Student-Centered Education and Paradigmatic Changes

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Abstract
The paradigm of the education centered on student and his learning activity triggered changes on designing and structure of the educational process, from approaching educational outcomes, as a transition from the focus on the acquisition of knowledge to the effort to form competencies or to more essentialised organizing of the contents, changing teaching methods, the way in which the assessment is done and, most prominently, to a more flexible networking. Within the policies and practices of higher education institutions in Europe and the world the teacher is considered increasingly as a guide for learning and a factor in the professional development of the students and our article advocates for the application of this principle in higher education in Romania, analyzing, first, how was shaped this trend of redesigning the training, compared to traditional perspective. Then, there are presented the practical possibilities of implementation, contextual impediments or limitations and its benefits. From the perspective of the academic teachers, this focusing on students exceeds the formal limits of academic activity, the teachers acting to advise them depending on their real, particular needs. The multiple strategic options of teachers and students have roots in the humanism, constructivism and instructionism, making a good connection with the specifics of today’s information society that uses modern communication resources.

We considered also as useful to know the students’ perception about the level to which they consider that they are involved and especially, engage themselves in improving the instruction process. The necessity for a more active involvement of the students is that, in order to cope with the rapid changes and demands of the academic environment, the student must be responsible, to be directed by clear goals, be persistent, to regulate her/himself, be flexible in thinking, to be selective and to exploit the resources he can use optimally.

Keywords: student-centered learning, reflexivity, change

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The paradigm of centering on student

Student-Centered Education is now a trend to guide the teachers’ activity in academia and the adoption of a paradigmatic perspectives, requires manifestation of opening to the scientific investigation of this phenomenon and favorable attitudes towards searching and discovery of ways in which it can be put into practice.

From a conceptual point of view, several Romanian authors (Cojocaru, Seghedin, Predescu and Domunco, 2006: 59) identified the following understandings of the Student/pupil-Centered Education (SCE): paradigm with a major impact on the maximal valorization of the human resource and to increase the quality of educational and instruction activities; ethics and deontological position which consists in valuing the subject of learning; strategic option based on empowering of the subject of learning in the educational process; approach modality to instructive-educational process, based on the needs, interests, aspirations of the learner. Thus, the authors cited show that the purpose of this paradigm is the optimal valuing of potential of the subject of learning. From a pragmatic point of view, as active strategy, SCE requires building in a real time a positive and significant learning experience, in a democratic, non-directive relation. As a subsystem of education, the Student-Centered Instruction (SCI) is both a mentality and a culture within an institution of higher education. Such a perspective is largely related and supported by the constructivist theories of learning. SCI is characterized by innovative methods of teaching aimed at promoting learning through communication with teachers and other students involved in the learning process, methods that consider students as active participants in their own learning, developing their transferable skills, such as problem solving, critical thinking and reflective thinking (Attard, Di Iorio, Geven and Santa, 2010: 7).

The collocations in the literature about centering on student in education include, sometimes, different shades of concentration on topic or process: from the education focused on the educated (as the first stage which draws the attention to the subject of education), to the education centered on the pupil/student (which emphasizes the individualization training requirement) and to the learner-centered instruction. It is also important to note that the paradigms, understood as functional assemblies of concepts, norms, rules and methods used by the scientific community in a certain period of time to explain and resolve a certain educational problem (Kuhn, 1962), change themselves. Student-centered instruction, which highlighted the active role of the learner, is completed today by the interactive instruction, bringing again to the attention of educators the importance of networking, under its collaborative form.

A brief history of the principle of centering on the educated

After Attard et al. (2010) sustaining the centering on the educated one is attributed to Hayward since 1905, and this idea was later supported by many others, including: Piaget, 1926; Dewey, 1956; Knowles in 1978; Rogers in 1980. The focus on educated has been imposed largely thanks to the psycho-humanist perspective, which showed that the learning must be assumed by the person himself: „The only man who is educated is the man who has learned how to adapt and change; the man who has realized that no knowledge is secure, that only the process of seeking knowledge gives a basis for security. Changingness, reliance on process rather than upon static knowledge, is the only thing that makes any sense as a goal for education in the modern world.” (Rogers, 1983: 104).
In the first part of the nineteenth century the psycho-centric concept starts to outline itself in Pedagogy, in general and in the modern Didactics, especially (as opposed to the traditional concept of teacher-centered type). According to the psycho-centrism, the student, both, as subject and object of education acquires what is new if he is engaged in a personal effort (Ionescu, 2009, cited by Trif, 2012).

Moreover, the postmodern Pedagogy emphasizes the role of education subject to relate himself critically, but committed to his own training by promoting the acceptance of variants, indeterminacy, ambivalence, originality, contextualism, decentralization. From the latter point of view, the requirement of focusing on knowledge, learning and assessment is present in the constructivist theory of instruction (Bransford, Brown and Cocking, 2000) or gets close to the transformational learning, facilitated by a coach (Zeus, Skiffington, 2002), to that learning which changes the learner`s mentality, authentic learning, that one met in a practical situation where the student encounters in real life.

Elena Joiţa (2010) explained that this paradigm was created as a reaction to traditional, standardized, behaviorist teaching at the discipline imposed, to strict programming, to centering on transmitting an enormous amount of knowledge, and the change was driven by both, the observation of the insufficiency of this approach and the impact of technological development and communication in educational environment. Therefore, it is necessary for teachers "to modify the relations with the finalities, curriculum, educated ones, methodology of training and education, to assume new roles at the leadership level, to anchor the training in various contexts (...), to process the given content by the efficiency of learning content given at each educated, to report it to the application of theory on various issues, practical, effective situations, to carry out verifications in the complex situations, which to mobilize and integrate the acquisitions (...)."(Joiţa, 2010: 97).

In the academic environment the adaptation is double: the university, by the teachers, changes its offer by reporting to its students, and the students change their practices to meet the academic learning requirements. The new changes on teachers `roles bring forward the management of the learning by facilitating it and the self-formation, and this approach creates the student opportunities to develop his independence and autonomy in training. From the standpoint of the social constructivism, A. Woolfolk (1998) is among those advocating for the importance of the student in the training process. In constructivism, the methodology ensures, through leadership, the educational success, as shown by several studies (Clarke, 2013), which take into consideration the adaptation to the context which the training is made in: educational relations, human diversity, time, conception on people, even those domestic factors indicating the resistance to change. Therefore the student-centered instruction requires competencies of meta-learning, asking students to think about their own learning.

In the higher education, the mechanisms that help imposing the SCI are: organizing the higher education after Bologna system, the student mobility and principles supported by documents of the committees for higher education. In the Leuven Communique, the student-centered instruction involves "to put the accent on the interests of learner, new approaches to teaching and learning, effective support and guidance structures" (2009: 3). Bucharest Communique (2012) emphasizes the role of the innovative methods of learning to ensure the centering on student and the Romanian Agency for Quality Assurance in Higher Education/ARACIS (2013) addresses the student-centered instruction as a basic principle in ensuring the quality of each academic institution.
Characteristics and strategies of focusing on students

An interesting analysis of SCR meanings (Trif, 2013: 31-32) highlights the focus on: needs of students; autonomy and control in learning; responsibility of student; self-knowledge, self-explanation, self-fulfillment; individualization, flexibility coming from the teacher. Lea, Stephenson and Troy (2003) identify the following characteristics: proposing an active learning (not passive); emphasizing the deep learning and understanding; increased personal and professional responsibility of the student; increasing the autonomy of the learner; interdependence between teacher and student; manifestation of the mutual respect in student-teacher relationship; a reflective approach to the teaching-learning process, both from the student and the teacher; placing at the center of the instructive activities, the learning understood as a process, according to its principal factors; understanding the importance of counseling, student guidance for choosing the most appropriate pathway of studies according to the learning needs. Thus, the student-centered instruction focuses on: reflexivity, differentiation, knowledge and adaptation to needs, experiences, different learning styles, as supported relation of teachers with their students. Gibbs (1995: 23) shows that the student-centered learning "offers students a greater autonomy and more control on the subjects, methods of learning and study pace."

Focusing on student means a two-way relation. Students use different learning strategies determined by the teaching strategies, therefore at their level is still required the presence of guidance on how to learn. Even more, the differentiated instruction is useful because "the harmonious plurality or unifying differentiation, as a principle, send us to the idea of respect the people equality in access to different directions, but each capable of maximum development opportunities [...]" (by Peretti, 1996, as cited Maciu, 2003: 322). Such a differentiation takes into account knowing and respecting the students’ preferences, their skills, teacher avoiding what is predetermined. The teacher can achieve the differentiation by varying the aims, contents, methodology, assessment, environment as a whole and the student, by the way he relates to the extension of knowledge, the depth of understanding, by the pace and used learning style (adaptation by Crețu, 1998 ), by adjusting his skills and attitudes. Therefore, the student-centered learning supports a creative learning, as a form of learning which aims at solving problems with uncertain character, by exploring alternatives, brainstorming and finding solutions, using creative imagination. A creative, critical and reflective learning can be achieved by experiential learning (patented by Kholb, 1984) and determines it in a generative way

Responsibility and accountability. In SCI teachers assess their own way of teaching and the assessment models no longer supports standardization, as there is a variety of contexts and the results are interpretable (Cosserat, 1998, cited by Keane, 2015). In their turn, students can not learn if they do not have this responsibility. This is a new model of training management, where the student uses his freedom of choice to take own responsibility. SCE and SCI involve also the management of universities, it is about creating a favorable environment to obtain quality in education, by offering study programs according to the market and individual needs, providing material endowment, involvement in research or propose other types of practical activities and especially the consideration of the feedback given by students.

From a socio-cultural point of view, focusing on student requires a stronger relationship between student and teacher, among students-students, as reflective, critical participants to their education: "Teacher-student relationship depends largely on the real authority of the teacher, in the eyes of his students. This authority is gained through
competence, morality, thinking flexibility and consistent in terms of values promoted and requirements addressed. (Diaconu, 2004: 12).

**Concrete ways of implementing SCI:**
A) Knowledge of previous experience and students’ motivation (interests, aspirations);

In order to motivate the students, the following actions can be used: inclusion of students in designing attractive courses; student involvement in solving certain problems, with a higher level of difficulty, for the respective discipline; presentation by students of different careers that might be available to them after graduation; get students aware about the importance of their work and its context in an applied situation, where they demonstrate their value to others; use own research to develop the learning experience of students, by queries about the methods used and openness to alternatives; inviting society representatives with expertise and experience on a particular field of study, to link learning and practical experience in their profession with the experiences gained during their study.

B) Use certain applied, active, interactive methods, stimulate reflection and meta-cognition, extension of learning field beyond mandatory content, space and time, beyond the conventional means of classroom/seminar;

Extending the learning space and use of information technologies led to the integration in teaching methodology of some methods of following type: projects, problem solving method, the "aquarium" method, use of graphic organizers (charts, cognitive maps), brainstorming, different variants of debates, presentations on electronic support, the "cube", taking roles, reflection (Brockbank, McGill, 2007) etc. The choice of methodology has, besides teaching valences, a series of consequences in terms of academic training of students, but especially for their professional training, the responsibility for this training being undertaken by educational institutions (Table 1).

**Table 1. Methodology supporting student-centered instruction**

<table>
<thead>
<tr>
<th>During classes</th>
<th>Apart classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Discussions in groups of two</td>
<td>- Independent projects</td>
</tr>
<tr>
<td>- Transforming initial discussion groups in larger groups</td>
<td>- Group discussions</td>
</tr>
<tr>
<td>- Cross-overs (mixing students in groups)</td>
<td>- Mutual mentoring students by other students</td>
</tr>
<tr>
<td>- Use meditation type groups (tutorial)</td>
<td>- Teamwork</td>
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<tr>
<td>- Round tables (one by one, each student speaks)</td>
<td>- Debates</td>
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<tr>
<td>- Writing reflections on what they have learned (lasting 3-4 minutes)</td>
<td>- Field visits</td>
</tr>
<tr>
<td>- Presentations made by students</td>
<td>- Internships</td>
</tr>
<tr>
<td>- Poster Presentations</td>
<td>- Journals of reflection for learning</td>
</tr>
<tr>
<td>- Role plays</td>
<td>- Computer assisted learning</td>
</tr>
<tr>
<td>- Designing charts of mind-map types by students</td>
<td>- Writing media articles</td>
</tr>
<tr>
<td></td>
<td>- Develop a portfolio</td>
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</tbody>
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Source: Attard et al., 2010: 22
C) Regarding the assessment, SCI uses mainly: formative assessment, building assessment, of peer-type, alternative modalities such as: homework, portfolios, individual or group projects, self-proposed themes, examination with opened book, self-assessment, mutual assessment.

D) Request of feedback from students to assess and improve teachers’ performance (by discussions, application of questionnaires, filling grids/sheets with quality indicators) is another way. For example, discussions held with all staff about what needs to be stopped, started or continued. Here students can express different assessments, but an agreement on requirements for teacher can be reached.

E) Use of Information and Communication Technology/ICT: Power Point activating presentations, accessing the Internet during school hours and spare time, using e-mail to communicate in order to support learning;

F) Type of participatory management where the teacher earns a real, recognized authority;

G) Making experience exchanges, constructive criticism; Keane (2015) suggests the latter action to be performed in an equal-to-equal manner, not in a quantitative variant, but qualitatively. His proposal refers to: Reason for requesting a peer review, Strengths and weaknesses of peer reviews, Outcomes for the lecturer, Outcomes for teaching practice, Possible improvement in subsequent quantitative evaluations, Possible improvement in subsequent student pass rates.

Assessing the implementation of SCI

A model of implementation would require (according to Attard et al., 2010) the following phases: 1) Analysis of problem: if a change is needed; 2) Identification of roles for different categories of actors (they can have informative role, can be responsible directly, can have an advisory role or the role to approve/reject certain decisions, actions); 3) Activating mechanisms of change, by thinking carefully about the costs and benefits; 4) Application of strategies for overcoming the barriers to change; 5) Implementing change and 6) Assessing impact of change. In a specific context, which included the questionnaire-based survey method, combined with focus groups method, for a small sample, formed by a group of students in the third year, at University of Craiova, we aimed to know their perceptions and assessments about the stage of student-centered instruction.

The survey was used on 28 students, and the same students were divided into three discussion groups during the focus groups conducted later. The research sample was done randomly, based on the voluntary consent of subjects to answer questions.

Our hypothesis was that focusing on student needs improvement. Incidentally, in The Black Book of application of Bologna Process (2006), the student organizations from various Romanian universities highlight various problems, mostly concerning the deficiencies in implementation of the teachers-students partnership in university environment. Lea et al. (2003) argue that one of the problems with the student-centered learning is that it is rather an aspiration than a reality.

The assessment criteria used in the applied opinion questionnaire (adapted from Attard et al., 2010) were related to following components: a) Implementation of procedures to ensure the quality of education, by consultation with students; b) Focus on learning outcomes; c) Studies mobility and recognition of prior learning; d) Social dimension of academic training; e) Teaching and learning methods used; f) Academic assessment methods; g) Learning environment; h) Acceptance of changes.
The assessing scale for each criterion associated with these components included following values: Very Much, Much, Average, Less and Very Less, At All, but given the small number of people surveyed, we regrouped their responses into two categories or levels: Accomplished (for values very much, Much, Average and Unaccomplished (for appreciations at values Less and Very Less or At all).

The students' opinions and assessments have indicated the following:

a) The application of procedures to ensure the quality of education through consultation with students

The applied items were: a.1. There are functional and transparent procedures in faculty, through which students can give feedback on the educational process? a.2. Students are involved in setting goals?, a.3. Students are consulted on the content of curriculum?, a.4. Students are consulted on teaching and assessment methods used?, a.5. Teachers appreciate the capabilities of students to think critically, reflectively, to propose solutions?

![Chart 1. Procedures for ensuring the quality and consultation with students](chart1.png)

Source: Authors’ own research

The individual responses, especially for the first item, were dispersed, but at least 20 of the 28 respondent students show that their teachers consult them on objectives and methodology, on curricula in general (Chart 1). The best scores are assigned, by the students, to the assessment practice of teachers on their ability to think critically, reflectively, and this leads directly, to an increase of the mutual respect, and indirectly confirms the application of certain procedures for quality assurance by consultation with students.

b) Focusing on learning outcomes
The items used were: b.1. When the learning outcomes are set, are taken into account the student needs and diversity of the group of students?, b.2. Before starting a the study of a discipline, students are informed briefly on expected learning outcomes?, b.3. Quality analysis of a study program considers the further use of learning outcomes?

Chart 2. Focusing on learning outcomes

Source: Authors’ own research

This aspect of teachers and students focusing on clear learning outcomes is better achieved (Chart 2), compared with the previous component. Moreover, according to the methodology of drafting the questionnaire, some questions are for control and the previous answers regarding the consultation of students in goal setting are correlated with the information communication about the learning outcomes.

c) Studies’ mobility and the recognition of prior learning

In the micro-research sample there was one person being foreign student and three students who have benefited from Erasmus mobility, but all the participants expressed their opinion on the question c.1. Students coming through mobility programs receive support to succeed in adapting to the new cultural and linguistic environment?

It is showed almost unanimously (27 of 28 students) that teachers provide support for adaptation to mobility and recognize prior learning.

d) The social dimension

The main psychosocial aspects analyzed (Chart 3) were: d.1. There are special support measures to help students from disadvantaged backgrounds?, d.2. Students take personal and professional responsibility towards the activities of academic education ?, d.3. Learning paths are quite flexible and thus allowing combining work, family life and studies?
From the position of self-esteem, our students have indicated that they assume the responsibility for the academic work and the social support of teachers is done by 80%.

e) Methods of teaching-learning

It is a highly visible indicator, often pursued by students, especially since they have received, in addition to the specialized training, a pedagogical training. The questions were: e.1. The curricula use the learning by application in practice?, e.2. Teachers give you feedback on what you have learned, about your performance?, E.3. Teamwork is used in education?

Source: Authors’ own research

Chart 3. The social dimension

Source: Authors’ own research

Chart 4. Teaching Methodology

Source: Authors’ own research
The student answers (Chart 4) made reference to one of the existing limitations and perceived by a significant part of them (25% of them): the existence of a pronounced informative education without correlation with practice. Also, detailing the views obtained during the focus groups, we found that the teachers request for students teamwork during courses and seminars, but not that much as student consider appropriate.

f) Method of assessment

The items applied were: f.1. Students assessment is continuous and transparent?, f.2. Self-assessment and mutual assessment are used in the student assessment process?, f.3. Students assessment is undertaken through projects ?, f. 4. In the students assessing process are used tasks simulations and real-life situations (applicable in everyday life)?

Chart 5. Methods of assessment

![Chart 5. Methods of assessment](image)

The assessing dimension (Chart 5) is of a great importance for students, and they were able to express a critical point of view, being assured of anonymity about their identity. It is gladly that there is a continuous, transparent assessment, but not all teachers use self and mutual assessment. We notice that the items f.3 and f.4 correlate themselves with the inadequate aspects, previously identified, on the insufficient correlation between theory and practice.

g) Learning environment

It was investigated with the following questions: g.1 Students have access to research and study facilities?, g.2. Teachers and students use information technology in education (internet, email etc)?, g.3. There is collaboration among students to succeed in learning?, g.4. There is collaboration among librarians and teachers to facilitate students learning?
The access to the spatial, material, human, information resources (Chart 6) is made, on average, for 80% of students. The rest of them has explained that there is an academic collaboration for the use of information technology in training (internet, e-mail etc) in dyad or small group, but the classical resources of libraries are not useful, given the perishability of their informational content.

h) Acceptance of change

This component included the questions: h.1. Your teachers have participated in trainings that upgraded their practical training?, h.2. Teachers do need to change themselves? If so, what aspects?, h.3. Students must change themselves? If yes, what aspects?, h.4. Other components of the education process need changing for a truly student-centered education? If yes, which ones?, h.5. Student-centered instruction has advantages. If yes, which ones?, h.6. student-centered instruction has drawbacks, limits? If yes, which ones?

It is interesting that the students' opinions about the change are balanced divided, this being necessary for approximately half of them (Chart 7).
The distribution of the responses indicates us that, the decisive role to implement SCI rests with the teacher, who needs more pragmatism in achieving training, but also students should increase their involvement level in teaching activity. It is also desirable to change some components, meaning that the curricular programs should be more centered on the relation with the real life, or that improvements in the material base are desirable. The centered training has several advantages, including the fact that the students reach the deep learning, which helps them in the professional and personal development, motivates them, but has its limitations or difficulties in its effective achievement, the main ones being linked to the consumption of resources (human, temporal).

Considering the sample size and methodology used, our study was observational only. Overall, the students have confirmed the need for the student-centered education to become a reality better demonstrated in practice, indicating here the difficulties and their own deficit on accountability, assuming, sometimes with more extended motivations, related to the usefulness of the academic studies, to get a job, in the social and economic context from Romania and Oltenia region.

The impediments and benefits of the student-centered education

The impediments, validated by both the theory of the subject covered, as well as the empirical approach outlined above, are: administrative obstacles, for example, large numbers of students within a group, the lack of financial support to provide educational materials and resources; the existence of other priorities in academic education, from the perspective of the teacher or the student, meaning that time and effort are not allocated for learning, there are some competitive tasks: for teachers – research, for students – work commitments; the decision-making system too centralized or too decentralized, the misunderstanding of SCI, negative attitudes towards the concept, application of teacher-centered practices, or centered on the contents taught, on the assimilation of knowledge rather than building competencies; finally, understanding differently the vision of future.

ICS benefits refer to: motivating students to integrate into the academic life of the community by improving the communication, taking into account the critical ideas of students, by practical research collaborations; make everyone accountable in training, the teacher, but especially the student; the increased activism: it is known that students learn more when they realize demonstrations, debates, applications, than by listening or reading; - Earnings in taking participation, through the taking decisions mechanism, self-determined learning: self-proposed, self-planned, self-managed, self-assessed; increased independence in learning; building transversal skills related to the teamwork, efficient verbal and written communication, sharing of tasks into priorities and critical analysis of solutions are components of lifelong learning competencies; by alternating strategies, methods, means, modes and forms of organization, man can get a more flexibility, a better adapt to different learning needs and styles (regarding the pace, time, space etc.); reduced academic failure or abandonment of university studies; - For teacher the inner motivation of professional development will also be improved, and his role and status will be more appreciated by students.

Conclusions

There is a number of misconceptions or fears arising from the pessimism regarding the application of the training focused on student, concerning: the idealist character of this principle, resistance to change, the large amount of resources needed, the impossibility to be applied in large groups, "undermining" the teacher's role, large volume
of tasks requested to students, increase the effort of the teachers as using active and interactive methods, difficulties in the selection of methods, trans-disciplinary character of curriculum, suitability for certain areas, the limited amount of contents learned, lack of empowerment of academic teachers in related disciplines (Psychology, Epistemology, Sociology), organizational difficulties (in terms of finding space, time, programs compliance) etc., but these can be overcome by creating the culture and practices favorable for learning. The difficulties are inherent, but they are compensated by the benefits of focusing on the student.

References:


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