STUDENTS' CONCEPTION OF LEARNING AND CAREER ORIENTATION. A STUDY ON HIGH SCHOOL STUDENTS FROM ARAD

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- Abstract: *Within the Erasmus + project: , The suitcase, the map and the* voyage of a youth worker" we have applied a questionnaire to 470 high school students from Arad, Romania, in order to identify their options in career choice. One of the objectives was to identify their conceptions of learning (as reproduction or as transformation) and to correlate them with their values, work motivation and learning style. The results have shown that students who obtained higher scores in learning as transformation preferred to obtain information about the jobs from specialized career counselling services, friends, jobs sites, movies, own preferences, Internet. They also value a working environment where they are challenged, their performance is recognized, they can find a balance between professional and personal life, they can manage their task in an autonomous manner, and they can have the feeling that they participate to a noble work. A paradigm shift is needed at Romanian education level, both at macro and micro level in paying more attention to counselling hours in schools and counselling service in general and in promoting different interactive, peer –facilitated learning situations
- **Key words:** conception of learning, career counselling, work place values, non-formal education, peer-education

1. Theoretical premises on students' conception of learning

The researches initiated by Saljo (1979), followed by Entwistle (1998), Dart, Burnett, Purdie, Boulton-Lewis, Campbell, (2000), Entwistle, Peterson, (2004) and others demonstrated a significant difference between students in terms of their conceptions about learning. It was observed the existence of a contrast between students conceiving learning as accumulation and reproduction of information, and those who try to get past its own significance in order to transform the material provided. There are three stages of this development.

In the first stage, the students become aware of the influence of the context in which they learn, what they need to learn, and how they should proceed (Gibbs, G. 1981 cited Saljo 1979), but this awareness does not mandatorily apply to their own learning.

The second stage is related to a distinction between "learning for life" versus "learning for school". In this case it is recognized that the environment in which learning takes place is sometimes artificial and unrelated to the external environment.

The third stage of development involves making the distinction between "learning" and "learning for real" or between learning and understanding. The existence of these stages in the conceptualisation of learning suggests that this is not a static process or consistently over time. (Bradford, K., 2004) According to Entwistle, N. (1998), the development of the students' conception of learning (from reproduction to transformation) and students' intellectual development (from dualism to relativism) are factors that influence their approach to learning and support the argument that a student does not deal with learning in only one way.

The authors differentiate between five conceptions of learning:

1. Learning as accumulation of knowledge. Learning means enriching, increasing one's knowledge. "Start with a small bag in which there are not too many things and gradually fill it in more '.

2. Learning as memorizing of information. Learning means to transfer information from various sources in the student's memory.

3. Learning as the acquisition of useful knowledge and skills. Learning means to assimilate information and to form abilities, skills, abilities, competencies useful in everyday life.

4. Learning as understanding of content. Learning means to establish connections between ideas and information, to discover the meaning of content and appreciate its value.

5. Learning as personal interpretation of knowledge. Learning means giving a personal meaning to knowledge, to analyse it critically and constructively and to reconfigure it. Learning is about being transformed

These concepts can be divided into two categories of conceptions of learning:

Learning seen as storage and reproduction, including the first three categories of conceptions;

Learning seen as personal understanding and interpretation of knowledge. This category would include the last two conceptions of students' learning.

In the following study we have used the latter two categories.

2. The study methodology

The study was accomplished within the project: "The suitcase, the map and the voyage of a youth worker" project financed by The European Union through the program ERASMUS + "Aurel Vlaicu" as a partner, with responsibilities for the elaboration of a career guide and for some specific instruments of guidance and career direction for the universal youth. The main objectives of the project are: to prepare a full range of 3 necessary tools for youth workers, in 2 years; To build and test an online training course on 50 people interested to become youth workers in 2 years of the project; to allow 200 young people to test a full range of innovative, created tools in order to project their personal and professional life plan with the support of youth workers during 2 years of the project; to create and test an online training courses for one key competence from the Reference Framework, by 200 young people, during 2 years of the project; to certificate 42 people interested in becoming youth workers in the Romanian Occupational Standard; to build an international partnership network of 9 structures based on youth work during 2 years of the project - 1st September 2015- 31 August 2017.

The project is specially designed for the youth, at the end of it there will be envisioned the following results: at least 50 youth workers from the project's partners – participants in the online training course; at least 200 young people (13-30 year old) from 30 Programme countries – participants in the learning to learn – online training course and user of the SIMULATION BOX of JOBS and Career box; at least 50 youth workers from 25 Programme countries – participants in the online training course and multiplier event; at least 42 persons interested to become certified youth worker according to the Romanian National Qualification Standard; at least 30 European structures to integrate the products results in their regular activities.

To achieve these facts there was initiated an investigation according to the youth's needs to identify some specific elements of the professional exposure: important values for teenagers, influential factors in the career decision making, the professional options teenagers have, their perception towards the desirable profession and **their conception of learning.** In this article we will refer to students' conception of learning and their preference for different profession

3.The objectives of the study

- To identify high school students' conceptions on learning
- To identify students' learning style

• To identify students' interests in participation in online courses and non-formal education activities

• To identify the relation between students' conception of learning and their preference for different type of jobs

• To identify the relation between students' conception of learning and their professional values

Study hypothesis

1. If students understand learning as transformation than they are more likely to take control of their career orientation process by consulting different sources of information and participating in specialized counselling activities

2. If the students' perceive learning as transformation then they will mostly value a working environment that is focused on autonomy, creativity and continuous professional and personal development

3. If Students prefer online and peer learning they are more likely to perceive learning as transformation

4. Description of the Sample

For this study there were 470 participants, 10th grade students from 13 High Schools in Arad; at least one class from each High School was in the study, according to the number of 10th grades.

The access to classes has been insured by the employees of the County Centre for Resources and Educational Assistance Arad. The sample is one of intention, including 10^{th}

grade students because we consider that these pupils can still perform professional career activities based on the results we have got after the investigation, while those in the 12^{th}

grade have already decided for their future career.

Total	Architecture	Service commerce	Philology	Maths- TIC	Music	Pedagogical Profile	Sciences	Technical Profile	Theology
470	25	26	56	50	26	25	142	97	23
100%	5%	5%	12%	11%	5%	5%	30%	22%	5%

Table 4.1. The different profiles of the 10^{th} grade students included in the research sample

5. Investigation tools

The method chosen is based on the investigation through **questionnaire** in order to get more results in a shorter period of time. The results we got through this investigation gave us the opportunity to get some information which can be analysed by quantity and its quality as well. The disadvantage of this method is the ambiguity or the lack of the answers to opened questions. (Rotariu, Ilut, 2001)

The main concept of the investigation is the decision in the future career. For this study there have been taken into account the following: factors which influence the decision, values of anchor type, which guide teenager in choosing a career, the professional option, if there is one, the option for a formation type, learning aspects as a transforming process including the career.

The indicators were formulated as dual choice items, with a Lickert scale, hierarchy items, and items with one option, and open items.

6. Data analysis and interpretation

In order to analyse students' conception about learning we have made a content analysis of their answers to the item no.13 of the questionnaire ("Please define what learning means to you").

We have grouped the results under two categories:

a) Learning as transformation. We included here definitions containing the following words: change, transformation, development, improvement, evolution, teaching others, self-development, learning style, trying something new, listening to the others, learning by doing, learning from others, being interested, continuous development, learning from mistakes, lifelong learning, being independent, life style, knowing yourself etc

b) Learning as reproduction. We included here definitions containing the following words: assimilation, accumulation of information, memorising





Chart no.4.1. Student's conception of learning

As we can see in the chart above, 243 subjects see learning as *transformation* and 219 as *reproduction*. The significant higher score for learning as reproduction of the reality is the reflection of the Romanian educational formal system promoting an evaluation of the memorised information instead of testing the understanding or practical skills of the students.

In order to test hypothesis no1: If students understand learning as transformation then they are more likely to take control of their career orientation process by consulting different sources of information and participating to specialized counselling activities we have implemented the non-parametric Mann-Whitney Test.

The results are presented in the table below:

Source of career	Students'	Ν	Mean Rank	
information	conception of			
	learning			
Parental advice	Reproduction	215	238,50	
	Transformation	241	219,57	
Parents' profession	Reproduction	215	227,06	
	Transformation	240	228,85	
Friends	Reproduction	215	220,88	
	Transformation	240	234,38	
Mass-media	Reproduction	214	229,51	
	Transformation	239	224,75	
Internet	Reproduction	214	227,00	
	Transformation	241	228,88	
Movies	Reproduction	215	226,04	
	Transformation	241	230,69	
Jobs' sites	Reproduction	215	228,01	
	Transformation	240	227,99	
Own preferences	Reproduction	214	226,05	
	Transformation	241	229,73	
Career counselling services	Reproduction	215	219,81	
	Transformation	241	236,26	

 Table 6.1. The relation between students' conception on learning and their source of career information

We can observe than students' obtaining higher scores for learning as transformation preferred to obtain information about the jobs from specialized career counselling services, friends, jobs sites, movies, own preferences, Internet.

Student's seeing learning as reproduction preferred to choose a career based on parental advice, parent's profession and mass-media information. These results, although not statistically significant tend to confirm our hypothesis. They show a specific trend: *students very dependent on the parental advice did not succeed to develop an active conception on learning*. On the contrary, students with investigative spirit, craving for independence and autonomy even in career orientation managed to integrate learning as a transformational process.

To test hypothesis no.2 If the students' perceive learning as transformation then they will mostly value a working environment that is

focused on autonomy, creativity and continuous professional and personal development we have implemented the non- parametric Mann-Whitney Test

Although the difference between the results is statistical significant (for a p<.05) only for variable *Independence* we acknowledge the fact *that in 5 out* of 7 variables included in Hypothesis no. 2 students conceived learning as transformation as it can be seen in the table 6.2.

Students' values in	Transformation	Reproduction
the context of		
working		
environment		
To be challenged	230,02	227,15
Performance	229,44	227,45
recognition		
Equilibrium	232,39	224,13
Autonomy	230,62	226,13
Independence(having	222,48	235,25
no boss)		
Professional	224,91	232,53
development		
A sense of noble	228,92	228,03
mission		

Table 6.2. Synthetic comparison between students' conception of learning and their values in the context on working place

Students having a clear conception of learning as a transformative process value a working environment where they are challenged, where their performance is recognized, where they can be in balance when referring to professional and personal life, where they can manage their task in an autonomous manner, where they can have the feeling that they participate in a noble work.

It is interesting to observe that students preferring to be independent at the working place (having no boss-as it was written in the questionnaire) manifest a significant understanding of learning as reproduction. This preference can be interpreted as "if I have no boss, I am free to accumulate whatever I feel necessary".

The same category of students would like to benefit from professional development at the working place. These options are logically congruent because the students value the working place where they accumulate more and more professional knowledge, in accordance with their conception of learning as reproduction of reality.

Regarding Hypothesis 3 *If Students prefer online and peer learning they are more likely to perceive learning as transformation*, the non-parametric test applied validates it. Students who like to manage their own learning by accessing online courses and peer learning have a transformative conception of learning, as it can be seen in the table 6.3. below.

Table 6.3. The relation between students' conception of learning and
their preference for online and peer learning

Students' preferred learning	Students' conception	Mean ranks
approach	on learning	
Online	reproduction	226,96
	transformation	228,93
peer education	reproduction	218,95
	transformation	234,09

7. Conclusions and discussion points

In this study we have identified the high schools students from Arad conceptions of learning. We found out that the majority of them understand learning as a system of data accumulation, as a reflection of an excessively informational education system. We have confirmed (even if not with statistically significant difference) that students perceiving learning as transformation have an active behaviour in collecting information about professions. They tend to give more credit to career counselling services than to their parents, because they feel they are more in control. Also, they prefer to learn for other youngsters or from the online environment rather than listen to a teacher or read a book. These results validate the importance of developing a space for interaction between the students in schools but also taking into account the benefits of online educational platform. Peer education is now regarded as a situation where everyone involved is both teacher and learner. As described in Peer Tutoring: Toward a New Model, this conception uses the tutoring process as a "central instructional strategy," in which tutoring itself is designed to facilitate learning, and in which everyone involved in a peer tutoring program is both tutor and learner.

A paradigm shift is needed at Romanian education level, both at macro and micro level by paying more attention to counselling hours in schools and counselling service in general and in promoting different interactive, peer – facilitated learning situations.

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