From Teaching to Learning

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Abstract: This study examined the effectiveness of educational methods - Learning by Using Active Methods - on improving the student's learning efficiency. We deal with less homogeneous university classes since a part of our students are teenagers coming from high schools and a part are of different ages coming from the educational system. Therefore to understand students as learners and to improve their abilities as learner are required. Our study tried to emphasize how students perform in each practice of a knowledge component. We try to find optimal learning methods by using different strategies, in order to improve students' learning efficiency. With a control group design, we analyzed the learning performance of Study programme Primary and Preschool Pedagogy students participating in the Optimized Learning Teaching study. Results were compared to students participating in traditional learning without using modern methods. Analyses indicated that students in the optimized condition are more interested in study and their motivation grows. There was significant difference in the learning performance of the two groups in either an immediate post test or a two-week-later retention test.
Keywords: active methods; learning efficiency; expectation

Introduction and Theoretical Framework
Nowadays we live in a postmodern society which values a person who is willing and able to respond positively to permanent changes (Paun, Potolea 2002). Researchers from educational fields widely recognize the

need for future teachers to be well prepared to meet the challenges, working and living in a society of permanent changing and in diverse communities (Ilica, 2009). To prepare competent teachers as agents of education, for a postmodern society it is important to determine their motivation and cognitive beliefs. Freshmen teachers must be equipped with knowledge, skills, dispositions and competences that will enable them to succeed with the changing needs of all students. Teachers need innovative and alternative instructional strategies to actively engage students in the learning process to raise academic standards (Ruhland & Bremer, 2002). Students must have the ability to think critically and be willing to challenge and ultimately adapt their "historical and cultural condition" (Hill, 2000). Their beliefs about teaching and learning must have a positive impact on the education of the youth during the 21st century. To understand students as learners it is necessary to find out more about students, greater students diversity makes it more imperative to provide challenging and effective learning environment for students. The methods in which students are taught to develop and implement instructional lessons in primarily and preschool education settings and the applications of these instructional methods during student teaching needs to be studied in relation to personal style and motivation about teaching and learning in the classroom (Dees, 2005). This study was based on the idea that teachers, who are challenged with a modern approach (learner-centred), would be better prepared to adapt and solve problems and they would face a real world career as primary and preschool education teachers. This study strives to better understand and appreciate the diverse needs and motivation of all future teachers thereby it enhances methods to better serve the need for professional development of primarily and preschool teachers (Kelemen, 2010).

The latest Universities' aim is to promote independence; effective learner environment that prepare students to be independent learners.

- student centred approaches to learning and teaching;
- deep approach of learning by actively engaging the students;
- actively working with the subject;
- reflecting upon learning;
- using active teaching methods.

The constructivism is a pedagogical theory which describes the way learners construct knowledge for themselves. From Piaget with his cognitive constructivism and Vygotsky with his social constructivism to nowadays scholars Jadallah, 2000; Maypole & Davies, 2001, they all

emphasize the importance of student learning through interaction with the teacher and other students. Studies have been conducted concerning the role of teacher experiences in course on student-centred teaching methods, the student must be deeply engaged in his learning so that he could learn more efficient than by listening to an expert talking about it. Encouraging students to reflect upon their own knowledge conduct to a more optimal learning. It is acknowledged that the use of modern methods in education may provide the means to improve teaching learning and assessment while focusing on the learning process. If knowledge is seen as being individually constructed, this implies that learning does not only involve students taking on board new ideas, but may require them to modify, develop, expand and change their prior conceptions. Under this perception, modern methods can influence the learning-teaching process because of the potential it offers for intervention by the learner or the teacher during the lesson. The possibilities provided by new techniques can also favour versatile immediate interaction among students. The guiding principle of constructivist learning theories is the learner's own active initiative and control in learning, and personal knowledge construction, and the self regulation of learning. The cultivation of self-determination as much as self-control, viewed as autonomy should be emphasized so that students come to experience themselves without the control of others. Modern methodology based on engaging learners in knowledge construction through collaborative activities determined learning in a meaningful context and through reflection on what has been learned through conversation with other learners.

The main perspectives and principles by which learning based on active methods should focus on general systems attributes: context of study, construction of units of learning, collaboration between the implied factors and permanent conversation (two-way learning dialogue). Therefore teacher must be transparent in his expectations and assessment. It is important that the teacher explained his syllabus thoroughly and mae sure his students are aware of their real possibilities and what they can do to improve their learning efficiency (Bocos, Ionescu, 2009). Teacher must be well prepared. Make sure that all handouts are copied beforehand and reread resources on the subject of each group's topic before lecturing. Have extra resources and references always on hand and available. Also, if you tell students that you will bring additional information to the following seminar, make sure you

follow through. There are some principles that teachers must have in his mind when work with his students:

• Keep things interesting. Although it's natural that you have a lot of material to cover in a short amount of time, keeping the class interested will ensure that students actually pay attention and learn what you are teaching. Interesting guest speakers, interactive activities or thought-provoking movies on the subject you are teaching are just some of the ways you can add a bit more interest to the class.

• Improve your classroom management techniques. Many professors erroneously believe that all students will know how to behave. The classroom management techniques are not only needed for K-12 teachers, but for elderly students also. Therefore teachers should always have complete control over the classroom at all times, and be able to appropriately and effectively deal with behaviour issues as they occur. It is necessary to pay attention to all students and don't let the behaviour of one student ruin the learning experience for everyone.

• Teacher must always keep an open door and provide extra help when necessary. Some students may have special needs or have a hard time in a large group learning situation. Teacher must be accommodated to those who have unique circumstances or have questions or concerns that need to be addressed outside the classroom. It is important that teachers are sensitive and considerate when dealing with these students, and try to help them any way you can.

• Furthermore it is very important to ask for student feedback. Any sort of direct feedback from students can be invaluable. Anonymous surveys can be a great way of understanding what your students really think of you and finding ways you can improve. Many scholars believe that the most important goal of education is for students to learn how to reflect on and diagnose their own performance.

To provide support and to achieve the predicted target in teaching we need to know more information about our students. It is necessary to know the level of students' knowledge and their conception and perception of teaching and learning. As we have stressed before the component of our students from Pedagogy of Primarily and Preschool Education is diverse. Some of them are young in the situation of initial formation, but more of them are adults who work in the system as teachers and want to achieve more competence so that they are likely to see themselves as vocational learners. Andragogy, concept introduced by Malcolm Knowles in 1975, stipulates that the professor should be

"*partner with adult learners, building on students' prior experience and promoting student self-direction*". Also the teacher's role for primarily and preschool is changing. The teacher who teaches children from 3 to 6/7 years old and 6/7 to 11/12 years old should be able to support the development of all potentialities of his/her students; he/she should become a creator of an inspiring climate and a bearer of challenges for students to discover new knowledge, to understand the importance, meaning and sense of knowledge and to develop a positive attitude towards learning. Therefore, the following research question emerged: What teaching methods are used in adult teaching. It is known that adults are more responsible for their own learning (Knowles, 1975):

- *self-direction*, how to choose what and how to learn;
- *experience,* use their own lives;
- *motivation,* toward personal and professional needs;
- *readiness,* oriented on just-in-time learning;
- *need to know*, identify the ration for the content to be learned;
- *timing,* an adapted schedule;
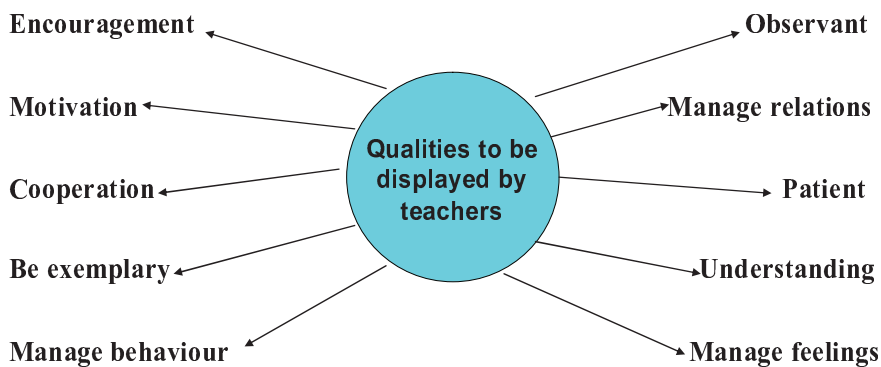- *practicality,* permanent transfer of learning.

The aim of the process of education in university is orientated toward turning on new undergraduates into independent and autonomous learners. They must become competent teachers. Competence for teacher' profession is seen as a complex qualification, skills and dispositions for a successful performance in profession of teaching, which includes knowledge, skills, attitudes, experience, values and personal characteristics. University must create the premises for student-centred learning communities that develop students' higher-order reasoning abilities, create communities of active, lifelong learners, and become engaged with solving the well structured problems of a complex society. It is known that how teachers teach is related to student's learning. University students possess different ways of knowing which influences how they learn and acquire knowledge.

This study investigated and compared two teaching methods, a traditional, teacher-centred, didactic method (the Traditional Approach) and a social constructivist, inquiry-based method (the New Approach) to determine which was more effective at improving students' understanding and ability to think critically. The internal learner-centred alternative transfers the responsibility of learning to the student, so that

the student becomes the centre of the educational process and becomes an active decision-maker by making choices on how his or her learning will take place within the constraints of what the professor has given. This learner-centred education prepares students for lifelong learning. Our purpose is to explore student outcomes of teacher-directed and learner centred methods in university classrooms on methods of teaching. In the table below we stress the skills which every teacher must demonstrate in order to promote an efficient learning.

Figure nr.1. *Summary of skills that teachers need to demonstrate when using the learner-centred approach*

Summary of skills that teachers need to demonstrate when using the learner-centred approach

Encouragement	Observant
Motivation	Manage relations
Cooperation	**Qualities to be displayed by teachers**	Patient
Be exemplary	Understanding
Manage behaviour	Manage feelings

Research Design and Methodology

Our research`s purpose is to investigate the perception of student regarding traditional and modern methods and their efficiency in acquiring performance in learning. "Research indicates that students are the most qualified sources to report on the extent to which the learning experience was productive, informative, satisfying, or worthwhile. While opinions on these matters are not direct measures of instruction

or course effectiveness, they are legitimate indicators of student satisfaction, and there is substantial research linking student satisfaction to effective teaching (Theall and Franklin, 2001)."To reach our purpose we used 50 students from educational sciences (25 students in each seminar class) which took part in this study. The students ranged in age from nineteen to forty years, the younger came from high schools and the elderly from the educational system (they are already teachers for kindergarten and primarily schools). The component of the two groups was almost identical (age, academic achievement and capabilities of the students) there were no special characteristics of these students that required extra measures. The research was place in the second semester of the university year of 2009-2010. Part 1 of the semester was taught using traditional teaching methods including lecture, assignments, and discussion of questions at the end of the chapters. During Part 2, we applied methodology that used modern teaching methods. Students' perception and ratings about the interesting and effective teaching methods is a way to suggest improvements in teaching/ learning process.

Methods used by this study were quantitative and qualitative methods. The qualitative methods included:

$\Rightarrow$ Lecture-based interactive course (Knowledge, Concepts).
$\Rightarrow$ Problem-based course (Application, Practice).
$\Rightarrow$ Semi-structured interviews (10 questions- Motivated Strategies for Learning).
$\Rightarrow$ Student Performance.

The quantitative methods used in this research were statistic strategies.

Results
The results of this study indicate that the research hypotheses are supported by real achievements. There was a significant improvement in exam scores (sig < .05), measuring student understanding of quality management and process improvement using active teaching methods versus traditional teaching methods. There was a significant improvement in process outcomes using active teaching methods to teach application of process improvement techniques.

In table no1 can be seen the students' expectation and preference for different teaching methods. Rating was done on a scale of 1-5, 1 – being the least interesting and 5 being the most interesting teaching method as indicated in table 1.

Table no.1. Ranked students' view about university teaching methods

	1	2	3	4	5	Total
	N %	N %	N %	N %	N %	
Formal lecture	20 %	25%	35%	26%	22%	100
Interactive lecture	52%	55%	64 %	74 %	86 %	100
Role play	34 %	38 %	57 %	64 %	80 %	100
Tutorial	45 %	54 %	67 %	80 %	74 %	100
Presentation	53 %	64 %	76 %	53 %	84 %	100

We saw that the preference of the students is oriented towards learner centred methods: interactive lecture, role play, tutorial and presentation. The main reasons for rating various teaching methods as interesting and best teaching methods we saw in the predominant students' answers to the questions asked:

• More informative and interesting
• Learning is effective in gaining knowledge
• More participation of students, they have opportunities to give their opinion
• Creative thinking is encouraged and active learning.
• Every one gets the chance to express their thoughts.

Simple topics can be learnt through different angles in a modern background of education. Students must be the initiators and architects of their own learning and knowledge-making, rather than passive receiver who absolve the transmission of knowledge from 'expert' teachers.

Conclusions
The shift from traditional teaching methods toward student-centred teaching methods by using active methods such as interactive small group activities appears to have significantly enhanced students' learning. The courses and seminars experience was characterized by a high level of dialogue and interaction, the assessment results suggest

overall strong engagement with the subject matter, and student feedback was very positive. It is increasingly important for students who want to become teachers to familiarize with active methods that allow them to build common experiential ground, which provided a shared base for engaging with more technical aspects of the subject matter and transferring this knowledge in their own classrooms. At the same time, student has feedback on the more didactic features of the curriculum. The common experiential ground and supportive social context were developed first, in order to support students' access to the delivered material. This suggests that a holistic teaching approach at the individual subject level is as important as particular teaching techniques that emphasise student-centeredness. My own conclusions are that, in the context of teaching at our Faculty of Educational Sciences, Psychology and Social Work, specialization Pedagogy for primary and preschool education with diverse cohorts of students, active methods such as student-centred teaching are an optimal way to improve students' learning efficiency.

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APENDIX
Motivated Strategies for Learning
Please tick or write in full to answer the following questions.
1. Which teaching approaches do you consider more efficient?
A. group work
B. pair work
C. individual work
4. Mention other teaching methods you prefer that are not included in 1.
………….……………..……… …………….………….………….
3. From the listed skills, which ones do you consider are appropriate to group work?
A. Cooperation
B. Trust
C. Caring
D. Openness

E. Decision-making
F. All of the above
G. None
H. Others (specify them) …………..…………., …………..………..
4. What additional skills do you think learners get from working in groups?
…………..………..……………..………………………..……………..…
…………..………..…………..………………………..……………..………..…
…………..………..…………..……………………..…………..……………..…
5. From the teaching methods used by professors, which do you consider as the best approach?
A. Interactive lecture
B. Student centred teaching
C. Tutorial
D. Presentation
E. Role playing
6. How can you best define learner-centred teaching methods?
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…………..………..…………..………………………..……………..…………..…
…………..………..…………..……………………..…………..……………..………
7. Do learner-centred teaching methods help you to achieve syllabus coverage?
YES
NO
8. If yes, can you give an example of how the strategy helps you to achieve the syllabus coverage?
…………..………..…………..……………………..…………..……………..…
…………..………..…………..……………………..…………..……………..…
…………..………..…………..……………………..…………..……………..…
9. From the listed skills which one do you get from role playing? Please tick.
A. Cooperation
B. Trust
C. Caring
D. Openness
E. Decision-making
F. All of the above
G. None
H. Others (specify them) …………..…………..,…….………..………
10. What additional skills do you think learners get from role playing?
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