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OPTIMIZATION OF EDUCATIONAL ENVIRONMENT FOR STUDENTS

Abstract: *The paradigm of adapting school to the learning necessities and possibilities of the student, characteristic for future systems of education and for contemporary type of educational system network requires a diversity of learning situations and experiences, built in accordance with the possibilities and the needs of all student categories, in order to respond to the principles of: “inclusive education”, “education for all” and “integrated education”. Starting from the premise that school environment increases learning efficiency for students, our paper tries to identify the deficiencies, i.e. the critical aspects of the learning environment, as a basis for adopting optimization measures. A lower degree of satisfaction was manifested in the following aspects: the potential of the didactic activities in stimulating the motivational needs of the student for learning; the communication and the relations between the students and the teachers; contribution of educational space with adequate materials and equipment.*

Keywords: *school adjustment, student-centered paradigm, educational policies, learning environment.*

1. Paper Rationale

Starting from the premise that school environment increases the learning efficiency for students, our paper tries to identify the deficiencies, i.e. the critical aspects of learning environment, as a basis for adopting optimization measures.

2. Theoretical framework and related literature

School adaptation may be defined, from the first point of view, as the process of transformation and adjustment of student behaviour in relation to the requirements and necessities of educational process, in order to better respond to these. Also, school adaptation includes the modification, the alignment and the adjustment of the educational process depending on the potential and the psychic individual capacities of the students. The final aim of all the modification and adjustments made on the two sides of the process is an equilibrium, a concordance between the requirements of the scholastic environment and the responsive behaviour of the student, also between the needs and the capacities of students and the adequacy of the process to them (A. Coașan, A. Vasilescu, 1988).

From a second point of view, school adaptation refers to the adaptation of the school of entire educational strategies to the individual needs of the students, to their learning capacities and particularities. This approach represents one of the paradigms of the postmodern view upon education. It is characterized by: promoting the new education, curricular reform; personalized approach of the strategies; the use of alternative resources of

information; interdisciplinarity; renouncing to the traditional educational method based on transmission and memorization; renouncing to pre-established contents in favour of an individual subjective construction of the knowledge; using multiple methods of teaching and learning; placing the student, with his needs and capacities, in the centre of the educational process (L. Tăușan, 2012). The postmodern approach corresponds completely to the constructivist approach to education, especially through the role of the student in the construction of the knowledge, also through the modification of the teachers' role and of the educational strategies, with a pronounced formative character.

Synthesizing the references upon the constructivist learning, E. Joița (2006, p. 62, 65) describes the following dimensions of the idea of centring the learning on the student as main actor:

- The students search for information by themselves and corroborate them;
- The students perform a subjective cognition, addressing questions, establishing correlations, formulating hypothesis, solutions, and arguments;
- The accent is on understanding, critical analysis, interpretation and intrinsic argumentation;
- The cognitive and acting autonomy, the initiative and curiosity are encouraged;
- The students pass from a passive attitude of receiving information to an acting and mental involvement;
- The student solves the problems using the discovery, the research, the construction and decision making processes;
- The new information is the results of reconstructing old information and data integration;
- The students organise and perform their own learning, forming capacities of "learning to learn, to know";
- The teacher has the role of organising information, problems, assignments, material. He/ she facilitates, guides, coordinates, offers support, formulates and helps formulating questions, supports individual answers, debates, negotiations and also realizes the final synthesis.

The paradigm of *adapting school to the learning necessities and possibilities of the student*, characteristic for future systems of education and for contemporary network type educational systems (V. Chiș, 2005), requires a diversity of learning situations and experiences, built in accordance with the possibilities and the needs of all student categories, in order to respond to the principles of: "inclusive education", "education for all" and "integrated education".

A series of documents from the international educational politics promote and sustain dimensions belonging to the paradigm of the educational process centred on the student and of the real accommodation of the school to the possibilities and the necessities of the student: The Convention on the Rights of the Child, The Framework for Action from the World Education Forum in Dakar, The Millennium Development Goals, UNESCO Medium-Term Strategy for 2008 – 2013 (J. Delors, 2000, G. Văideanu, 1996).

The necessity of adapting the school to diverse educational needs, to the learning and development particularities of each scholar is also reflected by the concept "education for all" launched at *The World Conference on Education for All in Jomtiem* (1990). Guaranteeing good quality elementary schooling for all the people, recognizing the diversity of the educational

needs, a pedagogy centred on the child, the right of all children to a complete cycle of primary schooling are part of the recommendations formulated in Jomtiem to grant the access of all to a basic education (T. Vrășmaș, 2001, p. 22).

From the perspective of “education for all”, a series of psycho-pedagogic principles were formulated. They may be considered premises of adapting the educational environment to the capacities and the needs of the students and converge to the idea that an adapted and flexible curriculum, together with the change of the educational practice are the base of qualitative education, according to the contemporary educational paradigms (E. Vrășmaș, 2004, p. 29-71):

- The development of the child is dependent on the environment from the time of conception;
- The development of the child is influenced by the relations with the surrounding objects, people and himself/herself;
- The virtual development and learning potentials all the children are born with are transformed into capacities and competencies only if they are positively stimulated and oriented;
- All the children can learn, only differs what they learn and the way they learn;
- Even if the learning stages are correlated with the development stages, there is a variety of individual development models, determined by the individual particularities, rhythm and style of learning, also by the intensity and the adequacy of the environmental influences.
- Promoting various learning types favour the individual development.

A new type of curricular culture is generated and is characterized by: transforming the school centred on the teacher into a school centred on the student, using the interactive learning methods, a flexible curriculum and an inter- and cross-disciplinary approach of the curriculum. This new type of curricular culture is in concordance with the paradigm of adapting the school to the needs and possibilities of the students, ensuring that all the scholars have chances that their interest are identified and their aptitudes and capacities are completely capitalized.

3. Methodology

The purpose of the research: identifying the shortcomings, the critical aspects of the educational environment, as base for adopting optimization measures.

The objectives of the research:

- O1: identifying the perception of the students upon the quality of the educational environment offered by the university;
- O2: identifying the aspects the students signal as presenting shortcomings and dissatisfaction;
- O3: proposing strategies for the optimization of the educational environment.

The hypothesis of the research: knowing the satisfaction level of the students regarding the educational environment permits the creation of an adequate strategy for its optimization.

Description of the instruments

For our investigation, we used the structured questionnaire with the following aspects: the endowment of the classes with the necessary educational materials, the relations between teachers and students, the educational methods, the potentiality of the teachers for stimulating the learning motivation, the pedagogic quality of the teaching activities.

Target group

The questionnaire was applied to a sample of 100 students from faculties of the Technical University of Cluj-Napoca, the years of study I (42%), II (19%) and III (39%).

4. Results and discussion

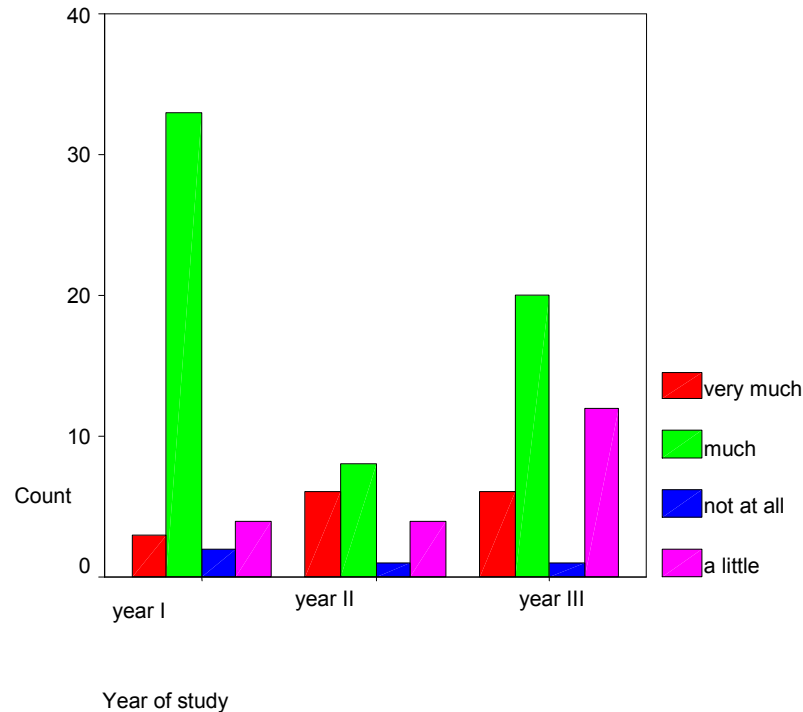
After analysing of the responses, we highlight the following results:

Referring to the pedagogic quality of the teaching activities and seminars, the majority of the students appreciate it as “good” (65%) and “very good” (19%). For a small percent of students (16%), this aspect is only “satisfactory”. There was no answer in the category of “unsatisfactory” (Table no.1).

Table 1: How do you appreciate the pedagogic quality of the teaching activities and of the seminars (the amenity of courses and seminars, clear explanations, adequate examples, the shift from exposition to conversation)?

Year of study	very good	good	satisfactory	Total
year I	6	32	3	41
year II	5	7	7	19
year III	8	26	6	40
Total	19	65	16	100

Referring to the capacity of the teachers to stimulate the learning motivation of the students, the majority (76%) considers that the teaching activities have this quality. A reduced percent (20%) of students evaluated it as “a little” and only 4% answered with “not at all” (Table no.2).

Figure 1: To what a degree teaching activities stimulate learning motivation of the students?**Table 2: To what a degree teaching activities stimulate learning motivation of the students?**

year of study	very much	much	not at all	a little	Total
year I	3	33	2	4	42
year II	6	8	1	4	19
year III	6	20	1	12	39
Total	15	61	4	20	100

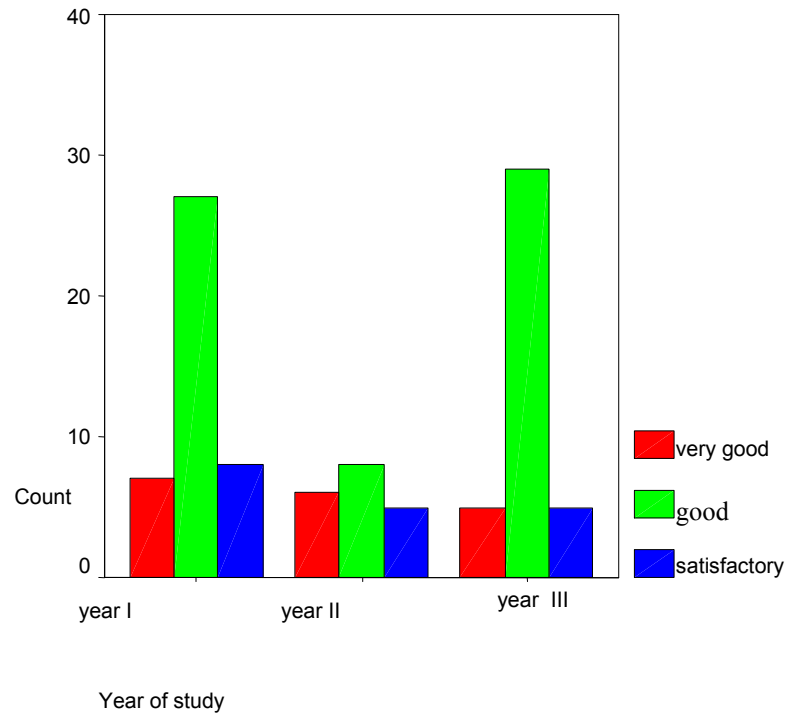
Referring to the educational methods used by the teachers during classes and seminars, the majority of the students (82%) appreciate the suitability of the discipline, the theme and their understanding capacity as “very good” and “good”. A percentage of 18% considers that the methods are “satisfactory”. There was no answer with “unsatisfactory” (Table no.3).

Table 3: How do you appreciate the suitability of the educational methods to the discipline and your understanding capacities?

Year of study	very good	good	satisfactory	Total
year I	7	27	8	42
year II	6	8	5	19
year III	5	29	5	39

Total	18	64	18	100
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Figure 2: How do you appreciate the suitability of the educational methods to the discipline and your understanding capacities?

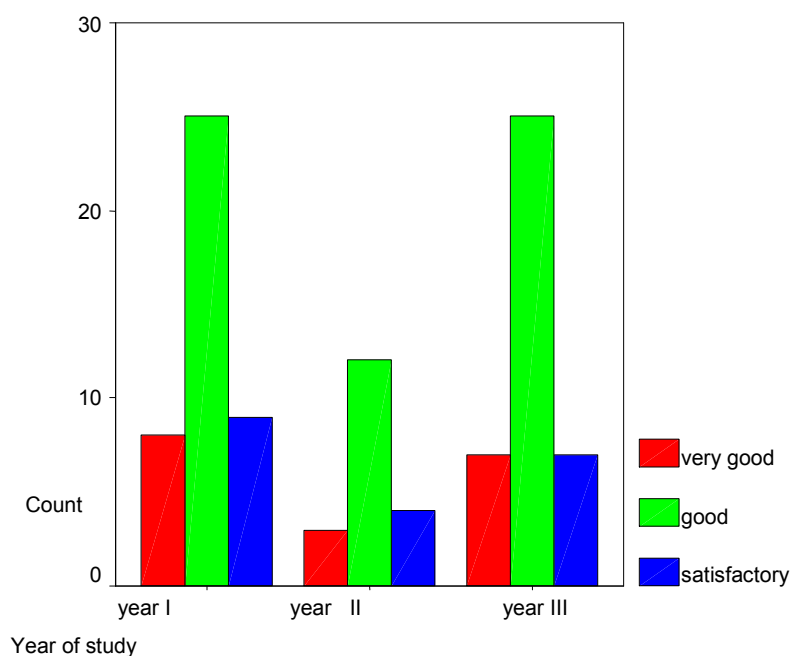


The communication and the relations between teachers and students is appreciated by the majority of the students (80%) as adequate, ensuring a positive and stimulating educational environment, only 20% of the students appreciate the behaviour of the teachers as “satisfactory” (Table no.4).

Table 4: How do you appreciate the relational behaviour of the teachers in ensuring a positive and stimulating environment?

Year of study	very good	good	satisfactory	Total
year I	8	25	9	42
year II	3	12	4	19
year III	7	25	7	39
Total	18	62	20	100

Figure 3: How do you appreciate the relational behaviour of the teachers in ensuring a positive and stimulating environment?



Referring to the endowment of the classes/laboratories with suitable educational materials, 78% of the students are satisfied, considering the endowment as adequate, 18% percent of them appreciate it as “satisfactory” and 4% as “unsatisfactory” (Table no.5, Table no.6).

Table 5: How do you appreciate the endowment of the classes/ laboratories?

Year of study	very good	good	satisfactory	unsatisfactory	Total
year I	10	22	8	2	42
year II	7	7	3	2	19
year III	12	20	7	0	39
Total	29	49	18	4	100

Table 6: How do you appreciate the endowment with materials in the classes/ laboratories?

Year of study	very good	good	satisfactory	unsatisfactory	Total
year I	13	18	9	2	42
year II	7	4	5	3	19
year III	12	18	8	1	39
Total	32	40	22	6	100

5. Conclusions

We highlight that the main aspects satisfying the expectancies of the students refer to: the pedagogical quality of the teaching activities and also the adaptation of the teaching and learning activities to the specificity of the discipline; the theme presented to the student and the understanding capacities of the students. A lower degree of satisfaction presented the following aspects: the potential of the didactic activities in stimulating the motivational needs of the student for learning; the communication and the relations between the students and the teachers; the endowment of the educational spaces with adequate materials and equipment.

Starting from these observations, we consider that proposing an efficient solution for the educational process of the students must be based on strategies that are able to stimulate the learning motivation and also on strategies that are able to optimize and facilitate the communication between teachers and students.

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Biographical note

Prof. PhD Liana Tausan Email completed her doctoral studies in pedagogy at the University in Bucharest. She has been teaching educational psychology at the University “1 Decembrie 1918” in Alba Iulia, since 2008. Her areas of interest are: pedagogy (introduction to pedagogy, curriculum theory and methodology, assessment theory and implementation), classroom management, educational psychology.