

Available online at www.elixirpublishers.com (Elixir International Journal)

Educational Technology

Elixir Edu. Tech. 50 (2012) 10480-10487



Comparative analysis of teaching methodologies at university level

Fauzia Khurshid and Kehkishan Zaheer

National University of Modern Languages, Islamabad.

ARTICLE INFO

Article history: Received: 31 May 2012; Received in revised form: 5 September 2012; Accepted: 17 September 2012;

Keywords

Lecture Method, Discussion Method. Project Method, Peer Teaching Method, Problem solving Method and Reflective Inquiry.

ABSTRACT

The purpose of this study was to compare various teaching methods used by university level teachers in public sector universities in Pakistan, study the common influences on choice of teaching method, and use this knowledge to enhance the quality of Instruction and therefore education in general. To encourage the student participation in the teaching learning process, their preferences of the teaching methods were also studied. The researcher used descriptive research to fulfill the requirements of the objective of the study. Major objective of the study was to compare the teaching methods favored by the teachers of various disciplines Social Sciences, Management Sciences, International Relations and Information Technology. Another objective was to study the student awareness of the methodologies used by their teachers. The sample of the study comprised of 38 teachers and 97 students from the abovementioned departments. The instruments used by the researcher in the study were selfdeveloped questionnaires. The questionnaires consisted of 26 items using five-point scale. The collected data was tabulated, analyzed, and interpreted in the light of the objectives of the study. From the finding of the study it was revealed that the most commonly practiced method of teaching is Lecture followed by project method. The least used method was Reflective Inquiry. There were some discrepancies among the teachers and student opinions of what teaching methods are most commonly used in the classrooms. When the teachers were asked to rank teaching methods according to the effectiveness of the method, the variables like 'gender' and 'department' did not have significant differences whereas 'qualification' of the teachers did. The teachers with PhD ranked Reflective Inquiry as the most effective and preferred method. The teachers with M. Phil and M.A degrees ranked Lecture method at the top.

© 2012 Elixir All rights reserved.

Introduction

The dictionary meaning of the word teaching entails all the activities of educating or instructing; activities that impart knowledge or skill. Education is a broad field and encompasses a whole scenario in itself. Many important factors play major role in teaching and guiding the future generation of any nation. One of these factors is the environment in the classroom. The environment should be conducive to learning. Good teachers have a sense of purposefulness and use the class time efficiently. The make sure that the most of the time available in the class is used on-task. In order to facilitate meaningful learning, the assignments should be interesting and varied and the teacher should explain the content, structure, and connections clearly. Teaching can be strategic - empowering students and encouraging independent learning, or cooperative - encouraging students to handle disagreements amicably by working in pairs or small groups.

Good teachers take into account all the above-mentioned aspects of good education and then select appropriate instructional method according to the subject matter and level of students. A teaching method comprises of the techniques and the principles used for educating the students. There are many methods of teaching used by today's teachers in all fields according to the needs of the subject matter being taught. Teaching methods have gone through a revolutionary development of their own as the philosophy of education developed over the time from Idealism to Realism,

Progressivism, Pragmatism, and Existentialism. The classrooms environment has shifted from teacher-centered to studentcentered and finally to Individualism with time encouraging the concepts of global village and virtual community. The present day students have to take charge of international issues and therefore the way they perceive the world around them is very different from the past generations.

New methods of teaching and sharing knowledge are being tested for this reason. No one teaching method is perfect and most times teachers have to mix and match strategies to enhance student learning. Each of the following methods has its advantages and limitation and these are discussed briefly in the following pages.

- 1. Lecture Method
- 2. Demonstration Method
- 3. Discussion Method
- 4. Project Method
- 5. Peer Teaching Method
- 6. Reflective Inquiry

Lecture Method:

Lecture method is the oldest teaching methods in the history. In this method the teacher shares knowledge with the students that have the role of passive listeners. This method although overused and abused especially in Pakistan has its merits. Some characteristics of lectures are that they can be used to introduce new subject or summarize ideas. Large groups of

Tele: E-mail addresses: dr_f_khurshid@yahoo.com

^{© 2012} Elixir All rights reserved

students can attend a lecture and access of knowledge is easy more so if the topic is some research topic. Main points can be reemphasized efficiently and best of all lectures can be incorporated with other methods of teaching. For example, a brief introductory lecture can give direction and purpose to a demonstration or prepare students for a discussion by telling them something about the subject matter to be covered (Dynamic Flight, 2003). It can also be a method of choice to add insight or expand on the previously presented materials. One of the demerits of lecture method is that it fosters passiveness in students. This can be countered however, if the presenter knows and responds to the background knowledge of the learners. While preparing for the lecture, it should be kept in mind that if it is too long, the students will not be able to pay attention. Most listeners have an attention span of no more than 10 - 15 minutes and retention rate for lecture is about five percent after a day. If short intervals for feedback are incorporated, the problem of attention span can be overcome. The retention issue can be improved by including small group activities with the lecture. Some open-ended questions as group activity or whole class can also be used to supplement effectiveness of lecture, for example:

- Please share what we have learned so far.
- Do you think this information is important? Why?
- Does this information relate to our previous lesson?
- How can we apply this knowledge in other situations?

Demonstration Method

According to a famous Chinese proverb if you give a fish to a man you feed him for the day but if you teach him how to fish, to feed him for life. The Demonstration method is based on that principle. We learn better by doing things. This is a process of teaching by examples or experiments. It is most favored by science teachers. Teacher demonstrates the scientific facts and procedures in front of students and they can personally relate to the information presented. As the interest of the student is raised, it helps in the retention of information for a longer time also because it establishes connections with the real world applications of the demonstrated facts. Students can also learn mental skills by this method under supervision. Skills requiring the use of tools, machines, and equipment are particularly well suited to this instructional method. There are five essential phases of demonstration method to be effective as follows:

- 1. Explanation
- 2. Demonstration
- 3. Student Performance
- 4. Instructor Supervision
- 5. Evaluation

The teacher sets up and explains the lesson objectives to the students before demonstration. The teacher then supervises while students perform the steps allowing them to practice various steps. Evaluation is a vital next step of the process to check learners' progress.

Discussion Method

Discussion method allows the students to participate in the learning process actively. They provide ideas, information, experiences, and opinions while trying to answer the question posed by the teacher. In order for this strategy to work best, the teacher should prepare opening or the lead-on question with possible answers. The purpose is to start the discussion after which the teacher should wait patiently allowing student to work the problem among them. It may take some time initially but as discussion takes momentum, students become more confident.

As the discussion gets under way, the teacher should listen keenly to various responses. Teacher may use some directional

questions during the discussion to guide the discussion in desired direction discretely. The teacher aims to draw out what the students know, rather than telling them. This is the opposite of the lecture method. The instructor should remember that the more intense the discussion and the greater the participation,

Project Method

The project method empowers the students to take charge of their own learning. The learning outcomes are based on academic content standards and key concepts for the level. This method encourages deep understanding in students and like discussion method initiated by an open-ended question. The students have to use critical thinking and analysis to synthesize something new (Buck institute of Education, 2012).

According to Mosston nine decisions are transferred from the teacher to the student, these are:

i.Location,

ii.Order of tasks,

- iii. Starting time per task,
- iv. pace and rhythm,

v.Stopping time per task,

vi.Interval,

vii.Initiating questions for clarification,

viii. Attire and appearance, and

ix.Posture (Moston, 2002).

One of the advantages of project method is that the teacher can move around in the class and give feedback to individual students on the time which can benefit the student and increase confidence. Teacher directs the class and has the control at the same time; students can develop at their own rate and increases the social interaction and motivation level (Blakemore, 1983).

Students gain a deeper understanding of the concepts and standards at the heart of a project. Projects also build vital workplace skills and lifelong habits of learning. Projects can allow students to address community issues, explore careers, interact with adult mentors, use technology, and present their work to audiences beyond the classroom. PBL can motivate students who might otherwise find school boring or meaningless (Buck institute of Education, 2012).

Peer Teaching

Peer teaching also known as Learning by Teaching boosts student confidence and enhances communication and public speaking skills. In this strategy, individual students or groups are assigned topic. Students research the topic and then plan and prepare a lesson, which they have to present in the class. They get to play the role of the teacher and gain confidence.

The origins of peer teaching can be traced back to the ancient Greeks, Aristotle in particular. The archons or student leaders used to help other students in comprehending the tenets of philosophy being taught by Aristotle at the time. Like the project method, research and other study skills are developed. The value of responsibility of their own learning as well as others is gained. This helps to sharpen their leadership skills. Benefits include improved understanding and performance in the subject area involved, improved confidence and study skills, as well as communication skills.

According to Joseph Joubert, the 19th century philosopher, "to teach is to learn twice." The Moravian teacher, John Comenius wrote in 1632 that the saying "he who teaches others, teaches himself" was very true (Whitman, 1988). Reflective Inquiry

Reflective Inquiry is a teaching method that requires students to be trained in higher level thinking. A whole mindset has to be developed before it can be applied at undergraduate level. Simpler methods that encourage higher level thinking processes like project method or experimental method are stepping stones for reaching the level when method of reflective inquiry can be used.

Inquiry method is designed to improve the critical and analytic thinking in students. The specific subject knowledge as well as thinking process specific to the particular subject are necessary prerequisites for this technique to be successful. The generalized model of reflective inquiry is consistent with thinking processes across disciplines (Donald, 2000).

In this method, students initiate the learning process. They decide the topic of inquiry, and develop question they want to answer on their own. A number of very diverse thinking skills are emphasized. The philosophy existentialism promotes the power of individual differences and therefore the responsibility to take charge of their own life and solve the issues of the world they have to live in. the role of the teacher is that of a facilitator and guide only.

In the words of Garrison, "With the developments in communication technologies, exponential growth in knowledge and need for advanced intellectual abilities to productively function in the modern world, it is imperative that we rediscover the traditional values of higher education and design learning experiences that model and facilitate reflective inquiry" (Garrison, 2000).

Statement of the Problem

The education system in Pakistan needs reforms in many areas. Teacher in-service training is one area in which a lot needs to be done. The field of teaching methodologies has undergone major changes in the modern world. The quality of education can be improved if new methods of teaching and research-oriented techniques are introduced. Students have access to internet and other information technology as the world has turned into a global village. In order to bring up the level of education system, teachers need to try new methods of teaching and this aspect should be explored.

Research Objectives

The objectives of the study were:

1. Explore various teaching methods used by teachers in different subject areas and find any commonalities and or differences.

2. Find out which instructional method is used more often by the teachers of the departments of Education, Management Sciences, Economics, Public Administration, Mass Communications, and Information Technologies and why.

3. Measure the effect of demographic variation in the determination of the teachers' inclination towards specific teaching methodologies.

4. Measure the effect of demographic variations in the determination of the students' inclination towards specific teaching methodologies.

Research Questions

In order to achieve these objectives, the following research questions were formulated:

1. What are the most commonly practiced teaching methods at university level?

2. Is there any discrepancy in student opinion of what teaching methods are commonly practiced by teachers?

3. Is there any effect of academic qualification of the teacher on the teaching method practiced by them?

4. Does teaching experience affect the teaching method used by teachers?

5. What is the most favored method of teaching among university level teachers in public sector universities?

6. Which teaching method is least favored by teachers?

7. Which teaching method do most students prefer?

8. Is the teaching method preferred by students different from the one practiced by teachers?

Methodology

Participants

The sample of the study consisted of teachers and students, the sample of the teachers was consisted of 38 university teachers of which 11 were men and 27 were women from public sector. The job experience of teachers ranged from 1 to 27 years, and educational qualifications from masters to PhD. Other specifications were the department, type of employment and class size. The second sample was students' sample which was consisted of 97 students among 39 was boys and 58 were girls from public sector universities. These students were enrolled in the graduation courses at their respective universities in the same disciplines as the teachers in the sample. Instruments

The teachers and students from specific departments (Social Sciences, Management Sciences, Information Technology, International Relations) of public sector universities were approached and requested to participate in the study.

Data was collected using two sets of questionnaires developed by the researchers, one for teachers and the other by students. The questionnaire consisted of 25 items. The responses were recorded on five points rating scale with response categories of usually, often, sometimes, rarely, never. The scores assigned to these categories range from 5 - 1. A ranking scale was designed for teachers as well as students on their respective questionnaires. The respondents were asked to rank the given teaching methods on a scale of 1 - 7 according to the effectiveness of the methods in their opinion. The number 1 to be assigned to the least effective method and 7 to the most effective method of teaching.

Procedure

The teachers of the Departments of education, Management Sciences, economics, Public administration, mass Communication, and Information technology in public sector universities were approached formally in their classroom settings. After their permission, they were requested to fill out the questionnaires with as much accuracy as possible. They were given as much time as they needed to complete the questionnaires. The students of same universities in the above mentioned departments were approached and requested to complete the questionnaire with care and honesty. The students were given as much time as they needed.

Reliability

Reliability was established by split-half method. It is seen that the reliability of the first half with 13 items is 0.708. The second half had 12 items with reliability of 0.844.

Results and Discussion

To explore the various teaching methodologies used by teachers of public sector universities in various subject areas, the Means and Standard deviation were calculated for variable 'gender'. The results showed that both male and female teachers used 'Lecture' method of teaching most of the time, whereas 'peer teaching' method was the least used method of Instruction at university level (Table 1).

Next, the sample's mean and standard deviation were calculated for the variables 'Class Strength' and 'service experience'. The most commonly used method of instruction is Lecture method regardless of the class strength. The next is reflective inquiry, the least commonly used method is the peer teaching at higher education level (Table 2) and (Table 3).

It is therefore; concluded that gender does not play an important role in the choice and use of teaching method at university level. The variables 'class strength' and 'service experience' also do not play an important in the selection of teaching strategy by the teachers.

Next the sample's mean and standard deviations were calculated for the variable 'Qualification'. The most commonly used method of instruction regardless of the teacher qualification is 'Lecture' method. This is followed by reflective inquiry and Discussion methods. Peer teaching method is not used very often according to the values in Table 4.

Next the sample's mean and standard deviations were calculated for the variable 'Qualification'. The most commonly used method of instruction regardless of the teacher qualification is 'Lecture' method. This is followed by reflective inquiry and Discussion methods. Peer teaching method is not used very often according to the values in Table 4.

Next, the teachers sample's mean and standard deviation were calculated on the SPSS, for the variable 'Department'. After comparing the mode of instruction in departments of Education, Management Sciences, and Economics, it becomes obvious that according to the teachers, the most commonly used method of instruction is 'lecture' method followed by 'Reflective Inquiry' and 'Discussion' method. The 'Peer teaching' method is the least common mode of teaching (Table 5.1.1).

When the mean and Standard deviation for students' sample were calculated for the variable 'Department' different results were observed. According to student responses, in the department of Education and Management Sciences, the most used teaching method is 'Project' method, while the most used method of instruction in Economics department was Lecture method. The least used method of instruction was 'Reflective Inquiry' in all three departments (Table 5.1.2).

Next, the teachers sample's mean and standard deviation were calculated for the variable 'department' for the departments of Public Administration, Mass Communication, and Information Technology. According to teachers' responses, the most common method of instruction is lecture method followed by Reflective Inquiry in all three departments. The least common method is the Peer teaching method (Table 5.2.1).

Next, the mean and Standard deviation for students' sample were calculated for the variable 'Department'. According to the students' responses, project method is the most commonly used method of instruction in Mass Communications and Information Technology followed by Lecture and discussion methods. In Public Administration department, the most commonly used teaching method is lecture followed by project and discussion. The least used method was Reflective Inquiry in all three departments (Table 5.2.2).

The third and last phase of this study deals with the preferred method of teaching from the perspective of teachers of various departments at public sector universities and the students of the same departments. A ranking scale was used to tabulate the choices. The mean and Standard deviation for teachers' sample were calculated for the variable 'Gender'. According to the data, the Male teachers prefer Peer teaching followed by Reflective Inquiry method. There is no one least favored method for male teachers; the other choices of teaching methods have very close values. The female teachers preferred lecture method followed by discussion method. The least favored method as effective tool of instruction was Reflective inquiry (Table 6).

Next, the mean and Standard deviation for teachers' sample were calculated for the variable 'Qualification'. According to the data, it is observed that the teachers with a PhD degree, ranked reflective inquiry as the best method of teaching while their least preferred method was lecture method. The teachers with M. Phil/ M.S and M.A/ M. Ed ranked Lecture method as the best method followed by Discussion method whereas their least favored method was Peer teaching (Table 7).

Next, the mean and Standard deviation for teachers' sample were calculated for the variable 'Department'. According to the data, the teachers of the departments of Education and Management Sciences prefer lecture method followed by Discussion and Project methods. The teachers of Education department rated Reflective Inquiry as their least favored method of teaching while teachers of Management Sciences ranked Reflective Inquiry and Project method lowest. The teachers of Economics department ranked Project method the highest followed by Peer teaching while Lecture method ranked lowest in their choice of methods (Table 8.1).

The teachers of Public Administration ranked Lecture method and Reflective Inquiry equally high followed by Discussion and Project methods. Demonstration ranked the lowest. The teachers in Mass Communication department ranked Reflective Inquiry as their top choice followed by Lecture and Discussion methods. Project method was the lowest ranked method of teaching. The teachers of Information Technology showed equal preference for Project and Discussion methods. Reflective Inquiry ranked the lowest in IT department (Table 8.2)

Next, the mean and Standard deviation for students' sample were calculated for the variable 'Gender'. According to the data, there is no marked preference of methods by Male students; by a small difference Discussion method is preferred to other methods. The Female students preferred Lecture and Reflective Inquiry methods by small margins compared to other methods (Table 9).

Next, the student sample's mean and Standard deviation were calculated for the variable 'Department'. The data reflects that the students of Education ranked Lecture method highest followed by Reflective Inquiry while Demonstration method was ranked lowest. The students of Management Sciences preferred Peer teaching method the most followed by Lecture method. The lowest ranking was given to Project method. According to data from Economics department, the students ranked Demonstration method as the most preferred followed by Project method while they ranked Reflective Inquiry as their least preferred (Table 10.1).

The students of Public Administration ranked Lecture method as the most preferred method of teaching followed by Discussion and Project methods. Their least preferred method was Reflective Inquiry. According to Mass Communication students, the Project method got the highest ranking followed by Demonstration while Peer teaching got the lowest ranking. The students of Information Technology department preferred Discussion method closely followed by Demonstration and reflective Inquiry Methods. Their least favored method of teaching was Lecture method (Table 10.2)

Conclusion

This study aimed at contributing to the existing literature on the factors affecting the quality of education. The study of

common influences on choice of teaching method can be used to enhance the quality of Instruction in particular and education in general. The results suggest that most of the university level teachers in public sector universities used Lecture method of teaching most of the time. There was no significant effect of gender, service experience, class strength, and /or qualification of the teacher on the commonly employed method of Instruction. As stated above Lecture method is the prevalent choice of teaching across the public sector universities. There was a significant difference of the frequency with which various teaching strategies are used in various departments for example; Education, Management sciences. Economics, Public Administration. Mass Communication. and Information Technology. The teachers of IT department used the most variety of teaching methods with focus on projects followed by Lecture and Discussion methods. The IT teachers' ranking of various methods matches the trends of the methods they use. The students ranking matched their teachers' preferences except that the students preferred Reflective Inquiry more than their teachers.

The participants of the study were asked to rank the teaching methods according to the effectiveness of the method. The study showed that highly qualified teachers recommend strategies that call for higher level thinking from students. The teachers that have a PhD in their field ranked Reflective Inquiry as the most effective strategy followed by Project and Discussion methods. The teachers with M. Phil /M.S and M.A preferred Lecture method.

Student participants' responses for ranking instructional strategies for their effectiveness suggest that there is significant difference in the choice depending on the subject they are studying. Students of Education and Public Administration preferred Lecture Method while students of Economics, Mass Communication and IT rated Project method at the top.

It can be concluded from the above study that the students today have access to information in all fields due to internet and other media sources. They can make their own choices about what methods of instruction are more suitable for the subjects they are studying. The role of teachers has shifted from that of information/ knowledge provider to that of a facilitator in the learning process of the students.

Recommendations

In order to improve the quality of education at higher education level in the universities, the results of the study provide many insights. Following are some recommendations for teachers' benefits to enhance student learning:

• Teachers should act as facilitators of knowledge and provide opportunities for learning and development. This can be achieved by using instructional strategies that call for higher level of thinking process, including but not limited to induction/ deduction, critical thinking and analysis and synthesis.

 \circ Using multiple teaching methods depending on the topic and learner outcomes in mind should be used. This provides variety and caters to the multiple intelligences and learning aptitudes of the students in the class.

• Teachers can discuss the course outline with the students at the beginning of the semester in order to gain insight into their personalities to decide which methods will be more suitable for the particular group.

• Students input about the instructional strategies for certain topic. This will give them the feeling of confidence and empowerment enhancing their motivation for the coursework. Significance

With the rapid growth of information technology, life is changing in fast lane. Change is now the common mode of life. For any nation to stay on par with these changing global scenarios, education of the masses is the only way. The education system need to provides access to contemporary learning skills in a this rapidly changing global setting alongside a political framework that is not discriminating for any individual in the society.

Democracy cannot flourish without active participation of citizens. This requires capacity for the cultivation and application of democratic principles. The capacity to develop, understand, and apply democratic principles must be generated in turn through an educational process (http://www.itacec.org).

Having established the general need to prioritize educational standards, the next step is to formulate some procedures to take firm steps in positive direction. The education system is crippled on many counts. One area is the need for teacher education providing them with tools and strategies to cope with and improve upon the current demands of time.

The present research was conducted to understand the trends of teachers at higher education level in public sector universities. This project becomes significant if the educational community can perceive the importance of the role it can play for the nation by staying update with the global trends, doing research to further the standards of education in Pakistan. There is no shortage of human resource in our country; the need of time is the channel the energy of masses into intellectual and practical arenas. By improving the teaching methodologies used in the universities or adapting the oft-used strategies to meet new vistas will definitely benefit us as a nation.

Bibliography

Bean, J. (1997). *Curriculum Integration*. New York: Teachers College Press.

(1983). In H. &. Blakemore.

Buck institute of Education. (2012). *what is pbl*. Retrieved may 22, 2012, from http://www.bie.org: http://www.bie.org/about/what_is_pbl/?gclid=CNWzqcyombAC FUFG3wodpBzC2g

(2000). In J. Donald, *Learning to Think: Disciplinary Perspectives*. San fancisco: Jossey-Bass.

Dynamic Flight. (2003, Nov). Retrieved 5 22, 2012, from http://www.dynamicflight.com:

http://www.dynamicflight.com/avcfibook/methods/

Garrison, D. (2000). *Inquiry and critical Thinking - Reflective Inquiry*. Retrieved May 25, 2012, from http://commons.ucalgary.ca:

http://commons.ucalgary.ca/documents/ReflectiveInquiry.pdf

http://www.itacec.org. (n.d.). Retrieved 5 20, 2012, from www.itacec.org:

http://www.itacec.org/profile/intro.htmitacec.org

McGee, C. (1997). *Teachers as curriculum decision-makers*. Palmerston North: Dunmore Press.

Moston, A. &. (2002).

Ramsay, P. (1985). *The Demestication of TEACHERS: a CASE OF SOCIAL CONTROL*. Palmerston North: Dunmore Press.

UNESCO, USAID. (2006). Retrieved May 20, 2012, from http://www.teachereducation.net.pk:

http://www.teachereducation.net.pk

(1988). The Benefits Of Peer Teaching. In N. A. Whitman, "Peer Teachin: To Teach Is To Learn Twice". ASHE-ERIC hIGHER eDUCATION rEPORTS.

Fauzia Khurshid et al./ Elixir Edu. Tech. 50 (2012) 10480-10487

Table 1 Comparison of university teachers' use of teaching methods by Gender								
	М	ale	Female					
Teaching method	Mean	SD	Mean	SD				
Lecture	25.00	4.775	26.22	11.257				
Demonstration	12.25	2.252	11.56	2.708				
Discussion	16.91	3.506	17.11	1.948				
Project	15.18	3.060	14.30	2.985				
Peer Teaching	10.45	3.012	9.63	2.662				
Reflective inquiry	21.27	3.467	19.56	3.203				

Table 2 Comparison of university teachers' use of teaching methods by Class Strength										
Teaching method	Up t	o 20	21 -	40	41	- 60	Abov	e 60		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Lecture	25.00	2.887	25.86	4.100	26.06	14.771	27.00	3.464		
Demonstration	9.00	2.517	12.14	1.676	12.50	2.251	12.57	2.820		
Discussion	17.00	2.380	17.14	3.237	16.50	2.503	18.00	1.633		
Project	14.14	3.078	14.29	3.773	14.25	2.840	15.86	2.968		
Peer Teaching	10.00	2.082	10.14	2.911	9.69	3.260	9.86	2.673		
Reflective inquiry	19.00	4.041	20.00	3.786	20.31	3.321	20.86	2.673		

Table 3 Comparison of university teachers' use of teaching methods by Service Experience									
	Less t	han 5	5 - 10) years	11 -20) years	More th	nan 20 y	
Teaching method	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Lecture	24.83	4.134	27.92	15.845	23.50	5.447	29.00	1.414	
Demonstration	12.44	2.148	10.62	3.015	12.00	2.708	13.00	2.828	
Discussion	16.72	2.675	16.46	2.259	18.50	1.000	20.00	0.000	
Project	14.50	3.365	14.46	2.876	14.25	3.304	16.00	1.414	
Peer Teaching	10.11	3.027	9.54	2.570	8.00	0.816	13.50	0.707	
Reflective inquiry	21.22	4.095	18.77	2.421	19.25	0.500	20.50	0.707	

Table 4 Comparison of university teachers' use of teaching methods by Qualification								
		PhD		M. Phil/ M.S		M.A/M.Ed		
Teaching method	Mean	SD	Mean	SD	Mea	n SD		
Lecture	24.92	4.641	27.50	15.535	24.92	2 3.029		
Demonstration	12.25	3.079	11.93	2.235	11.2	5 2.563		
Discussion	17.25	2.54	16.29	2.972	17.7	5 1.545		
Project	14.58	2.392	14.43	3.524	14.6	3.114		
Peer Teaching	10.25	2.864	9.79	2.940	9.58	3 2.610		
Reflective inquiry	20.00	2.730	19.86	3.880	20.3	3.447		

Table 5.1.1 Comparison of university teachers' use of teaching methods by Department								
	Ed	ucation		Management		Economics		
Teaching method	Mean	SD	Mean	SD	Mean	SD		
Lecture	24.88	3.271	28.25	16.858	23.33	4.041		
Demonstration	9.62	3.068	12.00	2.216	10.67	3.215		
Discussion	17.00	2.390	17.58	1.443	16.00	5.196		
Project	13.75	2.765	14.58	3.029	14.67	3.512		
Peer Teaching	9.62	2.615	10.75	2.563	10.00	3.000		
Reflective inquiry	18.00	3.024	20.67	2.498	19.00	5.568		

Table 5.1.2									
Comparison of university teachers' use of teaching methods by Department – students' perspective									
	Edu	ucation		Management Science		Economics			
Teaching method	Mean	SD	Mean	SD	Mean	SD			
Lecture	20.25	2.731	19.70	2.869	19.67	4.806			
Demonstration	11.90	2.864	9.50	3.028	11.20	2.624			
Discussion	15.40	2.604	13.10	3.510	12.47	3.523			
Project	26.75	4.327	21.30	6.482	17.60	5.539			
Peer Teaching	11.60	1.875	9.40	2.171	7.80	2.426			
Reflective inquiry	8.30	1.755	7.60	2.633	5.53	2.446			

Table 5.2.1 Comparison of university teachers' use of teaching methods by Department									
Teaching method	Public Ad	ministration		Mass Communication	Mass Communication				
	Mean	SD	Mean	SD	Mean	SD			
Lecture	25.75	3.500	26.00	5.292	24.67	4.726			
Demonstration	14.75	0.500	13.67	1.155	12.00	1.000			
Discussion	15.75	2.986	19.00	1.000	17.33	2.309			
Project	15.00	2.828	17.33	2.082	15.33	3.512			
Peer Teaching	9.25	5.500	10.67	1.528	9.33	0.577			
Reflective inquiry	23.00	2.449	22.00	3.000	20.67	3.055			

Table 5.2.2 Comparison of university teachers' use of teaching methods by Department- students' perspective								
	Public Ac	dministration	memous	Mass Communication	perspec	Information Tech.		
Teaching method	Mean	SD	Mean	SD	Mean	SD		
Lecture	22.50	3.024	20.05	2.519	21.00	3.398		
Demonstration	11.12	2.997	13.19	1.750	11.00	2.697		
Discussion	14.25	1.581	14.00	2.449	15.35	2.790		
Project	22.00	4.243	20.14	3.454	25.43	4.347		
Peer Teaching	8.88	2.696	8.14	2.151	10.39	2.105		
Reflective inquiry	7.00	1.852	6.71	1.617	6.78	2.110		

Table 6 University teachers' Ranking of teaching methods by Gender								
	М	ale	Fen	nale				
Teaching method	Mean	SD	Mean	SD				
Lecture	4.83	2.228	5.48	1.909				
Demonstration	4.73	1.737	4.26	2.114				
Discussion	4.64	1.912	5.26	1.723				
Project	4.64	4.644	4.93	2.093				
Peer Teaching	5.27	1.679	4.04	2.394				
Reflective inquiry	5.09	1.136	3.78	2.621				

Table 7 University teachers' Ranking of teaching methods by Qualification									
	Ph	ιD	M. Ph	il/ M.S	M.A/	M. Ed			
Teaching method	Mean	SD	Mean	SD	Mean	SD			
Lecture	4.00	2.174	5.93	1.817	5.83	1.467			
Demonstration	4.50	2.111	4.40	1.829	3.75	2.491			
Discussion	4.83	2.082	4.79	2.007	5.67	0.995			
Project	5.00	1.952	4.17	1.899	5.17	1.749			
Peer Teaching	4.50	2.236	3.21	1.672	2.58	2.575			
Reflective inquiry	5.17	1.992	3.64	2.134	3.75	2.769			

Table 8.1 University teachers' Ranking of teaching methods by Department								
	Edu	cation		Management		Economics		
Teaching method	Mean	SD	Mean	SD	Mean	SD		
Lecture	5.88	1.356	5.17	2.691	4.00	3.000		
Demonstration	3.12	2.031	4.33	2.146	5.00	1.000		
Discussion	5.62	0.744	4.92	2.193	4.33	1.528		
Project	5.50	0.926	3.92	2.193	6.00	1.000		
Peer Teaching	3.38	1.685	4.58	2.811	5.00	2.646		
Reflective inquiry	3.12	2.416	3.58	2.746	4.67	0.577		

Table 8.2 University teachers' Ranking of teaching methods by Department										
	Public Administration Mass Communication Information Tech.									
Teaching method	Mean	SD	Mean	SD	Mean	SD				
Lecture	5.50	1.000	5.33	1.528	6.00	1.732				
Demonstration	3.00	2.582	5.00	2.646	5.67	0.577				
Discussion	4.50	2.082	5.33	2.082	6.67	0.577				
Project	4.25	2.062	3.67	2.082	6.67	0.577				
Peer Teaching	3.75	2.872	4.33	1.155	6.00	1.732				
Reflective inquiry	5.50	1.732	5.67	2.309	5.00	1.000				

Fauzia Khurshid et al./ Elixir Edu. Tech. 50 (2012) 10480-10487

Table 9								
Ranking of teaching methods by Gender- students' perspective								
		Male	Female					
Teaching Method	Mean	Standard Deviation	Mean	Standard Deviation				
Lecture	4.54	2.024	4.36	2.058				
Demonstration	4.56	1.501	4.16	1.852				
Discussion	4.64	1.828	4.14	1.887				
Project	4.38	1.982	4.19	1.801				
Peer teaching	4.13	1.838	4.19	2.106				
Reflective inquiry	4.00	1.686	4.36	1.662				

Table 10.1									
Ranking of teaching methods by Department – students' perspective									
	Education			Management		Economics			
Teaching method	Mean	SD	Mean	SD	Mean	SD			
Lecture	4.45	2.259	4.70	2.003	4.80	1.612			
Demonstration	3.25	1.585	3.50	1.841	5.47	1.552			
Discussion	4.20	2.042	3.60	1.955	4.40	1.454			
Project	3.80	1.508	2.80	1.989	5.07	1.624			
Peer Teaching	3.95	2.038	5.20	2.098	4.60	1.724			
Reflective inquiry	4.35	1.663	3.90	1.370	4.00	1.512			

Table 10.2 Ranking of teaching methods by Department- students' perspective									
	Public Administration Mass Communication		Information Tech.						
Teaching method	Mean	SD	Mean	SD	Mean	SD			
Lecture	5.12	2.167	3.76	1.972	4.43	2.150			
Demonstration	4.12	0.991	4.19	1.806	5.04	1.331			
Discussion	4.62	2.066	3.86	1.931	5.09	1.703			
Project	4.37	1.598	4.52	1.965	4.52	1.974			
Peer Teaching	4.12	2.167	3.24	2.047	4.48	1.780			
Reflective inquiry	3.25	1.832	3.90	1.895	5.00	1.446			