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LEARNING METHODS USING IN A STUDENT-CENTRED PROCESS - LITHUANIA CASE

Indrė Knyvienė [a], ***Dalia Perkumienė*** [b], ***Ričardas Butėnas*** [c]

[a] *Kauno kolegija, Lietuva*
[b] *Aleksandro Stulginskio universitetas; Kauno kolegija, Lietuva*
[c] *Kauno kolegija, Lietuva*

Annotation. The student-centred learning means a link that can bring a different culture in the universities. This approach requires that the teachers really understand and pay attention to the students and use modern and progressive teaching methods. The empirical research was performed with the intention to find out if university teachers in Lithuania know and use different methods which are characteristic for student-centred learning. The most frequent methods of student-centred learning are problem-based learning, project-led education, learning contracts, flexible learning, inquiry learning, just-in-time checking and personalized learning. This research presents opinions of relevant authors on the contemporary student-centred learning and enables an insight into the practice of lecturers. It shows that SCL has got its place in European universities however several of its aspects should be developed further.

Key words: student-centred learning; learning methods; teachers; high school education.

INTRODUCTION

The student-centred learning can be introduced in different professional fields, different geographical areas and practiced also in big classes. Whilst teachers and students are acquainted with student-centred learning to a certain degree, they are in need of more guidance, knowledge and understanding regarding its application and practice.

There is an ambiguity in the expression "empowering teachers for a student centred approach". One interpretation is in the sense of preparing teachers to use a student centred approach addressing questions such as what the prerequisite conditions are, what strategies can be used, what the critical success factors might be, how is »success« measured and so on. Much of the available literature is based on issues of practice and on case studies and this has been included in the review.

Another interpretation of "empowering teachers for a student centred approach" is more abstract and descriptive, rather than concrete and prescriptive. Many writers have explored the underpinning theory or constructs and have provided models and commentaries in an attempt to suggest reasons why teachers should be empowered to provide a student-centred approach or have compared and contrasted student-centred learning with more traditional approaches or considered the advantages and disadvantages or the consequences. Other writers have been concerned with the broader picture in which student-centred learning is located in a culture or socio-economic and political context and some have examined student-centred learning as an approach which is part of - or reflects - wider pedagogic change looking at how student-centred learning both shapes and reflects those trends. These perspectives have also been included.

According to the European Students' Union (Student-centred learning, 2010) the student-centred learning is actually a synonym for quality higher education. Among other student-related issues they emphasise transparent procedures for students to be able to give feedback on the quality of the educational process, students are consulted on curriculum content, on the teaching and teaching and evaluation methods used, are involved in periodic programme quality reviews, are involved as full and equal members in committees, procedures for students to appeal decisions and etc.

Many researchers and practitioners have already begun to discuss the diversity of opinion regarding what constitutes a student-centred approach. Whilst there is a broad consistency in general opinion there are also growing concerns regarding the apparent misinterpretation of the "ingredients" of the student-centred learning.

Research question what teaching /learning methods focused on the students in the student-centred learning are the most effective for transferring of knowledge?

The aim of the paper is to disclose different methods using in the student-centred process.

The object of the paper - methods using in a student-centred process.

The methods used in the paper are as follows: monographic method, the analysis and synthesis of scientific literature, the analysis of legal acts, descriptive method and comparative method, quantitative and qualitative research methods.

The research of the present paper applies a composite study design based on the consistency of the quantitative and qualitative research methods. The type of design is consistent and explanatory, characterized by the quantitative data collection and analysis, and followed by the compilation of the qualitative research and analysis. Priority is given to the quantitative data; both methods are integrated in the interpretation phase of research (Creswell et al., 2003). The aim of a coherent explanatory design is to use the results of the qualitative research, which facilitate the explanation and interpretation of the results of the quantitative research. The empirical study was divided into 2 parts:

1. Qualitative content analysis can be applied for the description of miscellaneous data (Burns, 2000). The latent qualitative content analysis was used for the data processing (Cormack 2002).

2. The strategy of the quantitative research refers to the written survey of a closed-ended type questionnaire in order to specify the results. The factor analysis method applied for the data analysis made it possible to condense the number of initial indicators without losing any essential information and move to the examination of generalized types (Bryman, 2008).

CHARACTERISTICS OF THE CONTEMPORARY STUDENT-CENTRED LEARNING PROCESS AND DIFFERENT METHODS USING IN A STUDENT-CENTRED PROCESS

C. Zhu and N. Engels (2013) found that student-centred learning is the most important innovation on the micro level that can be placed beside the communication technologies and the use of collaborative learning approaches. The authors mention that innovations like student-centred learning are most typical in organisations that have integrative structures, emphasize diversity and that also place an emphasis on collaboration and teamwork.

The main characteristics of a student-centred approach are the considerations given to individual learners' experiences, perspectives, backgrounds, interests, capacities and needs (Harkema and Schout, 2008). Within this approach teachers mainly focus upon what students should learn and emphasize why (Bransford, Vye & Bateman, 2002). Teachers take into account the existing knowledge of students (Bransford, Brown, Cocking, 2000; Protheroe, 2007), provide different opportunities for students to learn, often change teaching methods, help students who have difficulties and consider their background. Teachers discuss with students which study activities lead to good results, expose students to looking for alternatives and trying to find their own solutions. Examination questions refer to real-life situation and do not lead to categorising students with regard to their scores or grades. The basic conditions for an effective learning situation are the learning environment in which learners feel safe and accepted numerous opportunities for students to confront new information, experiences, and personal discovery of new understandings that are all adapted to the individual students and their pace of learning, (Mc Combs et al., 1997).

R. Harden and J. Laidlaw (2013) emphasise that teachers should provide feedback to the student, engage the student in active learning, individualise the learning to the personal needs of the student and make the learning relevant. Hattie and Timperley (2007 in Harden and Laidlaw) speak about giving the students constructive and enough specific feedback, an explanation and that the language used in doing so should be non-evaluative, given in time and frequently and should help learners to plan further studies. Harden and Laidlaw state that students have individual needs regarding personal capabilities, motivation and what drives their learning goals and career aspirations, achieving mastery of the course learning outcomes on entry to the course, learning styles and the place of learning – on campus or at a distance and the time of learning. Individualisation can be achieved in many ways: The teaching programme may be arranged so that students can choose to attend a lecture on a subject, view a podcast of the lecture, engage in collaborative problem-based learning with their peers or work independently using an online learning programme. Learning resources or learning opportunities can be adapted or prepared so that the students' learning experience, as they work through the programme, is personalised to their individual needs. When learning experiences are scheduled in the programme, such as a session with a simulator, the time allotted for an individual student is not fixed, but is the length of time necessary for the student to master the required skills. Also the curriculum can be designed so that it helps students' individual requirements e.g. by including experiences in the early year of the course, by encouraging a problem-based approach, by the use of virtual problems related to the subject, by communicating with the students about how their learning experiences will contribute to their

mastery of the learning outcomes, short realistic scenarios and the use of new technologies such as simulators that provide a more realistic learning experience (Harden and Laidlaw, 2013, 31).

M. Mclean and T. Gibbs (2010) claim that the students should be included at all levels of curriculum design, implementation and evaluation. As "clients", students need to be part of the process of developing a learner-centred curriculum. A clear admission policy (with appropriate support structures) should be developed. The school should support student diversity and individual learning needs, the psychological and social aspects of student diversity, develop students' self-learning skills, allow time for independent learning and pursing areas of interest, regularly review the core curriculum content, recognise that their education continues beyond graduation, provide ample opportunity for student professional development and not pay lip service to learner-centeredness.

Z. Çubukçu (2012) lists the following characteristics of the student-centred teaching programme (Unver & Demirel, 2004 in Çubukçu, 2012), emphasising tasks that attract students' interests, organising content and activities around subjects that are meaningful to the students, determining clear opportunities that let all students develop their own learning, skills and progress to the next level of learning, organising activities that help students understand and improve their own viewpoints, developing global, interdisciplinary, and complementary activities, supporting challenging learning activities even if the learners find them difficult, and emphasising activities that encourage students to work with other students in cooperation. In student-centred learning environments, it is essential that students take responsibility for learning and that they are directly involved in the discovery of knowledge, choosing the materials used so that they offer them a chance to activate their background knowledge and ensuring that the planned activities are based on problem solving. Various institutions and outside-class activities are incorporated to support students' learning (Cubukcu, 2012, 53). The time dimension should be evaluated in psychological terms. It is important that the students have enough time to construct the information cognitively and connect the new knowledge to real life. The students should have enough time for communication, for learning, synthesising, observing and applying new knowledge to social life, work, family and society. When talking about "location" of student-centred learning we should include all the places where students learn: school, library, museums, work place and home.

A. Lemos, J. Sandars, P. Alves and M. Costa (2014) claim that the Bologna Process emphasises the importance of the student-centred approach. They point out that this system introduces students to the idea of taking responsibility for their learning activities, increased retention of the content, improved student engagement and improved status of the learners. Their study tried to investigate a new mixed-methods approach to evaluate the student centeredness of teaching and learning. The research results showed that, in particular, teachers appreciated especially the following: the importance of engaging students in the learning process, that the class was a place for discussion, students were encouraged to be autonomous and that there was a shift in power relationships from teachers to students. Course objectives and assessment programme remained under teacher control. Teachers used content to capture student curiosity and increase motivation. Teachers considered themselves more as facilitators, they gave students high responsibility in classroom activities, and, crucially, they provided instant feedback.

According to the European Students' Union (Student-centred learning, 2010) the student-centred learning is actually a synonym for quality higher education. Among other student-related issues they emphasise transparent procedures for students to be able to give feedback on the quality of the educational process, students are consulted on curriculum content, on the teaching and teaching and evaluation methods used, are involved in periodic programme quality reviews, are involved as full and equal members in committees, procedures for students to appeal decisions regarding their academic attainment or progression are provided, they are consulted when learning outcomes are designed, student needs and the diversity of the relevant student group are considered when designing learning outcomes, students are informed on the intended learning outcomes before they start a course or programme component, representatives of teachers and students are involved as full and equal members in the panels undertaking quality assurance reviews, institutional quality assurance reviews and guidelines take into account the overall elements of teaching and learning, prior learning (in non-formal learning environments) is recognised by the institution for the purpose of access into educational programmes, the process of recognition is easy, recognition of prior learning can be done without significant costs of bureaucracy, there are special support measures in place in order to help students from disadvantaged backgrounds, learning paths are flexible enough so as to permit combining work/family life and studies, group-work is used in the learning process, the goals of the learning process are agreed upon between teachers and students, peer and self-assessment are used as a method in the student assessment process, projects are used in the assessment of students, simulations of tasks and real life

situations are used in the assessment of students, students have access to appropriate research and study facilities both on and off campus, the institution contributes to promoting a national/regional culture of student–centred learning, the programme uses a student-centred learning approach in providing training on the use of innovative teaching methods and student-centred curriculum development.

Student, or learner, centred approaches to teaching have emerged from changing understandings of the nature of learning and, in particular, from the body of learning theory known as constructivism. In the broadest terms, constructivist learning is based on an understanding that learners construct knowledge for themselves (Hein, 1991; Krause et al, 2003).

N. Hativa (2000) has identified, student centred instructional methods include discussion, group work, role-playing, experiential learning; problem based learning and case-method teaching. All of these methods were utilised in various combinations throughout the semester.

A research university in Hong Kong sought to promote student-centred learning across the entire university by employing the following methods (Kember, 2009):

- Projects funded through teaching development grants.
- Subsequent use of the analysis to promote wider use of good practice.
- A compulsory teacher training course for new junior teachers, which encouraged student-centred learning.
- Analysis of good practice by award-winning teachers, in all faculties, to show how they made use of active forms of student learning.
- A program-level quality enhancement initiative which utilized a student survey to identify strengths and potential areas for improvement.
- Development of a model of a broadly based teaching and learning environment influencing the development of generic capabilities to provide evidence of the need for an interactive learning environment.
- The introduction of program reviews as a quality assurance measure.

The European Students' Union seems to have the most detailed and concrete list of what constitutes student-centred learning. They emphasise the importance of feedback in learners' progress, students' rights to decide about curriculum content and application, teaching and evaluation methods, stressing that prior learning should be recognised, emphasising the importance of group-work, the use of projects, different forms of assessment, simulation, research, IT, the collaboration of librarians and teachers, innovative teaching methods that provide everyone with and instructive and informative list of practical ways to implement a student-centred approach.

RESULTS

The empirical research was performed with the intention to find out if university teachers in Lithuania know and use different methods which are characteristic for student-centred learning.

The empirical research intended to find out how teachers in higher education use this pedagogical approach, how they try to personalise learning, and what are the main challenges faced by teachers.

The main findings of the theoretical research suggest that teachers should consider individual experiences, perspectives, backgrounds, interests, capacities and needs of students; provide different opportunities for students to learn and to cooperate, often change teaching methods, discuss which activities bring good results, adapt learning to students' pace. The feedback to students should be constructive, specific, contain explanation, use non-evaluative language, in-time and frequent. The curriculum should include considering experiences, problem-based learning, and new technologies. The European Students' Union emphasizes also students' rights to decide about the curriculum, teaching and evaluation methods, rights to decide in the committees on the quality of their institution, about credits, and to practically implement SCL approach by including PBL, group-work, projects, case methods, role plays, classroom workshops, distance education, different forms of assessment, simulation, research, IT, collaboration of librarians with teachers, etc. On this ground it was decided to ask the teachers about their organization of the learning process, giving feedback to students, including students' interests in the curriculum, considering students' rights and about the attitude of their universities toward student-centred learning.

The empirical research showed that the majority of teachers explain the topic again and that the teachers look for new study methods. On the other side reading of additional literature might not be very useful because this takes a lot of time. It is also rather worrying that quite a number of teachers have no time to repeat study topics.

The empirical part of the research presents data analysis of the questionnaires answered by 234 lecturers from 10 Lithuanian universities/higher schools (Vytautas Magnus University, Mykolas Riomeris University, Kaunas University of Technology, Aleksandras Stulginskis University, Šiauliai University, Kauno kolegija/University of Applied Sciences, Forestry and Environment Engineering College, Šiauliai State College, Alytaus kolegija/University of Applies Sciences, Vilniaus kolegija/University of Applied Sciences). The questionnaires were anonymous and sent around by Internet.

The research was made in two parts, the first was made in 2015 and the second in 2016.

Under research results the most important advantages of student-centred learning are:

- motivation of students: 156 - 66.7 % very important and 64 - 27.4 % important: 94.1 %
- partnership between teachers and students: 134 (57.3 %) very important and 78 (33.3 %) important: 90.6 %
- respecting different individuals: 104 (44.4 %) very important and 102 (43.6 %) important: 88 %.

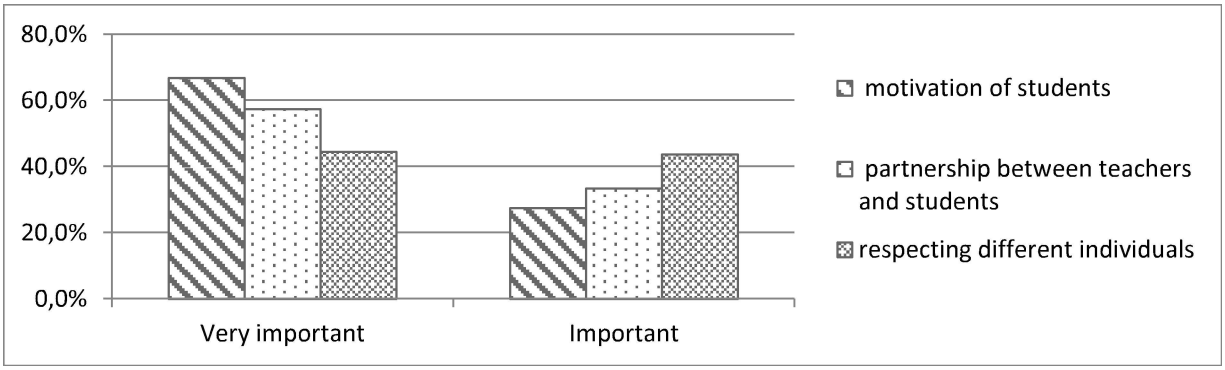

Figure 1. **The most important advantages of student-centred learning**

Less important aspects for the respondents were: more responsibility and commitment: 125 (53.4 %) very important and 76 (32.5 %) important, the ability to work at ones own pace: 60 (25.6 %) very important and 122 (52.1 %) important.

The most frequent methods used by Lithuanian teachers are:

- Solving practical problems: very frequently 107 (45.7 %), frequently 83 (35.5 %): 190 (81.2 %)
- Individual or small group based activities: very frequently 100 (42.7 %), frequently 79 (33.8 %): 179 (76.5%).
- In-class discussions very frequently 99 (42.3 %), frequently 80 (34.2 %): 179 (76.5 %).
- Problem-based learning very frequently 49 (20.9 %), frequently 105 (44.9 %): 154 (65.8 %).
- Use of the case method very frequently 152 (27.8 %), frequently 87 (37.2 %): 43 (65 %).
- Group presentations: very frequently 60 (25.6 %), frequently 88 (37.6 %): 148 (63.2 %).

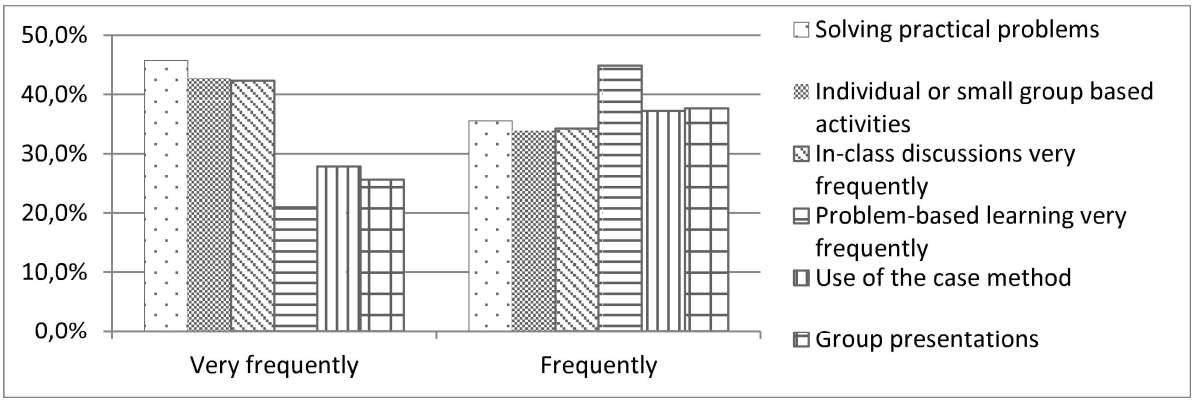

Figure 2. **The most frequent methods**

Methods which are less popular are: collaborative paper assignments very frequently 53 (22.6 %), frequently 48 (20.5 %); web-conferencing environment in distance education very frequently 45 (19.2 %), frequently 59 (25.2 %).

The respondents occasionally or rarely use such methods as classroom workshops, cooperating in research activities and projects.

31.6 % of respondents never use role plays.

The most frequently used methods of supporting students are:

- Offering students additional consultations/advice – 231 (98.7 %);
- Taking some time to speak with a student who has troubles personally/trying to tell him/her how to achieve better results – 225 (96.2 %);
- Enabling students to prolong their studies (= to finish their studies in 2 years instead of 1 year) - 157 (67.1 %);
- Helping foreign students who do not speak your national language – 154 (65.8 %);
- Studying either on campus or at a distance – 145 (62 %).

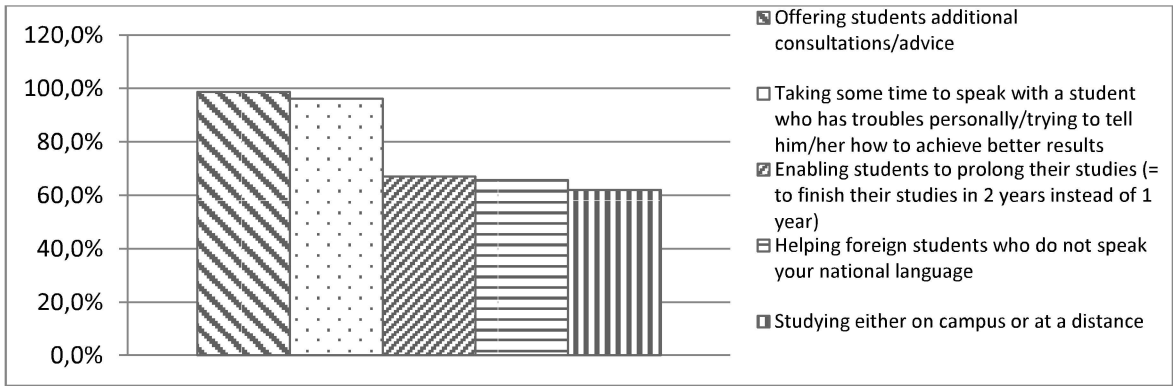

Figure 3. **Methods of supporting students**

Offering students individual examination terms (beside the terms which are defined by the University calendar) and using special support measures that help students from disadvantaged backgrounds – 143 (61.1 %).

The most typical study materials used by Lithuanian teachers to support students are:

- Additional literature very frequently 85 (36.3) %, frequently 119 (50.9 %): 204 (87.2 %).
- Textbooks 99 (42.3 %), frequently 71 (30.3 %): 170 (72.6 %).

Additional slides: 94 (40.2 %) very frequently, 57 (24.4 %) frequently: 151 (64.5%).

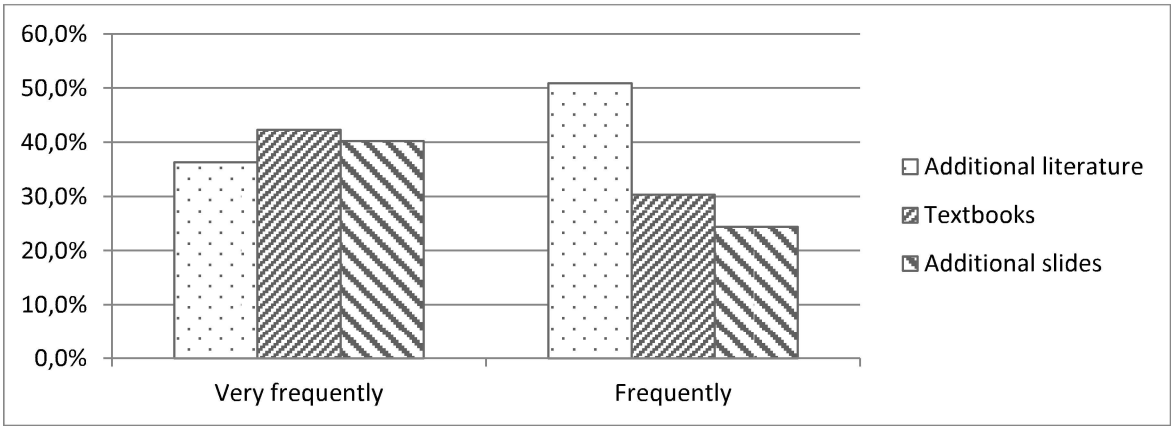

Figure 4. **Most typical study materials**

The research found that teachers are well acquainted with many different aspects of student-centred learning although the there is no generally accepted definition of SCL. However, teachers need more development programmes which will not acquaint them just with pedagogic and didactic issues but also accelerate their personal growth and other topics (like use of information technology). The research did not

investigate student's voice (because this was beyond the scope of the project) but it would be useful and could show if students have the same opinion about SCL as teachers.

The majority of the teachers can support student diversity and individual learning needs so that they offer them additional consultations, speak with those who have troubles, offer them individual examination terms, and enable studies at a distance. Some teachers also contact students via Internet. Teachers support students who find their learning activities difficult by by explaining the topic again and by looking for new study methods. Teachers support students by textbooks, additional slides, lists of additional literature but they do not often use research articles, popular scientific literature and statistical data. Only teachers in one of the countries say that they have no time to repeat things. If students do not have enough time, teachers try to help them by discussions and by extended terms. It is rather surprising that teachers do not often take the students to libraries which should be the other place for learning. However, they very often ask them to use experiences from their work place. Teachers also try to show that they value students either by polite behaviour, or by listening to students.

CONCLUSIONS

The opinion of many different authors and also the empirical research showed that the student-centred learning means a link that can bring a different culture in the universities. This approach requires that the teachers really understand and pay attention to the students and use modern and progresive teaching methods.

The most frequent methods of student-centred learning are: problem-based learning, project-led education, learning contracts, flexible learning, inquiry learning, just-in-time checking and personalized learning.

This research intended to empower teachers for student-centred learning therefore it does not try to solve some important problems, namely that the student-centred learning needs a more consistent and solid identity and teachers need a generally agreed model of the student-centred learning that is better defined, based on a combination of theory, practice and evidence, utilises technologies to their best advantage and is underpinned by effective assessment strategies.

It can be concluded that student-centred learning has forced its way in the tertiary education even if teachers do not receive much support from their universities. There are of course a number of open questions which should still be answered – from the uniform definition to new development programmes. However, teachers know and use many of SCL teaching methods and other useful items of the student-centred learning. This means that the student-centred learning is a good approach that should be investigated and introduced also on other levels of education all over the world.

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