of the adolescent students from the studied high school classes. At the same time, the aim was to ascertain to what extent the teachers contribute to the construction and stimulation of the autonomy of the students, by studying the term of autonomy from the perspective of the image that the students and teachers have. Thus, the research hypotheses aimed at:

- I1: Students have a high degree of autonomy;
- I2: The specialization studied by the student influences their degree of autonomy;
- I3: Teachers perceive the autonomous student as "the student problem";
- I4: The students consider that the autonomous student is the one who has "total freedom";
- I5: Teachers and students do not recognize autonomy as a characteristic of the adolescent student.

#### 3.2. Research sample

The research involved a total of 205 subjects, of which 162 high school students and 43 teachers, from a high school located in an urban area, from Romania.

Of the 162 students, 95 of them are female - which means 58.6%, and the remaining 67 are male (ie 41.4%). The distribution of subjects by gender is represented in the Graph no. 1. Distribution of subjects by gender:

Graph no. 1. Distribution of subjects by gender

		Frequ ency	Perce nt	Valid Perce nt	Cumulative Percent
Valid	male	67	41,4	41,4	41,4
	female	95	58,6	58,6	100,0
	Total	162	100,0	100,0	

Also, 47 of the students (29%) are in the 10th grade, 33 students (20.4%) are in the 9th grade, and 82 (50.6%) are in the 12th grade. This distribution is graphically represented as follows:

Graph no. 2. Distribution of subjects by grade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid Grade	9th	47	29.0	29.0	29.0
10th Grad	e	33	20.4	20.4	49.4
11th Grad	e	82	50.6	50.6	100.0
Total		162	100.0	100.0	

At the same time, 78 of students (48%) study in the specialty sciences, 50 students (30.9%) in the socio-human profile, and 34 of students (21%)- in the technical profile. The graphical representation of this distribution is:

Graph no. 3. Distribution of subjects by school profile

School profile		Frequenc y	Perce nt	Valid Percent	Cumulative Percent
Valid	Science	78	48,1	48,1	48,1
	Social science	50	30,9	30,9	79,0
	Technical	34	21,0	21,0	100,0
	Total	162	100,0	100,0	

### 3.3. Research plan and instruments

Given that the main objective of the present research is to analyse the development of the students' autonomy, as part of the critical thinking competence, the concepts used will be described. Of course, we cannot discuss the development of student autonomy, without taking into account the factors involved (the degree of autonomy of the teachers, the educational relations established between teacher-students, the type of activities carried out from the perspective of the involvement of the students and others).

In order to present the results of the research carried out, it is important to describe the significance of the concepts used. For the autonomous student we can specify the following characteristics: he is not afraid to express his point of view, he argues logically and coherently, he is passionately involved in the new situations that have emerged in the school, he has initiative, he trusts his own abilities and assumes responsibility for his actions. It is not influenced by the value judgments of others, but it does not challenge the rules that regulate the order in school and in class.

We can distinguish the conformist student as the one who conforms to the orders and regulations, is accustomed to the routine and therefore does not get involved in the new situations in the school. He has no self-confidence, is constantly doubting his abilities and is easily influenced by the judgments of others.

Both quantitative and qualitative methods were used to carry out the research. Two types of questionnaires were applied, one for students and the other for teachers, in order to identify and validate the data obtained.

The questionnaire for students and teachers analyses their characteristics, from the perspective of autonomy versus conformity. The research tool used is made up of 20 items, 10 of which correspond to the characteristics of the autonomous students, while another 10 items are characteristic of the conformist students. The respondents analyse the extent to which they find themselves in the described behaviours, appreciating them on a scale from low to very high intensity (1-4).

The interview used focused on the idea of identifying the meaning of autonomy, both for the teacher and for the students, asking the respondents to name characteristics of the independent students and situations in which these behaviours / characteristics can be identified in the educational practice.

The questionnaires were applied with the permission of the high school management, for four days. The ones for the students were applied personally, at the beginning of the class, with the teacher's consent. In the case of the teachers, they were distributed and then collected by the deputy director and the high school counsellor.

Overall, it is worth emphasizing the cooperation of the subjects (students and teachers). However, there were some teachers who resisted and refused to cooperate, as well as teachers who did not return the questionnaires.

#### 4. Research results

Starting from the assumptions already stated, it was sought to ascertain the extent to which they can be verified.

One of the objectives of the research was to find out what the distribution of the students, respectively of the teachers, on the dimensions corresponding to each population. The results of the frequency analysis on each dimension will be presented in the following.

In the case of students, on the autonomous dimension the distribution of the answers is found in Table no.1, their average at the corresponding items is 26.8, with a standard deviation of 3.39. The normal curve shows that most of the answers are distributed around the mean, which means that there is an approximately equal number of students with a low degree of autonomy and students with a very high degree of autonomy. Considering that the minimum score that could be obtained on this dimension was 10, and the maximum score could be 40, for the obtained data the minimum score is 18, and the maximum score is 36, with an average of 26.8, which it indicates to us that the respondents have a high degree of autonomy.

Table no. 1. Descriptive statistics for autonomy dimension(learner)

		Frequenc y	Percent	Valid Percent	Cumulative Percent
Valid	18,00	1	,6	,6	,6
	19,00	1	,6	,6	1,2
	20,00	2	1,2	1,2	2,5

21,00	6	3,7	3,7	6,2
 22,00	6	3,7	3,7	9,9
23,00	10	6,2	6,2	16,0
24,00	14	8,6	8,6	24,7
25,00	18	11,1	11,1	35,8
26,00	19	11,7	11,7	47,5
27,00	19	11,7	11,7	59,3
28,00	15	9,3	9,3	68,5
29,00	11	6,8	6,8	75,3
30,00	16	9,9	9,9	85,2
31,00	10	6,2	6,2	91,4
32,00	7	4,3	4,3	95,7
33,00	3	1,9	1,9	97,5
34,00	2	1,2	1,2	98,8
35,00	2	1,2	1,2	100,0
Total	162	100,0	100,0	

For the conformism dimension, the obtained results are found in Table no.2. The average of the obtained scores is 25.4, with a standard deviation of 3.44. The normal curve shows that most of the answers are distributed around the mean, which means that there is an approximately equal number of students with a low degree of conformity and a number of students having a very high degree of conformity. Given that the minimum score that could be obtained on this dimension is 10, and the maximum score could be 40, the results obtained on this dimension show the minimum score being 15, and the maximum score being 35, with an average of 25.4, which means that the degree of conformity of the students is lower than the degree of their autonomy.

*Table no. 2. Descriptive statistics for conformist dimension(learner)* 

		Frequenc	Percent	Valid	Cumulative
		$\mathbf{y}$		Percent	Percent
Valid	16,00	2	1,2	1,2	1,2

17,00	1	,6	,6	1,9
18,00	1	,6	,6	2,5
20,00	5	3,1	3,1	5,6
21,00	11	6,8	6,8	12,3
22,00	12	7,4	7,4	19,8
23,00	19	11,7	11,7	31,5
24,00	16	9,9	9,9	41,4
25,00	15	9,3	9,3	50,6
26,00	24	14,8	14,8	65,4
27,00	15	9,3	9,3	74,7
28,00	11	6,8	6,8	81,5
29,00	12	7,4	7,4	88,9
30,00	6	3,7	3,7	92,6
31,00	4	2,5	2,5	95,1
32,00	4	2,5	2,5	97,5
33,00	2	1,2	1,2	98,8
34,00	2	1,2	1,2	100,0
Total	162	100,0	100,0	

In analysing the stated hypotheses, it was assumed that the specialization of the class where the students study influences their degree of autonomy. The ANOVA Onaway test was used to verify this hypothesis. The results are presented in Table no6 (Descriptive ANOVA), Table no7 (Post Hoc Tests autonomy) and Table no8 (Bonferroni Tests autonomy).

Table no 6.Descriptive ANOVA autonomy

Autono	N	Mean	Std.	Std.	95%		Minimu	M
my			Devia	Error	Confiden		m	ax
			tion		ce			i
					Interval			m
					for Mean			u
					Lower	Upper		m
					Bound	Bound		
Science	78	27,11	3,395	,3845	26,3497	27,881	20,00	3
		54	9			0		5,
								0
								0
Social-	50	27,30	3,471	,4909	26,3134	28,286	19,00	3
Science		00	5			6		5,
								0
								0

Technic	34	25,52	3,017	,5175	24,4766	26,582	18,00	3
al		94	5			3		1,
								0
								0
Total	16	26,83	3,393	,2666	26,3130	27,366	18,00	3
	2	95	3			0		5,
								0
								0

Table no 7. Post Hoc Tests autonomy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	74,895	2	37,448	3,347	,038
Within Groups	1778,932	159	11,188		
Total	1853,827	161			

# Table no 8.Bonferroni Tests autonomy

		Mean	Std.	Sig.	95% C	onfidence
		Differenc	Error		Interval	
		e				
Subjec	Subject				Lower	Upper
t	profile				Bound	Bound
profile						
Scienc	Social-	-,1846	,6060	1,000	-1,6508	1,2816
e	science					
	Technical	1,5860	,6874	,067	-7,7219E-	3,2492
					02	
Social-	Science	,1846	,6060	1,000	-1,2816	1,6508
scienc						
e						
	Technical	1,7706	,7435	,055	-2,8429E-	3,5696
					02	
Techni	Science	-1,5860	,6874	,067	-3,2492	7,722E-
cal						02

Social-	-1,7706	,7435	,055	-3,5696	2,84
Science					3E-
					02

From the analysis of these data results the value and significance of F: F(2,159) = 3.34, p = 0.03. This means that there are differences in the degree of autonomy between specialists. This difference appears between the technical profile and the socio-human profile, in that the students from the socio-human profile are more autonomous than those from the technical profile. These are their values and meanings that result from interpreting the questionnaires completed by the students.

Another hypothesis that underpinned the research was that among the teachers, by which students and teachers are understood, a clear picture of what the student's autonomy means is not outlined. Moreover, autonomy is not identified among the characteristics of the adolescent student. In order to verify this hypothesis, the content analysis of the answers to the two open questions regarding the characteristics of the adolescent and autonomous student was proceeded.

From the analysis of the frequencies of the students' answers and the teachers answers, to the question that asked them to list three characteristics of the adolescent student, the following results were obtained:

Table no 9. Characteristics of the adolescent student (teachers and students answers)

	Answers	Frequency	
Students	Freedom	46	
answers	Impulsivity	15	
	Curiosity	14	
	Intelligence	11	
	nonconformity	11	
	Defective organization	8	
Teachers	Curiosity	10	
answers	superficiality	7	
	Freedom	6	
	nonconformity	5	
	Personality	5	

What is surprising at first glance is the low frequency of the feature in the first place. Out of 162 possible answers, "freedom" appeared only 46 times. Another "surprising" element is the large difference between the frequencies of the characteristic in the first place and that in the second

place. Given the decrease in frequencies, the rest of the features were not taken into account. Going further with the analysis it is observed that these traits identified even by the adolescent students do not bring anything new in terms of content. "Freedom", "impulsivity", "curiosity", "intelligence", "nonconformity" appear as unanimously recognized characteristics of this period. This may be due either to the ignorance of the correct meaning of this concept, or to the desire to attract attention, to exaggerate.

Another noteworthy element is the presence in large numbers of the opposite characteristics of the kind:responsible - irresponsible; conformity-nonconformity; rational - irrational; brave - cowardly; smoker - nonsmoker; drunk - non-drunk. This is proof of the confusion students of this age face. These traits show off that tendency to look for identity, especially for teenagers. Each one tries to be unique and perceives itself differently from the others, just the opposite.

By comparing the frequencies with the number of subjects, the greater uniformity of the opinions is observed, compared to that of the students. Teachers place "curiosity" on the traits of the adolescent student in the first place. This feature appears in different shades: "scientific curiosity", "the desire to discover new things", "the desire to live new experiences". The second feature, which is a short distance from the first, is "superficiality". Its identification is related, with certainty, to the nature of the relationships between teachers and adolescent students, with the fact that the former prescribes tasks that the latter must fulfill. From the way these tasks are carried out, "superficiality" seems to have emerged as a trait of the adolescent student. Another observation is that the "personality" appears as a trait of the adolescent student, but no other details are made. We consider personality to be a concept broad enough to encompass all others before it.

Comparing the answers of the teachers with those of the students it is found that the teachers placed "curiosity" in the first place, while for the students it is only the third. The "freedom" placed by the students at the first place, the teachers consider it in the second place. "Nonconformity" is placed by the students in the fourth place, and by the teachers in the third place. Considering these results, it can be appreciated that there are characteristics recognized by teachers and students at the same time, because the importance given is different.

From the analysis of the frequencies of the students' answers and teachers answers to the second question regarding the characteristics of the autonomous student, the following results were obtained, like in Table no 10. Characteristics of the autonomous student (teachers and students answers).

Table no 10. Characteristics of the autonomous student (teachers and students answers)

	Answers	Frequency	
	Freedom	48	
Students	Responsibility	16	
answers	Intelligence	15	
	Decision power	14	
Teachers	Freedom	11	
answers	Intelligence	8	
	Self-control	7	
	Passion for knowledge	3	

Again, it captures the low frequency of the feature in the first place (48). But it is observed that freedom appears in the first place both as a trait of the adolescent student and of the autonomous student. Indirectly, this means that students independently recognize a characteristic of the adolescent student. Also, there is the "frequency hopping", the second characteristic, "responsibility", defending 34 times less than freedom. Another feature identified as being common to the two categories of students (adolescents and the self-employed) is "intelligence". The "decision-making power" was also identified as a feature of the autonomous student.

And in this case, the opposite characteristics appeared: responsible - irresponsible; conformity-nonconformity; respected - disrespectful; desire for fun - lack of fun; to take into account the opinions of others - to disregard the opinions of others. The presence of these characteristics demonstrates either the age-specific confusion or the ignorance of the meaning of the concept of "autonomy".

It is observed that "freedom" appears on the first place as a feature of the autonomous student, in the opinion of the teachers. If it was placed second in importance between the characteristics of the adolescent student, it is now the first characteristic of the autonomous student. In fact, this is the only feature common to the two categories of students (adolescents and self-employed) identified by teachers. The "passion for knowledge" can be approximated with a hint of "curiosity", namely "scientific curiosity". The importance of the subjects of knowledge cannot be overlooked. The autonomous student is "intelligent" and "passionate about knowledge". On the whole, it cannot be said that teachers have identified the same traits for the adolescent and autonomous students.

Comparing the answers of the teachers with those of the students, it is observed that both categories of subjects placed "freedom" on the first place between the characteristics of the autonomous student. The "intelligence",

seen by students in the third place appears in the case of the teachers in the second place. It is again about identifying the same features that are given different importance.

As a conclusion of the content analysis, it can be said that students prove to have a more clearly outlined picture of what a teenage student is than teachers have. It also identifies more characteristics common to adolescent and autonomous students than teachers.

#### 4.Conclusion

The research results proved to be different from the initial moment. A confirmed hypothesis is that the degree of autonomy is influenced by the profile. It has been proven that the students from the technical profile have a lower degree of autonomy than those from the socio-human profile, but not the students from the science profile.

Both specific hypotheses regarding the image that teachers and students have about autonomy have been rejected. The teachers do not see in the autonomous student a "student - problem", and the students do not understand by autonomy the lack of any rules.

What is described as the educational ideal of the Romanian school, the "formation of the self-named personality" (Law of National Education, 2011) has proved to be a controversial area of educational theory and practice. Student autonomy elicits reactions among practitioners. The teachers perceive the autonomy that it is good not to discuss, because the school is a court re-presenting the authority, so it cannot stimulate the autonomy. As if authority and autonomy are two terms, two realities that are mutually exclusive in the school space.

Whatever conditions and resources it would have, no matter how well it was conducted, without competent teachers it could never fulfil the mission with which the company was invested, that of training future adults.

In this context it is not an exaggeration to say that the school itself contributes to a small extent to the student's autonomy; the primary responsibility rests with the teacher. "The characteristics and the quality of the dialogue that establishes in the school work relationship with students, the characteristics of the climate that creates in the lesson, depend largely on the quality of teacher educational work. Love for children, empathy, spirit of equity, self-control power, classroom management, passion for the subject they teach and generally for knowledge, attractive activities in the lesson and the talent to arouse students' interest for co-giving, the ease of dealing with the unforeseen and not giving back in the face of difficulties, the ability to make a correct assessment of the students' performances are all so many qualities that ensure the efficiency of the education in the classroom"(Iancu, 2000, p. 68) and which we add, contributes to the building of the student's

autonomy. Permanently directing students 'actions, not recognizing the teacher's own imperfections, not knowing the students' personality, their needs and interests are all reasons that inhibit their autonomy.

Contrary to the fears expressed by many teachers, the autonomy of the student does not suppress the teacher's authority. On the contrary, no one can become autonomous unless he has previously obeyed the rules of an authority. Autonomy does not mean the lack of rules, but the construction of a universe of its own within the existing rules.

Obviously, approaching such discussions requires competence from the teacher. In other words, building student autonomy is not possible if the teacher does not have the main role. That is why the continuous development of the teacher training programs is a necessity for the development of the society, for the restructuring of its values and for offering the most suitable contexts for children learning.

#### References

- Bagheri, M., Aeen, L.(2011). The impact of practicing autonomy on the writing proficiency of Iraninan intermediate EFL learners. *Pan Pacific Association of Applied Linguistics*, 15(1), 1-13.
- Brindley, G. (1990). *The role of needs analysis in adult ESL programme design*. In R. K. Johnson (Ed.) The second language curriculum (pp. 63-78). Cambridge: Cambridge University Press.
- Care, E., Vista, A., Kim, H., & Anderson, K. (2019). *Education system alignment for 21st Century Skills: Focus on assessment*. Washington, DC: Brookings. Retrieved from https://www.brookings.edu/research/education-system-alignment-for-21st-century-skills/
- Chaffee, J. (1992). Teaching critical thinking across the curriculum. *New Directions for Community Colleges*, 77, 25-35.
- Chalkiadaki, A. (2018). A systematic literature review of 21st Century Skills and competencies in primary education. *International Journal of Instruction*, 11(3), 1–16. Retrieved from http://www.e-iji.net/dosyalar/iji\_2018\_3\_1.pdf
- Christenson, S. L., Reschly, A. L., & Wylie, C. (2012). *Handbook of Research on Student Engagement*. New York: Springer.
- Dewan, S. & Sarkar, U. (2017). From Education to Employability. Just Jobs Network and UNICEF.
- Facione, P. A. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*—The Delphi report. Millbrae, CA: California Academic Press.
- Hattie, J. A. C. (2012). Visible learning for teachers. Maximizing impact on achievement. Oxford, UK: Routledge.

- Jaberian, H., Vista, A., & Care, E. (2018). *Monitoring for 21st Century Skills: Solutions adopted by the United Nations*. Washington, DC: Brookings. Retrieved from https://www.brookings.edu/blog/education-plus development/2018/11/26/monitoring-for-21st-century-skills/
- Jiménez Raya, M., Vieira., F.(2008). *Teacher Development for Learner Autonomy: Images and Issues from Five Projects*. In Pedagogy for Autonomy in Language Education: Theory, Practice and Teacher Education, edited by M. Jiménez Raya and T. Lamb, 283–302. Dublin: Authentik.
- Little, D. (2007). Language Learner Autonomy: Some Fundamental Considerations Revisited. *Innovation in Language Learning and Teaching* 1 (1): 14–29. doi:10.2167/illt040.0.
- Moore, B.N. & Parker, R. (1994). *Critical Thinking. Mountain View.* CA: Mayfield.
- Murphy, L. (2011). *Autonomy in context: A tale of two learners*. In D. Gardner (Ed.), Fostering autonomy in language learning, (pp. 17-27). Gaziantep: Zirve University
- Noom, M; Dekovic, M; Meeus, M.(2001). Conceptual analysis and measurement of adolescent autonomy, *Journal of Young and Adolescence*, 30(5), 577-595.
- Paiva, V. L. M. O. (2011). *Identity, motivation and autonomy in second language acquisition from the perspective of complex adaptive systems*. In G. Murray, X. Gao, & L. Lamb, Identity, motivation and autonomy in second language (pp. 57-75). Bristol: Multilingual Matters.
- Pemberton, R., & Nix, M. (2012). Practices of critical thinking, criticality and learner autonomy. In K. Irie& A. Stewart (Eds.), Proceedings of the JALT Learner Development SIG Realizing Autonomy Conference, [Special issue] *Learning Learning*, 19(2), 79-94. Retrieved from http://ldsig.org/LL/19two/pemberton-nix.pdf.
- Prensky, M. (2012). From Digital Natives to Digital Wisdom: Hopeful Essays for 21st Century Learning. Thousand Oaks, Calif., Corwin
- Ryan, R. M., Deci, E. L. (2009). *Promoting self-determined school engagement: Motivation, learning, and well-being.* In K. R. Wenzel & A. Wigfield (Eds.), Educational psychology handbook series. Handbook of motivation at school (p. 171–195). Routledge/Taylor & Francis Group.
- Rolleston, C. (2018). 21st Century Skills: Upskilling for an uncertain future? [Web log post]. Retrieved from https://www.younglives.org.uk/content/21st-century-skills-upskilling-uncertain-future.
- Stahl, N.N, Stahl, R.J.(1991). We can agree after all! Achievement consensus for a critical thinking component of a gifted program using the Delphi Technique. Roeper Review, 14(2), 79-88.

- Simon, H. A., & Kaplan, C. A. (1989). Foundations of cognitive science. In M. I. Posner (Ed.), *Foundations of cognitive science* (p. 1–47). The MIT Press.
- Scott, Cynthia, L. S. (2015). *The futures of learning 2: What kind of learning for the 21st century?* (ERF Working Paper No. 14). Paris: UNESCO Education Research and Foresight.
  - https://unesdoc.unesco.org/ark:/48223/pf0000242996
- Sternberg, R.J., Subotnik, R.F. (2006). *Optimizing Student Success in School with the Other Three Rs: Reasoning, Resilience, and Responsibility. Research in Educational Productivity Series*. Charlotte, NC, Information Age Publishing. http://books.google.

  com/9Cthe+application+of+intelligence,+creativity,+and+knowledge+for+a+common+good.%E2%80%9D&source=gbs\_navlinks\_s (Accessed 21<sup>st</sup> September 2020).
- Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, 85, 571–581.
- Wagner, T., Kegan, R., Lahey, L., Lemons, R., Garnier, J., Helsing, D., Howell, A. and Rasmussen, H. (2006). *Change Leadership: A Practical Guide to Transforming Our Schools*. San Francisco, Calif., Jossey-Bass.
- Veugelers, W. (2011). *Introduction: Linking autonomy and humanism*. In W. Veugelers (Ed), Education and humanism: Linking autonomy and humanity (pp. 1-9), Boston: Sense Publishers
- Voogt, J., & Roblin, N. P. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of Curriculum Studies*,44(3),299–321.doi:10.1080/00220272.2012.668938
- Wenden, A. (1998). *Learner Strategies for Learner Autonomy*. Great Britain: Prentice Hall.