# NEAR EAST UNIVERSITY EDUCATIONAL SCIENCES INSTITUTION DIVISION OF CURRICULUM AND INSTRUCTION

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# DETERMINANTIONS OF LECTURER'S OPINIONS ABOUT EFFECTIVE TEACHING IN AGRICULTURE DEPARTMENTS

#### **MASTER THESIS**

**AVIN HAMAAZIZ ALLAHKARAM** 

Nicosia
June 2016

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**DECLARATION** 

# **DECLARATION**

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by thesis rules and conduct, I have fully cited and referenced all materials and result that are not original to this study.

Name, Last Name: Avin Allahkaram

Signature

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Avin Hamaaziz Allahkaram.

#### ABSTRACT

# DETERMINANTS OF LECTURERS OPINIONS ABOUT EFFECTIVE TEACHING IN AGRICULTURE DEPARTMENTS

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MA, Educational Programs and Instruction

Supervisor Assist. Prof. Dr. Deniz Özcan

#### June, 2016

The aim of this study is to investigate the determination of the lecturers opinions about effective teaching and teaching methods used in agricultural faculty of Sulaimani University in Iraq through the lecturers view. Furthermore, the questionnaire of this study has been obtained from a survey by Morin, Nedzela and Quon (2001) whereby employees in Ottawa University in Canada for the same aim of this study. The applied questionnaire contains four major sections concerning the view of the lecturers on teaching, teaching methods, teaching tools and factors that hindering teaching.

The quantitative data was collected throughout the applied questionnaire that consists of 42 items in the faculty of agricultural science of Sulaimani University which has seven departments and more than 400 lecturers with different titles. The sample of 121 lecturers have been collected that categorized into two variables (gender and working experience). Moreover, to conduct statistics techniques, Microsoft Excel and SPSS software has been used.

Concerning the view of teaching, finding suggest different views in many items between male and female lecturers however less experienced lecturer candidates view is varying only in terms of communications between lecturer and students and promoting conceptual changing in students from more experienced ones. Regarding teaching methods, lecture method ranked as the best methods however the other proposed methods are acceptable too. Male lecturers are using project-based and experimental methods significantly more than female lecturers in our sample. However, when we analyzed the finding in terms of working experience we couldn't find any significant differences. Examining teaching tools the lecturers participants respond positively to the suggested teaching tools on average. Men lecturers are benefiting significantly from web-based software and charts more than female ones. In term of working experiences we found that the less experienced lecturers are using slides significantly more than the other ones. Finally, in respect to factors that hindering teaching, most of the lecturer respondents agree with the proposed items and no significant difference in terms of gender found. Lastly, in term of working experience the lecturers with less experience skills think that research commitments hinder their teaching more than the others.

Keywords: Teaching, teaching methods, teaching tools, agricultural education, Sulaimani University.

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## **CHAPTER I**

# **INTRODUCTION**

# 1.1. Background of the Study

# 1.1.1. Teaching, Learning and Teaching Methods in Higher Education

Defining term of teaching could be complicated. However numerous definitions could be drawn by various scholars. Coe et al (2014) defined effective teaching as a main dimension which positively affects students' academic achievement and yields future success in their life.

It could be indicated that teaching and learning are the both sides of a coin and higher education plays an substantial role in society by creating new knowledge and then transmitting it to students and enhancing innovation. (Eid,2014)

Furthermore, Brown and Atkins (1988) have described teaching as an interactive and intentional activity accordingly teaching is a process of providing opportunity for students to learn. However, students may not learn constantly what the teachers intend or they may learn notions which teachers didn't intend them to learn. The most accepted criterion for measuring good teaching is the amount of student learning that occurs.

Heimlich (1990) describes teaching style as the tendency toward behavior in the teaching-learning exchange that generates from beliefs, values, aspirations, attitudes, personal and social histories and cultures. Moreover, He specified sensitivity and inclusion as the two domains of teaching style. (Cano, et al., 1992, p. 48) State that "The sensitivity domain is based on the ability of the teacher to 'sense' the shared characteristics of the group learners. Inclusion domain is the teacher's willingness and ability to utilize techniques to enhance the learning experience based on the group's characteristics" furthermore they mention that with these two domains, teachers can be labeled as an expert, provider, facilitator or enabler.

Claxton and Murrell (1987) proposed that learning style could be an extremely significant element in the move to improve curricula and the teaching process in higher education. Anderson and Adams (1992) mention that more

attention than ever was being concentrated on how to meet the challenge of increasing diversity in the classroom. They also discuss that one of the most significant challenges that university instructors face is to be permissive and perceptive enough to recognize learning differences among their students. Moreover, they state that many instructors do not realize that students vary in the way they pursue and understand knowledge. Anderson and Adams (1992) also state that;

"The notion that students' cognitive skills are corresponding at the collegiate level [proposes] arrogance and elitism by sanctioning one group's style of learning while discrediting the style of others".

Coe et al(2014) have listed main elements which is required for effective teaching. These elements could be summarized as follows;

- a. Pedagogical Content knowledge,
- b. Quality of Instruction,
- c. Classroom Climate,
- d. Classroom Management,
- e. Teachers beliefs
- f. Professional Behaviors.

Moreover, Creemers and Kyriakides (2006) have proposed a model for effective education. The components of the model could be indicated as the following;

- Orientation: Could be improved by providing goals of a specific tasks related with the course.
- Structuring: Could be formulated by providing background information about the topic to be covered during a class time. Moreover, indication of review goals is also focal, particularly during revisions. It could be also stated that outlining the content to be performed and promoting a smooth transition among parts of the course is vital for great (effective) education.

- Questioning: Preparing a different questions which are parallel to the topics taught and enabling a time for a students to solve and promoting a student responses.
- Teaching Modeling: Teachers should engage with forming problem-solving issues and encourage their students to deal with problem-solving strategies.
- Application: Teachers are supposed to transmit small group tasks to generate chances to practice and apply a given knowledge.
- Classroom as learning environment: Encouraging interactions among teacherstudent, student- teacher and student-student. Also, define rules to be obeyed during class to create better learning atmosphere for the students.
- Management of time: could be enhanced by carefully organizing the classroom management and by maximizing engagement rate.
- Assessment: Teachers need to focus more on usage of adequate techniques to gather data about the level of knowledge and abilities of their students and evaluate their own skills and practices for effective education.

#### 1.1.2 Teaching and Learning

Bootkin et al (2014) defined the term of learning as a process of engaging new situations which is changing rapidly.

Mclerney (2014) stresses fundamental mechanisms of the effective teaching and learning as a practices which values creativity and innovations with enriched research and learner orientations that play a key role to generate motivated learners which exhibits physical and psychological well-being. Therefore, understanding underlying factors which play crucial roles at learning process is also fundamental. According to Bootkin et al (2014) family upbringing, peer groups and communication media are some of the primary factors which may affect learning process.

Moreover, it is also argued that argued teaching style and learning style are related to each other. Thus, teachers should have personal knowledge, personal practices to facilitate student learning. It is suggested that personal knowledge refers to a knowledge about the students and the methodology to be followed and

knowledge about the content while personal practices represents the provision of feedback and reports related creation of safe learning environment. Furthermore, it is also indicated that some of the main dimension which play a key role on the teachers' effectiveness could be suggested as showing enthusiasm, maintaining an academic focus and provision of opportunities to students in order to learn better through well-managed classrooms (Mclerney, 2014).

According to Atkins et al (2002) effective teaching intellectually requires teacher's knowledge and experience about the topic which is being taught. Moreover, Anderson (1992) identified the main characteristics of the effective teaching as clarity of the teacher's explanations and directions, creating a task-oriented classroom climate, arranging numerous learning activities, controlling the progress of students and in case of necessity taking measures about the students' weak points, establishing well-formed and well-organized course, supplying positive and constructive feedback to students and making good use of questioning technique.

Furthermore, March(1982) expressed that effective teaching should be systematic, stimulating and caring which increases motivation and reduces a negative attitudes learning and leads higher achievement and, more importantly, effective teaching is crucial to concern a successful teaching strategies in the parameter of what teachers and students value.

Atkins et al., (2002) pointed that in order to provide effective teaching teachers should need to concentrate more on thinking and problem- solving issues to analyze and observe topic to generate most adequate methodology and determine critical strategies and course-related materials and to organize and structure ideas, information and activities for the students.

Kyrinacou (2013) stressed that attentiveness, receptiveness, and appropriateness are three fundamental factors which play critical roles to shape effective teaching. The term of attentiveness could be expressed as cooperativeness of the students to the learning where receptiveness could be described as a sense of students motivation and attend to learning experience. Appropriateness could be

defined as the level of adequateness of learning experiences for the defined learning outcomes by considering a previous knowledge and understanding of students. It is also indicated that psychological concepts such as motivation, reinforcement and self-concept are also important mechanisms which influence effective teaching.

Moreover, Newcomb et al., (1986) listed main principles of teaching and learning as the following;

- a. Meaning, organization and structure of the teaching material should be clarified to learners,
- b. Degree of readiness of teachers to teach and learners to learn,
- c. Learners should be motivated to learn,
- d. Learning activities and practices should match with needs, wants, and area of interests,
- e. Favorable behaviors of learners should be rewarded

As previously indicated this part of the current study would also attempt to provide information related with Agricultural Education and Effective Agricultural Teaching

# 1.2 Teaching in Agricultural College in Universities

Several studies concerning teaching and learning in agricultural education have been addressed in literature previously, in this study the sufficient number of them which are relevant to the objectives of this thesis has been reviewed.

Agricultural knowledge systems play an essential role in developing and disseminating knowledge, information, and technologies relevant to developing global food security and environmental sustainability. Agricultural education is one of the agricultural knowledge systems components. Acker (1999) assessed the quality of higher education of agriculture in his study whether there is need for

reform or not, the result of the study exhibits the necessity for making substantial improvement in the quality of higher agricultural education globally. Earlier study conducted by Cano, Garton, and Raven (1992) by which investigated teaching, learning and personality of preservice teachers of agricultural education, regarding teaching style the result indicates that student-centered teaching preferred but different preferred learning styles have been revealed. Torres and Cano (1995) state that learning style provides significant insight into the way learners process information and knowledge to learn as well as how teachers teach and finally how both teachers and students interact. In their study Torres and Cano (1995) at which titled as learning style in agriculture found that independent learning style tend to be preferable to male students in contrary dependent learning style was preferred by female students. The reviewed studies have been employed in US.

Far away from US, in the study of teaching styles in Agriculture College at Razi University in Iran Hamdhaidari, Agahi, and Papzan (2007) figured that the education in the agriculture college based on theory more than practice and the faculty staff facing many challenges and they education system hasn't change for some decades. In other study Jamel (2006) employed in College of Agriculture in Mosul University/Iraq about Teaching and Learning Styles, the result of the study revealed that instructors tend toward less students' involvement in active learning styles while independent learning styles were significantly acceptable by the students. The results also showed that third and fourth-year students were more preferring independent styles of learning comparing to first and second-year students.

Similarly, Jamil (2012) deals with teaching clarity in College of Agriculture in Mosul University/Iraq, the result pointed that a big proportion of agri-science have low clarity from student's perspective while student's achievement were better for high clarity teachers than low clarity teachers. Again another research by Idris (2014) investigated the attitude of the staff of college of agriculture in Mosul University in Iraq to assess the students for their teaching, the result shows that the average has negative attitudes toward evaluating students for the teaching and there was a not significant difference for attitudes of faculty members to evaluate students regarding

their teaching depending on (sex, qualification, years of service, scientific title) while the result showed significant difference based on scientific departments.

Robinson et al., (2012) examined the perceptions of teaching ability during teaching experience in agricultural education the result shows that the emerging teacher view identified some areas needed for growth and development but also identified their progress toward becoming a professional. The Self–Assured Teacher view showed that highly comfort and confidence in their teaching ability, which extended to their perception on developing lessons and teaching across the agricultural education curriculum. The Determined Teacher view identified confidence but not comfortable with their teaching ability.

Regarding accessibility of technology in agricultural education Coley et al., (2015) in the result of their study in Tennessee points out that Tennessee agricultural teachers are not necessarily adopt technologies for their classroom and many of the teachers didn't access to technologies adequately.

# 1.3 Motivation of the Study

Universities are educational institutions based on teaching different sciences regardless the nature the departments and faculties there is teaching and learning process in all faculties. On the other hand, teachers have different perspectives about the effective teaching styles. Many studies have been employed in agricultural education field over time. Despite the existence of several agricultural colleges in Iraq, only a few studies attempt the investigation of learning and teaching process and most of them conducted in Mosul University which is now unfortunately damaged by ISIS. This thesis is attempted to figure out the effective teaching styles in the college of agriculture in Sulaimani University from teacher's point of view.

# 1.4 Research Questions and Objectives of the Study

The aim of this study is to determine the teachers' opinions about effective teaching and teaching methods used in agricultural faculty of Sulaimani University in Iraq. More specifically, the study seeks to answer the following questions.

- 1. How are the views of lecturers on teaching? Is there any significant difference between the opinions of teachers about effective teaching according to;
  - a) Their gender
  - b) Working experience
- 2. Which teaching methods are used by the teachers frequently? Is there any significant differences between the teaching methods used by the lecturers according to;
- a) Their gender
- b) Working experience
- 3. Which teaching tools are used by the lecturers frequently? Is there any significant differences between the teaching tools used by the lecturers according to;
- a) Their gender
- b) Working experience
- 4. What are the factors that hinder the teaching? Is there any significant differences between the views of the lecturers about the factors according to;
- a) Their gender
- b) Working experience

# c) 1.5 Scope and Limitations of the Study

This study investigates the teaching methods in agricultural college in higher education from teacher's point of view but the study only conducted only in the faculty of agricultural science of Sulaimani University which has seven departments and more than 400 lecturers with different titles. The questionnaires distributes in all departments based on the number of academic staff of each department. <a href="http://agr.univsul.edu.iq/home">http://agr.univsul.edu.iq/home</a> retrieved from 30.10.2015

# 1.6 Research Methodology

The questionnaire of this study has been obtained from a survey by Morin, Nedzela and Quon (2001) whereby employees in UOttawa University in Canada for the same aim of this study. 225 professors have been contributed in the survey but the survey covers all faculties in UOttawa University. Quantitative research has been applied in this study. The sample of 120 participants in the population of more than 400 teachers in the faculty of agriculture of Sulaimani University contributed to this study and responded to our questionnaire at which categorized by gender and working experience. In order to reach to the objectives of the study descriptive statistic has been conducted to analyze the responses. To conduct statistics techniques, Microsoft Excel and SPSS software has been used.

# 1.7 Key Term Definitions

In this section the major terms that repeat most frequently in this thesis have been described to provide better understanding, they are:

- Teaching J. Brubacher describes teaching as it is an arrangement and manipulation of a situation in which there are gaps and obstructions, which an individual will seek to overcome and from in which he will learn in the course of doing so.
- Teaching Methods described as the learned generalized form of behavior which can be systematically applied in various teaching fields in order to facilitate and improve the learning outcome Mocinic (2012).
- Teaching Effectiveness Centra (1993), describes effective teaching as "that which produces beneficial and purposeful student learning through the use of appropriate procedures".
- Agricultural Education is a science of offering knowledge, information, and skills needed by many individuals to enter the advanced in agriculture careers as well as develops agricultural literacy Lee (2000).

# 1.8 Disposition

The following sections contain four chapters:

- Chapter Two Literature Review: this chapter contains conceptual framework of the thesis as well as most effective researches from literature has been reviewed and discussed.
- Chapter Three Data and Methodology: in this chapter the research design, reliability, and validity, sample and data collection process has been presented.
- Chapter Four **Finding and Discussions:** this chapter deals with the results of the study at which statistically has been analyzed, the results have been presented and discussed.
- Chapter Five Conclusion and Recommendation: this chapter outlines the summary of the study and recommendation for future studies.

## **CHAPTER II**

#### LITERATURE REVIEW

The primary aim of the current chapter is to present a detailed information regarding the nature of agricultural education, definitions of teaching, effective teaching, factors influencing effective teaching, effective teaching methods, importance of overall teaching experience on effective teaching, teaching tools which may be used for effective teaching.

# 2.1 Nature of Agricultural Education and Effective Agricultural Teaching

It could be stated that agriculture is not only farming and could be stressed that it is a component of universal economic network of imports and exports.

Agricultural industries necessitate new qualifications in order to catch up with the dynamic technological changes. Moreover, it could be expressed that skills can be improved by employing numerous teaching strategies and effectiveness. (Kahler, 1995).

Martin (1995) defined that agricultural education as a scientific study and applying all regulations and teaching techniques and learning to create better understanding for food, fiber and natural resource system. It could be stated that Vocational Act of 1917 created an opportunity for disciplined, well-shaped agricultural education to formulate excellent commitment among agriculture and education with the light of application of technical knowledge and execution and assessment of scientific principles and techniques which facilitates the development of agricultural manpower by well-defined and structured teaching process.

According to Shinn (1997) agricultural teacher could be described as a person who prepared a planned subject matter and learning experiences which would be beneficial to build knowledge and qualifications to take care of plants, animals, information and marketing agricultural products to provide insights which are related with implementing policies in agriculture industry.

Furthermore, Jenkins (2008) stated that vision of agricultural education as creation of awareness to people to understand critical role of agriculture on natural resources systems not only for personal benefits but for a well-being of community members.

It could be stated that profession of agricultural education may be beneficial to educate students for a bright carrier and generating a perception about global agriculture food and natural resources system. (National Strategic Plan and Action Agenda for Agricultural Education, 1999).

Moreover, Elbert and Baggett (2003) indicated that agricultural education may be helpful to create subway for a vacancy after high school graduation in labor force or prepare students for the future education at the university level by transferring necessary knowledge and abilities to them.

Pointing the importance of agricultural education is also critical for the current study. Purtle (2012) mentioned that learning the importance of agriculture education as a provision and practical knowledge which could be applicable on a numerous dimension in their life time such as engaging with daily tasks, completing course work in university or having a job in agricustural sector.

Rosenshine and Furst (1971) indicated that teacher behavior variables could be stated as generation of an opportunities to learn, focusing more on the opinions of students, enthusiasm, task-oriented, degree of criticisms carried and lastly performing structured comments.

Furthermore, Suydam (1983) dictated that effective teachers should be create awareness about achievement, promote cooperation, use time effectively and control acts of students in the classroom contexts.

Moreover, Luft and Thomson (1995) stated that agricultural teachers could be characterized as effective teacher when teachers reflect commitment to teach, transmit professional knowledge, show high self-confidence and build a good interpersonal relationships and have ability to solve problems also highly motivated to teach and lastly have high ethical values.

Velon (1996) argued ten principles at which effective teachers should practice. These principles could be expressed as

- a) Meaningfulness
- b) Open Communication
- c) Well- structured ideas
- d) Appropriate Modeling
- e) Prerequisites
- f) Novelty
- g) Appropriate Practice
- h) Pleasant Conditions
- i) Consequence
- j) Consistency

Moore (1994) offered three fundamental teaching technique in agriculture which are named as

- a) Formal step
- b) Project Approach
- c) Problem solving approach

Moreover Philips and Osborne (1988) stressed fundamental actors of effective teaching as democratic behavior reflected by teachers, application of primarily knowledge and skills, degree of readiness for both student and teachers learning by doing of agricultural problems.

Odubiyi (1988) indicated that the importance of communications on effective agricultural education to clarify the aim and importance of the course to students teaching and factors which may influence teaching methods.

# 2.2 Teaching and Learning

Bootkin et al(2014) defined the term of learning as a process of engaging a new situations which is changing rapidly.

Mclerney(2014) stresses fundamental mechanisms of the effective teaching and learning as a practices which values creativity and innovations with enriched research and learner orientations that play a key role to generate motivated learners which exhibits physical and psychological well- being. Therefore, understanding underlying factors which play crucial roles at learning process is also fundamental. According to Bootkin et al (2014) family upbringing, peer groups and communication media are some of the primary factors which may effect learning process.

Moreover, it is also argued that argued teaching style and learning style are related to each other. Thus, teachers should have personal knowledge, personal practices to facilitate student learning. It is suggested that personal knowledge refers to a knowledge about the students and the methodology to be followed and knowledge about the content while personal practices represents the provision of feedback and reports related creation of safe learning environment. Furthermore, it is also indicated that some of the main dimension which play a key role on the teachers' effectiveness could be suggested as showing enthusiasm, maintaning an academic focus and provision of opportunities to students in order to learn better through well managed classrooms(Mclerney, 2014).

According to Atkins et al (2002) effective teaching intellectually requires teachers knowledge and experience about the topic which is being taught. Moreover Anderson(1991) identified the main characteristics of the effective teaching as clarity of the teacher's explanations and directions, creating a task- oriented classroom climate, arranging numerous learning activities, controlling the progress of students and in case of necessity taking measures about the students' weak points, establishing well-formed and well organized cources, suppliying positive and constructive feedback to students and making good use of questioning technique.

Furthermore, March(1982) expressed that effective teaching should be systematic, stimulating and caring which increases motivation and reduces a negative attitudes learning and leads higher achievement and more importantly effective teaching is crucial to concern a successful teaching strategies in the parameter of what teachers and students value.

Atkins et al(2002) pointed that in order to provide effective teaching teachers should need to concentrate more on thinking and problem-solving issues to analyze and observe topic to generate most adequate methodology and determine critical strategies and course-related materials and to organize and structure ideas, information and activities for the students.

Kyrinacou (2013) stressed that attentiveness, receptiveness and appropriateness are three fundamental factors which play critial roles to shape effective teaching. The term of attentiveness could be expressed as cooperativeness of the students to the learning where receptiveness could be described as a sense of students motivatation and attend to learning experience. Appropriateness could be defined as the level of adequateness of learning experiences for the defined learning outcomes by considering a previous knowledge and understanding of students. It is also indicated that psychological concepts such as motivation, reinforcement and self concept are also important mechanisms which influence effective teaching.

Moreover, Newcomb et al.(1986) listed main principles of teaching and learning as the following;

- a. Meaning, organization and structure of the teaching material should be clarified to learners,
- b. Degree of readiness of teachers to teach and learners to learn,
- c. Learners should be motivated to learn,
- d. Learning activities and practices should match with needs, wants, and area of interests,
- e. Favourable behaviours of learners should be rewarded

As previously indicated this part of the current study would also attempt to provide information related with Agricultural Education and Effective Agricultural Teaching.

# 2.3 Mechanisms of Effective Teaching

#### 2.3.1 Motivating Students

As mentioned earlier motivation and reinforcement are the one of the main mechanisms of the effective teaching. Moreover Ericksen (1978) outlined that effective learning in classroom is closely related with the teacher's dexterity to grasp their interest which brought students to the course in the first place.

Sass (1989) argued that there are several factors which may effect the motivation of the students. These factors could be mentioned as student motivation to work and learn, persistence, special attention to the subject matter, self confidence and self- esteem (Blight, 1971).

According to Boeaerts (1995) indicated emotional and social factors could be influential on students' learning and these factors are linked with students motivation. Morover Atkins et al.(2002) argued that without motivation attention of students may fall and their quality of understanding may be seriously effected.

Mclerney et al(2001) expressed that motivation on education promotes a creation of opportunities which may faciliate the development of students' potential and generates life chances to become a successful people that they did not expect to become. Moreover, it could be stated that teachers have to focus more on providing an aid to their students to cultivate personal qualities og motivation which may provide students necessary sources for generating aspiration, independent learning and achieving goals.

On the other hand, Idol and Jones (2013) argued that teachers as a first step, should eliminate negative student motivation which could be described as a perception of that one does not have any roadmap to follow, anything to belief therefore nothing to manage and complete. When students are facing with negative

motivation, they might disturb their peers in the classroom and more likely o engage in-off- task thinking.

Idol and Jones (2013) also reported that teachers need to concentrate more on well- defined qualitative dimensions to create better understanding about the opinions of the students which is related with the learning process and it is suggested that in order to identify and avoid negative motivation teachers need to clarify the underlying factors which leads students to engage negative motivational behaviours. Negative motivational could be observed in forms of daydreaming, disturbing peers and low grades.

There are numerous methods that teachers could practice to encourage students to become more motivated for the effective teaching and learning concept. These methods could be stated as the following (Lowman, 1984; Lucas, 1990; Weinert and Kluwe, 1987; Bligh, 1971).

- a) Teachers could provide a frequent and positive (constructive) feedback which promotes beliefs of the students.
- b) Teachers should create opportunities for students' success by attaining course-related tasks that are not too easy and too difficult to overcome.
- c) Teachers should provide an aid to their students to find personal meaning.

# 2.3.2 Encouraging Students to Ask questions

Barnes (1983) agued that asking and answering questions are the key elements for learning process and effective teaching thus, questions should be designed in a way to grasp the students' attention and points the main points and also supports active and effective learning.

Moreover, Rosmarin (1987) mentioned that asking and answering questions would be one of the main driver to develop students' intellectual skills.

Strategies which could be executed by the teachers to encourage students to ask questions could be stated as the following

- a) Request Questions: Hyman (1982) argued that teachers might encourage students to ask questions by explicitly request questions from students and allow time to students to prepare their questions to ask. Futhermore it is also recommended to teachers to becareful while looking around the room in order to not to miss somebody's hand and avoid negative reactions to the questions asked by students. Negative reactions could be stated as avoidance of eye contact while answering questions, answering questions in an incomplete form, perceiving questions as interruptions instead of participation to learning process.
- b) Positive Comments: Watkins (1990) indicated that positive comments could be one of the useful strategy to encourage students to ask questions in class. Positive comments could be in forms of "thanking to students for his/her question(s)" or simply "indication of the question was a good question"
- c) Keeping a list for questioners and commenters: Rosmarin (1987) also argued that there might me numreous students that might wish to ask questions or comment to the questions which is being asked in the classroom context. Teachers should carefully observe raised hands and keep a written list of order for questioners or students who wish to comment and stick to it.
- d) Repeat Questions in case of necessity: Teachers might need to repeat, transform and paraphrase questions when it is compilacated or long and sometimes to make it more understandable for class members.

#### 2.3.3 Promoting a Discussion

Discussion could also be indicated as a fundamental component of teaching and learning process. Moreover, class discussions enables students to gain more knowledge as a result of exhanging ideas and information. Furthermore, it could be argued that class discussions promotes debate skills of students which would lead students to defend their point of view by providing evidences.

Keachie and Sviniski (2013) mentioned that there might be several actors about why students do not want to participate discussions. The main reasons could be

stated as passivity of the student, failure to observe the importance of discusion on learning process, afraid of looking stupid as a result of critisms.

It is also stated that teachers tendency about explaining the answer to the class before students find right answer or meaning would also influence the quality of discussion (McKeachie and Sviniski, 2013).

Frederick (1989) indicated that in order to promote students to discussion in class teachers are need to focus on how to constuct good discussion. Therefore, teachers are recommended to be organized and planned about specific in-class actives such as brainstorming, group-work which facilitates discussion and shift activities after a certain period of time in order to refresh the attention of students.

McKeachie and Svinicki(2013) also mentioned that teachers should motivate students to become more active about stressing their opinions and actively listening and responding their classmates. Thus, teachers are suggested to develop listening skills of classmembers by repeating or paragraprasing what other member said before responding it or by constantly expressing the goal and benefits which student will obtain as a result of the discussions.

#### 2.3.4 Showing Enthusiasm

Rosenshine and Furst (1971) stated that numerous teacher behavior variables have an impact on teaching effectiveness and ethusiasm is one of these variables.

According to Zhang et al (2002) teachers' attitudes towards teaching influences the nature of learning of the students. In other words, if teacher love to teach then students might love to learn.

Moreover, it is also pointed ou that effective teachers are more likely to exhibit a high level of enthusiasm which shows their professional skill and confidence that may be rooted from the accumulated knowledge and experience of the teacher. Beside of this, it is suggested to teachers to build a positive learning atmosphere by experessing their desire towards to courses taught, by preferring to calling students with their names, by enhancing student cooperation during class e.t.c. The most important aspect of promoting enthusiasm in class could be

mentioned as high level of student achievement. Therefore, teacher should focus more on creation of classroom atmosphere which would enable high level of academic achievement (Zhang et al., 2002).

# 2.3.5 Transmitting important knowledge to students

Biggs (1999) indicated that good teaching is heavily depends on the nature of teaching concept while Harden et al (1984) argued that teaching concept could be explained better with two fundamental strategies which could be expressed as teacher-centered, and student-centered education. Harden and Crosby (2000) defined teacher—centered education as a form of education which primarily concentrates on a teacher as a trasmitter of information to a learner whereas, student-centered strategies focuses on changes which takes place on students learning and the path that students followed to grasp achievement.

It is indicated that transmitting important knowledge to students is one of the crucial role of the teacher (Harden and Crosby,2000). Furthermore, Brown and Atkins(1986) argued that while transmitting knowledge teachers might choose to provide an aid to to students to interpret about the transmitted knowledge and execute several educational techniques to subject matter to students to create better understanding.

Besides of this, effective teaching purposes teachers should have disciplinary knowledge and should focus more on interactive way while passing knowledge on to the students.

# 2.3.6 Critical Thinking

Lipman (1987) defined ciritica thinking as a skillful and responsive thinking that is conductive to good judgement as it is sensitive in terms of context and depends on criteria and self-correcting.

Paul (1990) stated that school is perceived as a place to repeat what the students have learned from the their teacher or from academic sources and regarded as successful in case of following steps perfectly and managed to reach right answer.

However only few students put an effort to create better understanding to deepen thinking in other words thinking analytically or critical way to gather knowledge.

It is also discussed that didactic lecturers would not encourage students to think actively and interpret about conclusions through their opinions. Therefore, it is recommended teachers to (Paul, 1990)

- encourage students to discuss their ideas/opinions with their classmates and teacher,
- encourage students to test relationships, assumptions
- Consider a new concept of knowledge learning and literacy which would be realistic and applicable,
- Link the knowledge acquisition with diological and dialetical thinking

# 2.4 Teaching Tools

# 2.4.1 Whiteboard and (Chalkboard)

Altough technological advancements most of the teachers may still think that using chalkboard(whiteboard) is still useable as a component of the effective teaching tool. It is advised teachers to execute some strategies to strenghten classroom presentations by using whiteboard (chalkboards). These strategies could be stated as the following:

- a) Useage of chalkboard to point out the formation of the presentation and expression of critical points for the course by;
- i) Highlighting the agenda to indicate topics of the day
- ii) Listing main points for the course,
- iii) Summarising ideas which were generated as a result of the debated in classroom context.
- iv) Presenting figures, charts and diagrams

- v) Writing necessary formulas, calculations and steps to be followed in order to find right answers.
- b) A good organize and plan for board work: Since students engage with copying what they figure out from the board it is suggested teachers to avoid chaotic and confusing board work.
- c) Allow a time to students to copy what you've written: Sometimes it could be hard for the students to copy and listen to new information simultaneously. White et al (1978) argued that students needs time to catch up their teachers therefore teachers should be flexible about timing issues particularly before passing a new chapter or opening a new discussion topic to discuss.
- d) Visually underlining the critical points: Garcia (1991) discussed that teachers should mention the main points, assumptions, conclusions by highlighting the crucial terms and points on the board before leaving the topic which is being taught.
- e) Write legibly: White et al (1978) suggested that teachers may need to be sure about readability of their handwriting either by standing to the side so that having an opportunity to monitor if the board is visible to the entire of class after finishing writing or by drawing the blinds or shades in case of havig a glare on the board.

# 2.4.2 Transparencies and Overheads

The transperancies are used to purchase silhouettes on the projectors glass surface. While the image is reflected by mirrors of the projectors and expand by lenses, it is also possible to write on blank transperancies in class at the same time. Mostly the projectors are more preferable than chalkboards becaue projectors facilitates viewing the images and improves effective teaching since you do not turn backward to the students and finally the visual materials by using the projectors improves student's attention to the lecture during the class.

#### **2.4.3 Slides**

The use of slides especially in the faculty and departments related with the art and history is more preferable than the other faculty and departments which mainly purchased to increase the interest of students to the class. However, the use of slides unlike projectors and chalkboards requires darkness in the classroom which makes taking notes difficult. The use of slides enables — demonstrating certain examples of general concepts that faciliates student's to remember easily. However slides are also useful in terms of explaining process of something as a step by step and provides understanding regarding to the correlation between the diverse theories and visual relationships.

#### 2.4.4 Computers and multimedia

The use of computers and interactive multimedia is being used by the teachers to provide effective and efficient teaching. Generally the computers and interactive multimedia is being purchased to coordinate differences among the level of students'. Since the technology is changing rapidly reaching information through advent of networking it is possible to witness the community of global learning/teaching.

The spread of computers and interactive multimedia through the conectivity and networking facilitated the share of instructional tools and experiences worldwide.

# 2.5 Effective Teaching Methods at Higher Education Level

Pratt (1997) indicated that students coud act a judge to evaluate the effectiveness of teaching. Moreover, Braskampt and Ory(1994) argued that student could articulate their opinions with the light of the topics which are taught and how is taught to them.

The main aim of this part of the study is to indicate the most widely used effective teaching methods by the teachers to transmit course related –information to the students. The methods could be expressed as Lecture Method, Problem Based

Learning, Project Based Learning, Case Study, Colloborative and Cooperation Learning.

#### a) Lecture Method:

Sajjed (2010) expressed that the lecture method is still the most prefferable teaching technique in higher level education. Lecture method could be excuted when the size of class are large and teaching material is shaped by as structured manner and the teacher has a plenty of time to monitor the teaching material.

Moreover, Sajjad (2010) revealed that lecture method could be the best method since it provides new ideas, improves creativity skills for student. Futhermore it is also discussed that lecture method is useful at explaining the entire topics to students and it could provide answer to all questions of students.

Useful strategies for improving lecture method could be stated as the following;

- Information could be captured through lecture method if it is transmitted to students by memorable examples.
- Learning could become more supportive by using whiteboards, flipcharts and other visual aids.
- Teacher should have ideas of students to reinforce lecture methods

### b) Case Study:

It is argued that case study method could be efficiently applied to engineering and liberal arts and education to enhance problem solving skills and critical thinking. In case studies students are presented real life experiences or imaginary situations to lead them to think how to identify problem and how to find a solution and interpret reasons and implication of actions after providing both problem and solutions (Sajjad, 2010)

Strategies for teachers to use case studies more effective manner for the benefit of students could be summarized as;

• Cases should be explicit and well written, should not be too long.

- Should be realistic and debatable with conflicting ideas.
- Students are supposed to work in teams to write report or prepare well orgaized presentation that is related with the case.

# c)Problem-Based Learning:

Dolmans, Grave, Wolfhagen and Vlueten (2005) stated that problem based learning is commonly practised in higher education.

Futhermore, Hemlo-Silver (2004) expressed that problem based learning is an instructional method which helps students to learn problem solving. In problem based learning technique learners are directed to a complicated problem which might have numerous cases to solve. Moreover, in problem-based solving students are encouraged to work in colloborative groups in order to define what they have learned to fix a problem.

It is stated that in problem based learning students would become a part of self directed learning and apply their knowledge to solve problem and express what they have learned. The role of teacher has also changed in problem based learning the teacher are expected to enhance learning period instead of just providing a knowledge. The main aims of employing problem-based learning could be stated as the following.

- Provision of flexible knowledge
- Promotion of problem solving abilities
- Enhancing self directed learning skills.

Barrows (1996) indicated that problem- based learning may be helpful at devloping important abilities such as critical thinking, useage of appropriate learning resources, team work and leardership skills.

#### d)Project- Based Learning:

First reference for project based learning was expressed by the arguments of Kibatko and Vaculovas (2011) since he mentioned that projects on math science and social science enables students to gain new ideas which could be introduced,

organized, employed and asssed by the students to gain an understanding their lives while performing the work within harmony (Kibatko and Vaculovas, 2011).

Altough there are numerous definitions carried out for project based learning commonly it is indicated as a method which focuses on a solution of problem by the students who are working as a group and as an outcome students complete report, dissertation or model (Kibatko and Vaculovas, 2011).

According to Harris and Katz (2001) the project- based learning is a method which focuses on learner as one of the important component of using this method is that instead of using strict old-school lesson plan it enables learners to investigate and develop more research about the topic.

Barrack and Doppelt (2000) indicated that project based learning would be useful method for creation of new ideas, exploring new scientific topics and merging accumulated knowledge which captured from various events. The project based learning is an active educational process that obtains interrealation of individuals. The main importance of this process is its nature of openness

In this process teachers in order to make individuals think and discover more about the topic creates and designs situations to be questionned. Thus, individuals' creativeness, interests and the way of thinking moderates this project as well as their insiparations from the real life surroundings (Kimonen and Nevalainen, 2000).

Strategies for the successful combination of project-based learning into the teaching process;

- Practise- based nature of knowledge and learning
- Project autonomy
- Knowledge integration.

### e)Colloborative/ Cooperative Learning:

Bruffee (1993) described cooperative learning as a systematic pedagogical strategy which motivates small group of pupils to work together for academic

achievement. Colloborative and Cooperative learning could be interchangeably used as an effective teaching method.

Furthermore, Beckmann (1990) expressed that students who are dealing actively with the work in collective or cooperative groups are likely to be more happy with their classes.

While employing colloborative/cooperative learning strategies few points are extremely crucial for the well-desgined cooperative learning context. Steps for the applying cooperative learning strategies could be indicated as the following;

- a) Analysing and understanding how to shape groups
- b) Proposing and encouraging positive interdepence
- c) Promoting individual responsibility
- d) Solving paradoxes in groups
- e) Determinating adequate homeworks and marking criteria
- f) Designing and creating active learning climate.
- g) Carefully planing for each stage of groupwork
- h) Provide students skills in which they need to manage while working in groups

#### a. Expriential Learning:

Experiential learning could be defined as a learning by;

- i)Doing,
- ii)Action,
- iii) Experience,
- iv) Discovery and explotation.

Moreover Wurding and Calson (2010) stated that experiential learning occurs when students show a participation in learning content in which they have special interest, need and want.

Some of the focal principles of experiential learning could be listed as the following (Association for Experiential Education, 2010);

- Experiential Learning occurs when carefully selected experiences are promoted by reflection, critical analysis,
- Experiences are formulated to require the student initiative, make decisions can be accountable for results.
- Lecturer's main roles could be indicated as sharing experiences, problems and supporting students insuring physical and emotional safety and facilitating the learning process.
- Designs of the learning experience include the possibility to learn from natural consequences, mistakes and success.

# 2.6 Factors Hindering Teaching

The fundamental objective of this part of the study is to present information about the factors that may have negative impact on the performance of teacher thus reduce the quality of education. Numerous studies have been conducted to investigate what are the factors which may hinder teaching. It could be stated that lack of necessary teaching materials and supplies, lack of training, lack of effective communication among teachers and learners, availability of discipline problems in classroom context, problems related with student counseling, heavy workload on teacher(Rasheed, Aslan and Sarwar,2010) and availability on too many students in classes, lack of research commitments among teachers, too wide range of student abilities and lastly shortage of academic sources on libraries are the one of the few major factors which may influence quality of teaching.

#### 2.7 Previous Studies

The primary aim of this part of the study is to present findings of the conducted similar studies by various scholars.

Numerous studies have been conducted to clarify mechanisms to effective teaching on agricultural education (Roberts and Dyer,2004; Phipps and Osborne,1988), effective teaching methods in agricultural education(Kassem, 1992;Croswell,1990), effective teaching tools on agricultural education(Shinn,1997; Yelon,1996), Morin et al (2001) conducted a detailed study regarding effective teaching tools, teaching methods, factors hindering teaching.

Phipps and Osborne (1988) conducted a study and indicated that effective teaching could be fuelled by motivation, feedback, readiness and learning by doing.

Creswell(1990) suggested that most preferrable teaching techniques as instructor-centered teaching method, interactive, individualized and experimental teaching method

Yelon (1996) conducted a study and revealed that effectiveness of teaching method could be fueled by implementing formal education method.

Shinn (1997) examined effective teaching methods, tools and mechanisms of effective teaching in agricultural education. Researcher dictated those problems solving approaches and discussions as a teaching method, chalkboard (whiteboard) are the most preferable teaching tool for agricultural education. Moreover, it is stated that "importance of feedback "is the most prominent effective teaching mechanism for agricultural teaching.

Morin et al (2001) conducted a study and found that usage of transparencies; whiteboards (chalkboards) are most widely practiced teaching tools. Moreover, researchers also stated that email is also becoming an important device for teaching. It is also expressed that encouraging students to think critically and equipping them with independent learning are the most commonly employed views on teaching. Researchers also pointed that teachers are intensively engaging with technology and computers for education purposes. Furthermore, research argued that range of

student abilities and class sizes are fundamental sources of hindrances of teaching and lecture format is still most commonly preferable teaching method.

Roberts and Dyer (2004) conducted a study to analyze characteristics of effective agriculture teachers. Researchers stated that "Encouraging and caring with students", "motivating students", "moral and ethical value" are the most critical characteristics of effective agricultural teachers.

# 2.8 Overview on College of Agriculture of Sulaimani University

University of Sulaimani is a public university that established at 1968 in Sulaimani governorate which located in Kurdistan regime of Iraq (north Iraq). Currently the university has 8 faculties and 2 colleges. The university has currently about 20000 students getting knowledge and skills from various scientific fields. According to statistic data for academic year 2013-14, number of lecturers are 1644 with different academic and scientific titles such as professors, assistant professors, lecturers and assistant lecturers.

College of agriculture is one of the oldest colleges of the University of Sulaimani, it has been established since the foundation of the university in 1968. There are about 400 Kurdish and Arabic speaker teachers with different titles, professor, PhD holders, Masters and BSc degrees are teaching in the faculty of agriculture and the faculty departments are:

- 1. Soil and Water Science
- 2. Field Crops
- 3. Animal Production
- 4. Food Sciences
- 5. Horticulture
- 6. Agricultural Extension

#### 7. Sciences Unit

The educational policy of the faculty of the agriculture of Sulaimani University is designed to achieve some significant objectives that are, to enhance agriculture sector because of the nature of the north Iraq area that is agricultural territory with a vast zone of arable land and sufficient water resources and more than 50% of the people in the region were working in agriculture. Another goal is to rebuilding rural community after many after thousands of villages has been destroyed and the agriculture sector was neglected and damaged as well because of long-term wars by previous regime of Iraq in the eighties of last century. The faculty supports teaching and learning process in particular, moreover, in response to quality assurance reforms by the ministry of higher education the faculty of agriculture of Sulaimani University obliges the teachers to attend teaching activities such as seminars and workshops in order to increase their teaching skills and competencies. Recently the faculty invited Prof. Dr. Daniel Hersman from Kansas University to present a seminar that titled as (Active Teaching Strategies for Enhancing Undergraduate Students Learning).

### **CHAPTER III**

### **METHODOLOGY**

### 3.1 Research Design

This study is following survey methodology. The survey was conducted to investigate lecturer's opinion of view about teaching, teaching methods, teaching tools and factors that hinder the teaching process. The design format of the presented study consists of quantitative data collection exploring the above aspects.

### 3.2. Participants

The population of more than 400 teachers is currently working in the faculty of agriculture in Sulaimani University. Approximately 150 hard copies of the study's questionnaire were distributed among them, consequently 121 participants responded to the applied questionnaire. As it has been mentioned before, the participants of this study have categorized by gender and working experience.

The minimum age of the participants is 24 while the maximum is 65 years old. In terms of working experiences 66 of the lecturer candidates have experience of less than fifteen years and 55 of them have been working more than fifteen years. Moreover, 75 (62%) of the participants are male and 46 (38%) are female.

# 3.3. Instruments of the Study

The instruments used for the investigation of the research questions of the study is contain a closed end answer questionnaire. The questionnaire of the study was derived from Morin, et al., (2001) which titled with *Survey on Teaching*, however, the original questionnaire reduced in a way to be consistent with the aim of the current study.

As it presented in Appendix A the questionnaire of the study consists four major sections, under each of the four heading several particular statements were included pertaining to teaching methods that rate and define the categories. These

items were included strongest associations and clear rating from the content validation processes. Moreover, the questionnaire has been translated to Kurdish language which is the dominant speaking language of the territory; hence, the participants were able to understand the content of the questionnaire before filling it.

### 3.4. Data Analysis

The study follows quantitative research methodology. Data collected from the questionnaire and imported to the SPSS software to be analyzed. Descriptive statistics were calculated for the teachers participating in the study. Descriptive statistics for questionnaire responses include the mean and standard deviation for individual teaching method frequencies, as well as a mean and standard deviation of frequency of usage for each main sections category. The Mann-Whitney U test is used to compare differences between the variables that categorized in this study which are male versus female and experienced lecturers versus less experienced lecturers.

### **CHAPTER IV**

# FINDINGS AND DISCUSSION

# 4.1 Items Measuring Lecturers Views on teaching

The items that measure lecturers views on teaching consist of items from 1 to 17 of the applied questionnaire of this thesis. These items were used to measure the lecturers perceptions on teaching. Table 1 consist these measures and highest percentage and the number of the variables from strongly disagree to strongly agree.

**Table 4.1 Lecturers Views on Teaching** 

		Strong Disagr		Disagre	e	Undecid	led	Agre	e	Strongly Agree	,		
NO	Items	N	%	N	%	N	%	N	%	N	%	$\overline{\mathbf{X}}$	SS
1	Encouraging students to ask questions.	47	38. 8	66	54. 5	5	4.1	2	1,7		.8	4,2 9	
2	Motivating students to learn.	60	49. 6	52	43.0	4	3.3	5	4.1	0	0	4,3 8	,74 4
3	Promoting discussion about the subject matter.	40	33, 1	70	57, 9	9	7,4	2	1,7	0	0	4,2	
4	Transmitting important knowledge to students.	62	51, 2	50	41, 3	5	4,1	4	3,3	0	0	4,4 0	,72 5
5	Providing up to date and interesting resource material for students.	42	34, 7	61	50, 4	14	11, 6	4	3,3	0	0	4,1 7	,75 7
6	Promoting conceptual changes in students.	25	20, 7	64	52, 9	24	19, 8	8	6,6	0	0	3,8 8	,81 2
	Setting challenging problems and assignment, and helping students to cope with them.	30	24, 8	60	49, 6	25	20, 7	6	5,0	0	0	3,9 4	,80 9
3	Communicating	44	36, 4	68	56, 2	5	4,1	4	3,3	0	0	4,2 6	,69 0

	ideas between lecturer and students.			,		.*	, ,						
9	Supporting and caring for students.	41	33, 9	68	56, 2	6	5,0	4	3,3	. 2	1. 7	4,1 7	,80 3
10	Providing situations where students can learn from each other.	25	20, 7	70	57, 9	15	12, 4	11	9,1	0	0	3,9 0	,83 1
11	Passing on lecturers experiences to students.	36	29, 8	59	48, 8	10	8,3	16	13, 2	0	0	3,9 5	,95 6
12	Giving interesting presentation, using instructional technology.	44	36, 4	58	47, 9	11	9,1	7	5,8	1	,8	4,1 3	,86 5
13	Stimulating Students to think a critical way.	39	32, 2	47	38, 8	21	17, 4	14	11, 6	0	0	3,9 2	,98 0
14	Producing independent learners	36	29, 8	61	50, 4	13	10, 7	11	9,1	0	0	4,0 1	,88 0
15	Equipping students with independent skills for problem solving.	39	32, 2	61	50, 4	16	13, 2	5	4,1	0	0	4,1 1	,78 3
16	Helping students to understand important ideas.	39	32 <b>,</b> 2	72	59, 5	5	4,1	5	4,1	0	0	4,2 0	,70 3
17	Displaying enthusiasm for the subject matter.	45	37, 2	65	53, 7	7	5,8	4	3,3	0	0	4,2 5	,71 0

As presented in the table 1, distributions of frequency, percentage, mean and standard deviation related with opinions of the lecturers about teaching process are provided. Considering the statements of 1 and 2 that teaching is encouraging students to ask questions and motivating students to learn the majority of the lecturers don't agree. More than 90% of the lecturers think that teaching doesn't transmit important knowledge to students. In contrary of expectations the lecturers believe that the communication between lecturers and students is not a part of teaching. However, the lecture candidates don't reject that teaching is stimulating students to think critically. Moreover, 13.2% of the lecturers indicate that through teaching they pass

their experiences to students. Further, 4.27% of the lecturers think that teaching is supporting and caring for students.

Table 4.2 View on teaching according to gender

Items		N	Mean Rank	Sum of Ranks	U	P
1. Encouraging students to ask questions.	Male Female Total	75 46 121	57.87 66.10	4340.50 3040.50	1490.500	.156
2. Motivating students to learn.	Male Female Total	75 46 121	54.24 72.02	4068.00 3313.00	1218.000	.002
3. Promoting discussion about the subject matter.	Male Female Total	75 46 121	60.79 31.34	6559.50 2821.50	1709.500	.925
4. Transmitting important knowledge to students.	Male Female Total	75 46 121	56.45 68.41	4234.00 3147.00	1384.000	.041
5. Providing up to date and interesting resource material for students	Male Female Total	75 46 121	53.38 73.42	4003.50 3377.50	1153.500	.001
6. Promoting conceptual changes in students.	Male Female Total	75 46 121	56.85 66.77	4263.50 3117.50	1413.500	.069
7. Setting challenging problems and assignment, and helping students to cope with them.	Male Female Total	75 46 121	55.87 69.37	4190.00 3191.00	1340.000	.026
8. Communicating ideas between lecturer and students.	Male Female Total	75 46 121	56.40 68.50	4230.00 3151.00	1380.000	.036
9. Supporting and caring for students.	Male Female Total	75 46 121	55.50 69.67	4162.50 3218.50	1312.500	.013
10. Providing situations where students can learn from each other.	Male Female Total	75 46 121	57.65 66.47	4323.50 3057.50	1473.500	.132
11. Passing on lecturers experiences to students.	Male Female Total	75 46 121	56.29 68.67	4222.00 3159.00	1372.000	.041
12. Giving interesting presentation, using instructional technology.	Male Female Total	75 46 121	59.12 64.07	4434.00 2947.00	1584.000	.412

13. Stimulating Students to think a critical way.	Male Female Total	75 46 121	58.17 65.62	4362.50 3018.50	1512.500	.232
14. Producing independent learners	Male Female Total	75 46 121	58.09 65.74	4357.00 3024.00	1507.000	.205
15. Equipping students with. Independent skills for problem solving.	Male Female Total	75 46 121	59.92 64.39	4492.00 2889.00	1642.000	.628
16. Helping students to understand important ideas.	Male Female Total	75 46 121	58.92 64.39	4419.00 2962.00	1569.000	.338
17. Displaying enthusiasm for the subject matter.	Male Female Total	75 46 121	58.92 64.39	4255.00 3126.00	1405.000	.055

According to the table 2 (Mann-Whitney U test), it is seen that there is a significant difference between the views of lecturers according to their gender in the item "Motivating students to learn". Female lecturers motivates their students to learn more than male lecturers (U=1218.000, P<0.05). Also, significant difference is seen in the item "Transmitting important knowledge to students", female lecturers have more positive view about transmitting important knowledge to students more than male (U=1384.000, P<0.05). Moreover, in the item "Providing up to date and interesting resource material for students" there is a significant difference between the views of lecturers. Female lecturers have more positive views about providing up to date and interesting resource material for students than male lecturers (U=1153.500, P<0.05). Furthermore, there is also significant difference between the views of lecturers in the item "Setting challenging problems and assignment, and helping students to cope with them" female lecturers have more positive view about setting challenging problems and assignment, and helping students to cope with them (U=1340,000, P<0.05). In addition to this, in the item "Communicating ideas between lecturer and students", there is a significant difference between the lecturers according to their gender. Female lecturers have more positive views about it than male lecturers (U=1380.000, P<0.05). Also there is a significant difference between the views of lecturers in terms of their gender about "Supporting and caring for students". Female lecturers have more positive views about it more than female lecturers (U=1312.500, P<0.05). Finally, there is also a significant difference

between the views of lecturers according to their gender in terms of "passing on lecturer's experiences to students". Female lecturers have more positive views about it then male lecturers (U=1372.000, P<0.05). There are no significant differences between the lecturer's views according to lecturers' genders in the other items about views on teaching.

Table 4.3 View on teaching according to Work Experience

Items	Experience	N	Mean Rank	Sum of Ranks	U	P
1. Encouraging students to ask questions.	1-15 15-above Total	66 55 121	64.32 57.02	4245.00 3136.00	1596.000	.197
2. Motivating students to learn.	1-15 15-above Total	66 55 121	62.38 59.35	4117.00 3264.00	1724.000	.596
3. Promoting discussion about the subject matter.	1-15 15-above Total	66 55 121	61.01 60.99	4026.50 3354.50	1814.500	.998
4. Transmitting important knowledge to students.	1-15 15-above Total	66 55 121	64.92 56.29	4285.00 3096.00	1556.000	.130
5.Providing up to date and interesting resource material for students	1-15 15-above Total	66 55 121	63.83 57.60	4213.00 3168.00	1628.000	.285
6. Promoting conceptual changes in students.	1-15 15-above Total	66 55 121	60.47 61.64	3991.00 3390.00	1780.000	.842
7. Setting challenging problems and assignment, and helping students to cope with them.	1-15 15-above Total	66 55 121	65.61 55.46	4330.50 3050.50	1510.500	.086
8. Communicating ideas between lecturer and students.	1-15 15-above Total	66 55 121	69.80 50.44	4607.00 2774.00	1234.000	.001
9. Supporting and caring for students.	1-15 15-above Total	66 55 121	60.06 62.13	3964.00 3417.00	1773.000	.715

10. Providing situations where students can learn from each other.	1-15 15-above Total	66 55 121	64.38 56.95	4249.00 3132.00	1592.000	.193
11. Passing on lecturers experiences to students.	1-15 15-above Total	66 55 121	58.30 64.25	3847.50 3533.50	1636.500	.315
12. Giving interesting presentation, using instructional technology.	1-15 15-above Total	66 55 121	64.03 57.36	4226.00 3155.00	1615.000	.256
13. Stimulating Students to think a critical way.	1-15 15-above Total	66 55 121	57.64 65.03	3804.50 3576.50	1593.500	.225
14. Producing independent learners	1-15 15-above Total	66 55 121	59.09 63.29	3900.00 3481.00	1689.000	.475
15. Equipping students with independent skills for problem solving.	1-15 15-above Total	66 55 121	60.43 64.39	3988.50 3392.50	1777.500	.831
16 .Helping students to understand important ideas.	1-15 15-above Total	66 55 121	58.06 64.53	3832.00 3549.00	1621.000	.245
17. Displaying enthusiasm for the subject matter.	1-15 15-above Total	66 55 121	61.11 60.87	4033.00 3348.00	1808.000	.967

In respect to view of the candidate lecturers distinguished with their work experiences, the analysis output of Mann-Whitney U test is presented in the table 3. Although most of the findings are not significant but differences can be observed. The working experience in this study is categorized in two categories, first lecturers with 1-15 years experiences and lecturers with more than 15 years experiences. The more experienced lecturers are less positive about the statement of transmitting important knowledge to students. Furthermore, the less experienced lecturers view is significantly varies from other that agree with the item of Setting challenging problems and assignment, and helping students to cope with them (U=1510.500, P<0.10). Also there is a significant difference between the views of lecturers in terms of their experience about "communicating ideas between lecturers and students".

Less experienced lecturers have more positive views about it than more experienced lecturers (U=1234.000, P<0.05).

The experienced lecturers are more positive in terms of the item states that teaching encourages students to think in a critical way more than less experienced lecturers. Likewise, the experienced lecturers are supporting item that argues teaching is helping students to understand important ideas more than less experienced lecturers.

# 4.2 Items Measuring Teaching Methods

The items that measure teaching methods that used by lecturers frequently consist of items from 18 to 25 of the applied questionnaire of this thesis. These items were used to measure the lecturers perception on teaching methods. Table 4 consist these measures and highest percentage and the number of the variables from Never to Very Often.

**Table 4.4 Teaching Methods** 

		N	ever	Se	ldom	Occa	sionally	0	ften		ery ften		
NO	Items	N	%	N	%	N	%	N	%	N	%	X	SS
1	Lecture method	2	1,7	2	1,7	6	5,0	46	38,0	65	53,7	4,40	,802
2	Seminar method.	6	5,0	16	13,2	33	27,3	44	36,4	22	18,2	3,50	1,089
3	Problem-based learning.	6	5,0	23	19,0	34	28,1	38	31,4	20	16,5	3,36	1,117
4	Project-based learning.	8	6,6	23	19,0	36	29,8	40	33,1	14	11,6	3,24	1,096
5	Case methods.	16	13,2	20	16,5	35	28,9	32	26,4	17	14,0	3,12	1,238

6	Experiential method.	3	2,5	7	5,8	22	18,2	56	46,3	32	26,4	3,89	,951
7	Collaborative/ Cooperative learning.	6	5,0	15	12,4	25	20,7	50	41,3	25	20,7	3,60	1,099
8	Peer teaching.	12	9,9	19	15,7	36	29,8	38	31,4	14	11,6	3,19	1,152

Table 4, consists of the analysis of the findings of second section of our questionnaire which reflect the answer of the second objective of the study. It can be observed that the methods that proposed to the participants are been used by the lecturers generally as they respond positively to them. From the finding it was discovered large percentage of the lecturer candidates benefiting from using lecture methods, this finding outlined with (Sajjad, 2010) and (Morin et al., 2001).

According to the responses given to the statement of using seminar method as a teaching method, 36.4% of lecturer candidates reported that they are using it often and 27.3% are occasionally. Moreover, regarding the problem based and project based methods the lecturers respond were they are using them often by 31.4% and 33.1% respectively. Considering the case methods 26.4 % of lecturer candidates indicated that they are using it often but 28.9% of them responded occasionally. Experiential method seems to be preferable in Agriculture College as 46.3% of the lecturers are using it often and 26.4% are using it very often. The candidate lecturers pay a big attention to collaborative/ cooperative learning as 42.3% of them using it often and 20.7% are using it very often. Finally, peer teaching method is using by the lecturers candidates in 20.7% often however 29.8% of the respondents state that they are occasionally about using it.

**Table 4.5 Used Teaching Methods According to Gender** 

Items		,	N	Mean Rank	Sum of . Ranks	U	P
1. Lecture Method	ı	Male	75	59.89	4491.50	1641.500	.616
1. Deciare Michiga		Female	46	62.82	2889.50		
		Total	121				
2.Seminar Method		Male	75	62.36	4677.00	1623.000	.571
2.50mmar Mctilou	,	Female	46	58.78	2704.00		
		Total	121		•		
3.Problem	based	Male	75	59.44	4458.00	1608.500	.518
Learning	vaseu	Female	46	63.54	2923.00		.010
Dearning		Total	121				
4.Project based Le	omin ~	Male	75	55.52	4164.00	1314.000	.023
T.I Toject based Le	aming	Female	46	69.93	3217.00		1020
•		Total	121				
5.Case Method		Male	75	56.57	4186.50	1411.500	.107
D. Case Iviolity		Female	46	66.82	3073.50		
		Total	121				
6.Experimental me	thod	Male	75	55.14	4135.50	1285.500	.020
opormionai me	uiod	Female	46	69.43	3124.50		7-2-0
		Total	121				
7. Collaborative lea	omin a	Male	75	55.94	4195.50	1345.500	.034
7. Conaborative jes	arımığ	Female	46	69.25	3185.50		.051
		Total	121		-		
P Door Tooching		Male	75	56.79	4146.00	1445.500	.186
8.Peer Teaching		Female	46	65.09	2994.00	2110.000	.100
		Total	121				

Table 5, Mann-Whitney U test provides the variation between male and females lecturers about the teaching methods. Obviously from the table can been seen that in respect to project based learning male lecturers are using the method more than the female lecturers more (U=1314.000, P<0.05).

Likewise, Experimental method is more preferable by male lecturers more than female lecturers (U=1285.500, P<0.05). Concerning the collaborative learning, there is a significant difference between the male and female lecturers perception, male lecturers are using it more and significantly than female lecturers (U=1345.500, P<0.05).

Table 4.6 Used Teaching Methods According to Work Experience

15-above Total   121   1-15   66   60.42   3988.00   1777.000   .837	Items	**	Experience	N	Mean Rank	Sum of Ranks	U	P
15-above Total   121	1 Lecture Method	· · · · · · · · · · · · · · · · · · ·	1-15	66	59.21	3908.00	1697.000	.490
Total   121	1. Decime Memor	. ,	15-above	55	63.15	3473.00		
15-above   Total   121   1-15   66   62.19   4104.50   1736.500   .673			Total	121			•	
15-above   55   61.69   3393.00	2 Seminar Method		1-15	66	60.42	3988.00	1777.000	.837
Total 121  3.Problem based Learning 1-15 66 62.19 4104.50 1736.500 .673  Learning 55 59.57 3276.50  Total 121  4.Project based Learning 1-15 66 64.98 4288.50 1552.500 .156  Total 121  5.Case Method 1-15 66 61.72 4012.00 1708.000 .667  Total 121  6.Experimental method 1-15 66 61.07 3969.50 1750.500 .835  Total 121  7. Collaborative learning 1-15 66 63.27 4175.50 1665.500 .415  Total 121  8.Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858	2.Schina Method	ı	15-above	55	61.69	3393.00		
Learning Total 121  4.Project based Learning 1-15 66 64.98 4288.50 1552.500 .156 15-above 55 56.23 3092.50 Total 121  5.Case Method 1-15 66 61.72 4012.00 1708.000 .667 15-above 55 59.05 3248.00 Total 121  6.Experimental method 1-15 66 61.07 3969.50 1750.500 .835 15-above 55 59.83 3290.50 Total 121  7. Collaborative learning 1-15 66 63.27 4175.50 1665.500 .415 15-above 55 5828 3205.50 Total 121  8.Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858			Total	121				
Learning Total 121  4.Project based Learning 15-above 55 59.57 3276.50  4.Project based Learning 15-above 55 56.23 3092.50  Total 121  5.Case Method 1-15 66 61.72 4012.00 1708.000 .667  15-above 55 59.05 3248.00  Total 121  6.Experimental method 1-15 66 61.07 3969.50 1750.500 .835  15-above 55 59.83 3290.50  Total 121  7. Collaborative learning 1-15 66 63.27 4175.50 1665.500 .415  15-above 55 5828 3205.50  Total 121  8.Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858	3 Problem	hased	1-15	66	62.19	4104.50	1736.500	.673
Total 121  4.Project based Learning 1-15 66 64.98 4288.50 1552.500 .156 15-above 55 56.23 3092.50 Total 121  5.Case Method 1-15 66 61.72 4012.00 1708.000 .667 15-above 55 59.05 3248.00 Total 121  6.Experimental method 1-15 66 61.07 3969.50 1750.500 .835 15-above 55 59.83 3290.50 Total 121  7. Collaborative learning 1-15 66 63.27 4175.50 1665.500 .415 15-above 55 5828 3205.50 Total 121  8.Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858		baseu	15-above	55	59.57	3276.50		
15-above 755 56.23 3092.50 Total 121  5.Case Method 1-15 66 61.72 4012.00 1708.000 .667 15-above 55 59.05 3248.00 Total 121  6.Experimental method 1-15 66 61.07 3969.50 1750.500 .835 15-above 55 59.83 3290.50 Total 121  7. Collaborative learning 1-15 66 63.27 4175.50 1665.500 .415 15-above 55 5828 3205.50 Total 121  8.Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858	Learning		Total	121				
15-above   55   56.23   3092.50	4 Project based I a	arnina	1-15	66	64.98	4288.50	1552.500	.156
Total 121  5.Case Method 1-15 66 61.72 4012.00 1708.000 .667 15-above 55 59.05 3248.00 Total 121  6.Experimental method 1-15 66 61.07 3969.50 1750.500 .835 15-above 55 59.83 3290.50 Total 121  7. Collaborative learning 1-15 66 63.27 4175.50 1665.500 .415 15-above 55 5828 3205.50 Total 121  8.Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858	4.1 Toject based De	arimig	15-above	55	56.23	3092.50		
15-above 755 59.05 3248.00 750 750 750 750 750 750 750 750 750 7			Total	121				
15-above Total 121  6.Experimental method 1-15 66 61.07 3969.50 1750.500 .835 15-above 55 59.83 3290.50 Total 121  7. Collaborative learning 1-15 66 63.27 4175.50 1665.500 .415 15-above 55 5828 3205.50 Total 121  8.Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858	5 Case Method		1-15	66	61.72	4012.00	1708.000	.667
Total 121  6.Experimental method 1-15 66 61.07 3969.50 1750.500 .835 15-above 55 59.83 3290.50 Total 121  7. Collaborative learning 1-15 66 63.27 4175.50 1665.500 .415 15-above 55 5828 3205.50 Total 121  8.Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858	J.Case Meniod		15-above	55	59.05	3248.00	-	
15-above 755 59.83 3290.50 Total 121  7. Collaborative learning 1-15 66 63.27 4175.50 1665.500 .415 15-above 755 5828 3205.50 Total 121  8. Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858			Total	121				
7. Collaborative learning 1-15 66 63.27 4175.50 1665.500 .415 15-above 55 5828 3205.50 Total 121 8. Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858	6 Evnerimental me	athod	1-15	66	61.07	3969.50	1750.500	.835
Total 121  7. Collaborative learning 1-15 66 63.27 4175.50 1665.500 .415 15-above 55 5828 3205.50 Total 121  8. Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858	o.Experimental in	smou ·	15-above	55	59.83	3290.50		
7. Collaborative learning 15-above 55 5828 3205.50 Total 121 8. Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858			Total	121				
15-above 55 5828 3205.50 Total 121  8.Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858	7 Collaborative le	arnina	1-15	66	63.27	4175.50	1665.500	.415
Total 121  8.Peer Teaching 1-15 66 59.49 3807.00 1727.500 .858	7. Conaborative ic	arımıR	15-above	55	5828	3205.50		
6. Peer Teaching			Total	121				
off cer reaching	& Peer Teaching		1-15	66	59.49	3807.00	1727.500	.858
15 45010 55 00.37 3332.00	o.r cer reaching		15-above	.55	60.59	3332.00		
Total 121			Total	121		• •		

When we categorized the lecturer candidates based on experience years, as it can be seen in the Table 6, Mann-Whitney U test reported that there is no significant difference between the perception of less experienced and more experienced lecturers meaning that the both categories have the same opinion on the importance or usage of the given teaching methods.

### 4.3 Items Measuring Teaching Tools

The items that measure teaching tools that used by lecturers frequently consist of items from 26 to 36 of the applied questionnaire of this thesis. These items were used to measure the lecturers perception on teaching methods. Table 7 consist

these measures and highest percentage and the number of the variables from Never to Very Often.

**Table 4.7 Teaching Tools** 

•		Never		Coldom		Occas-	ionally	Often		Verv	Often	707	
NO	Items	N	%	N	%	N	%	N	%	N	%	X	SS
1	Transparencies and overhead projector	2	1,7	4	3,3	32	26,4	83	68,6	0	0	4,57	7 ,804
2	White board	0	0	4	3,3	12	9,9	44	36,4	61	50,4	1 4,34	,791
	Presentation software (e. g power Point)	0	0	1	,8	6	5,0	38	31,4	73	60,3	3 4,55	,635
	Web-based software (e. g web CT)	14	11,6	18	14,9	31	25,6	32	26,4	26	21,5	5 3,31	1,285
	Simulation/demonstration software	8	6,6	25	20,7	24	19,8	40	33,1	24	19,8	3,39	1,207
ı	Scientific software (e. g spreadsheets, math tool, databases)	23	19,0	23	19,0	26	21,5	33	27,3	16	13,2	2,97	1,329
7	Electronic bulletin board	121	100,0	0	0	0	0	0	0	0	0	1,00	,000
8 (	Chart	23	19,0	29	24,0	20	16,5	35	28,9	14	11,6	2,90	1,325
9 ]	Email	18	14,9	22	18,2	31	25,6	29	24,0	20	16,5	3,43	3,939
10	Video	4	3,3	10	8,3	33	27,3	44	36,4	30	24,8	3,71	1,036

Obviously, it can be seen from table 7, that the majority of the lecturer candidates are using transparencies and overhead projector as a tool of teaching that are 68.6%. Likewise, regarding the item whether the participants are using white board for teaching 36.4% state that they are using often and 50.4% of them indicate that they are using very often. Considering the presentation software such as power point, the candidates are mentioning that 31.4% are using it often however 60.3% are using it very often. Regarding the web-based software, 26.4% of the candidates indicate that they are using it often and 25.6% of them are irresolute. When the use of stimulation demonstration software, 33.1 % of lecturer candidates indicated that they are using it often and 20.7% of them reported that they are seldom and finally 19.8% of the candidates stated that the are undecided.

Considering the scientific software (e. g spreadsheets, math tool, and databases), 27.3 % of lecturer candidates reported that they are using it often and 21.55 of them mention that they are irresolute. In respect of electronic bulletin board, 100% of the lecturers indicate that they never used it, the case may be because the university didn't provide this kind of tool yet. 28.9% of the lecturer respondents state that they are using chart often but 24% of them are not using it often (seldom). According to the table the candidates are not likely to use email as 25.6% of them respond to be occasionally and 24% of them indicate that they are using it often. The lecturer candidates tend to use video as a tool of teaching that's 36.4% of them are using it often and 24.8% of them are using it very often. Slides also seem to be preferred by our lecturer participants when 47.9% of them state that they use it very often and 27.3% are using it often.

Table 4.8 Teaching Tools according to lecturers' genders

Items		N	Mean Rank	Sun of Ranks	U	P
1.Transparencies and overhead projector	Male Female Total	75 46 121	57.57 66.59	4318.00 3063.00	1468.000	.091
2. White board	Male Female Total	75 46 121	59.75 63.03	4481.50 2899.50	1631.500	.582
3. Presentation software (e. g power Point)	Male Female Total	75 46 121	61.72 55.77	4567.00 2454.00	1464.000	.285
4. Web-based software (e. g web CT)	Male Female Total	75 46 121	53.90 72.58	4350.50 3030.50	1192.500	.004
5.Simulation/demonstration software	Male Female Total	75 46 121	58.01 65.88	4350.50 3030.50	1500.500	.216
6. Scientific software (e. g spreadsheets, math tool, databases)	Male Female Total	75 46 121	61.00 61.00	4575.00 2806.00	1373.000	.054
7. Electronic bulletin board	Male Female Total	75 46 121	56.73 67.97	4254.50 3126.50	1725.500	.615
8. Chart	Male Female Total	75 46 121	60.37 62.02	4528.00 2853.00	1404.500	.079
9. Email	Male Female Total	75 46 121	57.41 66.86	4305.50 3075.50	1678.000	.719
10. Video	Male Female Total	75 46 121	58.01 65.88	4350.50 3030.50	1455.500	.133
11. Slides	Male Female Total	75 46 121	62.93 57.85	4720.00 2661.00	1500.500	.198

Table 8, Mann-Whitney U test reports the differences in the opinions of the lecturer candidates when they categorized by gender. According to the table men lecturers are significantly using web-based software more than female lecturers (U=1192.500, P<0.05). Likewise, the men lecturers in our sample indicate that they

are using charts more than female lecturers significantly (U=1404.500, P<0.10). Regarding the other tools we couldn't find particular differences between the male and female perception in this study.

Table 4.9 Teaching tools according to lecturers' experiences

Items	Experience	N	Mean Rank	Sum of Ranks	U	P
1.Transparencies and overhead projector	1-15 15-above Total	66 55 121	62.58 59.51	4330.00 3251.00	1711.000	.405
2. White board	1-15 15-above Total	66 55 121	61.96 59.85	4089.50 3291.50	1751.500	.716
3. Presentation software (e. g power Point)	1-15 15-above Total	66 55 121	60.86 57.95	3834.00 3187.00	1647.000	.589
4. Web-based software (e. g web CT)	1-15 15-above Total	66 55 121	62.35 59.38	4115.00 3266.00	1726.000	.635
5.Simulation/demonstration software	1-15 15-above Total	66 55 121	65.22 55.94	4304.50 3076.50	1536.500	.135
6. Scientific software (e. g spreadsheets, math tool, databases)	1-15 15-above Total	66 55 121	58.79 63.65	3880.00 3501.00	1669.000	.436
7. Electronic bulletin board	1-15 15-above Total	66 55 121	61.00 61.00	4026.00 3335.00	1815.500	.415
8. Chart	1-15 15-above Total	66 55 121	59.00 63.40	3894.00 3487.00	1683.000	.481
9. Email	1-15 15-above Total	66 55 121	58.37 64.15	3852.50 3528.50	1641.500	.356
10. Video	1-15 15-above Total	66 55 121	61.33 60.61	4047.50 3333.50	1793.500	.907
11. Slides	1-15 15-above Total	66 55 121	66.83 54.01	4410.00 2970.50	1430.500	.032

As it can be seen from the table 9,according to Mann-Whitney U test output, the more experienced lecturers view on teaching tools do not vary from the less experienced lecturers view significantly except of (slides) that are used by less experienced lecturers significantly more (U=1430.500, P<0.05). However, some differences can be observed for some tools such as electronic bulletin board, emails and charts but these differences are not significant statistically.

# 4.4 Items Measuring the Factors that Hindering Teaching

The items that measure factors hindering teaching for the lecturers consist of items from 37 to 42 of the applied questionnaire of this thesis. These items were used to measure the lecturers perception on teaching methods. Table 10 consist these measures and highest percentage and the number of the variables that contains the measurements as 20%, 40%, 60%, 80% and 100% respectively.

**Table 4.10 Factors Hindering Teaching** 

			%- 0%		)%- )%		)%- )%		)%- )%		)%- )0%		
N	O Items	N	%	N	%	N	%	N	%	N	%	X	SS
1	Too wide a range of student abilities	5	4,1	4	3,3	19	15,7	46	38,0	47	38,8		41,028
2	Number of students (too many)	2	1,7	3	2,5	4	3,3	35	28,9	77	63,6	4,5	0,818
3	Research commitments	9	7,4	15	12,4	31	25,6	48	39,7	18	14,9	3,4	21,116
4	Lack of up-to date equipment and facilities	1	,8	9	7,4	11	9,1	33	27,3	67	55,4	4,29	9,970
5	Lack of library resources	7	5,8	4	3,3	24	19,8	41	33,9	45	37,2	3,93	31,109

6 Teaching outside area of expertise

13 10,7 12 9,9 27 22,3 37 30,6 32 26,4 3,521,279

The above table summarized the opinion of the sampled lecturers numerically about the factors that hinder teaching process, the participant lecturers respond to the statements positively for the presented items in this section however we will review all of them one by one in the following section.

Considering the statement of too wide a range of student abilities hinders the teaching, 38.8 % of respondent lecturers reported that they think its 80-100% correct and 38 % of them reported that the item affect teaching by 60-80%.

When the statement of number of students is examined, 63.6 % of lecturer candidates reported that they strongly agree that too many students in a class impact teaching negatively. Considering the statement (research commitments), 39.7 % of participant lecturers are agree with it which is inhibit teaching by 60-80% reported that they strongly disagree and 25.6 % of them reported that it hinder teaching by 40-60%.

Considering the statement of too wide a range of student abilities hinders the teaching, 38.8 % of respondent lecturers reported that they think its 80-100% correct and 38 % of them reported that the item affect teaching by 60-80%.

When the statement of number of students is examined, 63.6 % of lecturer candidates reported that they strongly agree that too many students in a class impact teaching negatively. Considering the statement (research commitments), 39.7 % of participant lecturers are agree with it which is inhibit teaching by 60-80% reported that they strongly disagree and 25.6 % of them reported that it hinder teaching by 40-60%.

According to the responses given to the statement of lack of up-to date equipment and facilities prevent teaching, 55.4 % of teacher candidates reported that they strongly agree that it prevent by 80-100%, and 27.3 % of them reported that

they think the component of this statement hinder teaching by 60-80%. Regarding the statement of lack of library resources barriers to teaching,

More than 70 % of teacher candidates reported that they strongly agree with the statement. Finally in respect of last item of this section, 30.6% of the lecturers agree that 60-80% prohibit teaching if the lecturers are teaching out of their area expertise and 26.4% of them indicate that they are strongly agree with the item.

Table 4.11 Factors that hinder the lecturers teaching according to their genders

Items	Gender	N	Mean Rank	Sum of Ranks	U	P
1. Too wide a range of student	Male	75	62.93	4720.00	1580.000	.410
abilities	Female	46	57.85	2661.00		
	Total	121				
2. Number of students (too	Male	75	62.45	4684.00	1616.000	.492
many)	Female	46	58.63	2697.00		
	Total	121				
3. Research commitments	Male	75	58.78	4408.50	1558.500	.353
	Female	46	64.63	2697.00		
	Total	121		•		
4. Lack of up-to date equipment	Male	75	59.85	4489.00	1639,000	.610
and facilities	Female	46	62.87	2892.00		
and facilities	Total	121				
5. Lack of library resources	Male	75	57.63	4320.00	1472.000	.155
•	Female	46	66.50	3059.50		
	Total	121				
6. Teaching outside area of	Male	75	59.47	4460.00	1616.000	.548
expertise	Female	46	63.50	2921.00		
oxportise	Total	121				

Using Mann-Whitney U test, when the items of this section in the table 11, that related to the factors that barriers to teaching are analyzed in term of the differences in gender, we couldn't find any significant differences between male lecturer candidates and female lecturer candidates. On average both genders in our sample have the same opinion on the factors that hinder teaching.

Table 4.12 Factors that hinder the lecturers teaching according to lecturers' experiences

Items	Experience	N	Mean Rank	Sum of Ranks	U	P
1. Too wide a range of student	1-15	66	61.17	4037.00	1804.000	.951
abilities	15-above	55 121	60.80	3344.00		
aomics	Total	121				
2. Number of students	1-15	66	63.69	4203.00	1637.500	.276
(too many)	15-above	55 121	57.77	3177.50		
2 Danamit	Total			4404 - 0		
3. Research commitments	1-15	66 55	66.69 54.17	4401.50	1439.500	.041
·	15-above	121	34.17	2979.50		
	Total					
4. Lack of up-to date equipment	1-15	66	65.11	4297.00	1544.000	.117
and facilities	15-above	55 121	56.07	3084.00		
	Total	121				
5. Lack of library resources	1-15	66	64.09	4264.50	1576.500	.191
-	15-above	55	57.29	3116.50		
	Total	121				
6. Teaching outside area of	1-15	66	64.09	4230.00	1611.000	.273
expertise	15-above	55	57.29	3151.00		
	Total	121				

According to Mann-Whitney U test in the table 12, that categorizes the lecturer candidates with respect to their experiences, we don't find any significant differences between the perceptions of more and less experienced lecturers except in one item which is concerning research commitment as a factor that hinder the teaching process. Accordingly less experienced indicate that the research commitments impact their teaching negatively more than experienced lecturers (U=1439.500, P<0.05). The case may be because less experience lecturers are not expertise sufficient to write and publish academic researches.

### **CHAPTER V**

### SUMMARY AND CONCLUSIONS

#### 5.1 Presentation

Universities are educational institutions based on teaching different sciences regardless the nature the departments and faculties there is teaching and learning process in all faculties. On the other hand, teachers have different perspectives about the effective teaching styles. The aim of this study is to determine the teachers' opinions about effective teaching and teaching methods used in agricultural faculty of Sulaimani University in Iraq.

### 5.2 Summary of the Results

This study investigates the teaching methods in agricultural college in higher education from teacher's point of view.

Regarding the lecturers view about teaching the finding suggests that the majority of the lecturers are disagree with the statement of (teaching is encouraging students to ask questions and motivating students to learn). More than 90% of the lecturers think that teaching doesn't transmit important knowledge to students. In contrary of expectations the lecturers believe that the communication between lecturers and students is not a part of teaching. However, the lecture candidates don't reject that teaching is stimulating students to think critically. Moreover, 13.2% of the lecturers indicate that through teaching they pass their experiences to students. Further, 4.27% of the lecturers think that teaching is supporting and caring for students.

In the section of view of the lecturers on teaching, the view of the lecturer candidates are significantly different in terms of gender. The female lecturers are more positive and agree with respect of the items of the "Motivating students to learn, Transmitting important knowledge to students, Providing up to date and

interesting resource material for students, Promoting conceptual changes in students, Setting challenging problems and assignment, and helping students to cope with them, Communicating ideas between lecturer and students, Supporting and caring for students, Passing on lecturers experiences to students, Displaying enthusiasm for the subject matter". Also there is a significant difference between the views of lecturers in terms of their experience in a way that the less experienced lecturers more agree with the statements about "communicating ideas between lecturers and students and Setting challenging problems and assignment, and helping students to cope with them".

Considering the teaching methods, findings report that the lecturer candidates are highly benefiting from using lecture methods and other teaching methods that are proposed to them which are seminar method, problem based method, project based method, case method, collaborative/cooperative learning and peer teaching. Furthermore, it can be seen that in respect to project based learning and collaborative learning male lecturers are using the method more than the female lecturers, this differences are statistically significant. However, there is no significant difference between the views of the lecturer candidates with respect of the working experiences.

When teaching tool items are examined we found that, the lecturer candidates are never using electronic bulletin board, they benefit from chart very little and not using email actively. In contrary the lecturer participants are using and benefiting from other ten tools of the sections. There is no difference in terms of gender in using the suggested tools except two of them that's the female lecturers using transparencies and overhead projector and Web-based software significantly more than male lecture candidates. When we categorized the participants to experienced and less experienced lecturers, we couldn't find a significant difference for using the suggested tools except in the case of (slides), at which less experienced lecturers are using it more than others significantly.

When we examined factors that hinder the lecturers teaching, all the respondents agree that the suggested factors are hindering their teaching that are; too wide a range of student abilities, number of students (too many), research commitments, lack of up-to date equipment and facilities, lack of library resources

and teaching outside area of expertise. Comparing the view of female lecturer candidates with male ones, we didn't find significant differences. However, when we compare them in terms of experiences we find that less experienced lecturers believe that research commitments hindering their teaching more than the others, the difference is approved significantly while we couldn't find the significant differences in term of other items.

### 5.3 Recommendations

From the findings, we recommend that the university should provide more technology in teaching tools. In contrary of our expectations, the lecture candidates were very disappointed about the teaching process that on average they believe that teaching will not encourage students to learn and more than 90% of the lecturers think that teaching doesn't transmit important knowledge to students on the other hand a few of the lecturer candidate were agree with the statement that teaching is supporting and caring for students and through teaching they pass their experiences to the students.

Finally, further researches can be employed in different levels of the educational institutions, different colleges and different universities by using more variables or different variables. Other methodology can be used to investigate the same field of this thesis such as qualitative research.

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### **QUESTIONNAIRE**



First of all I would thank you for your contribution in my research in purpose of preparing my master thesis titled (Teaching Methods in Agricultural College). As a result I will find the preferred teaching methods in the college of agriculture of Sulaimai University. This questionnaire is a basic of my thesis in (Near East University). I would mention that each question which you answer has a significant impact on my research and is valuable. Finally I would let you know that no personal information about the participants will be resealed.

Sex of Participants	male	Female
Age		years old
Occupation (certifications)	••••••	••••••
Experienced working		years

# Questionnaire

# Section A- View on teaching

A-Strongly Disagree B-Disagree C-Undecided DAgree E-Strongly Agree

How much do			Nicotae		66 <del>02</del> 22222
How much do you agree with each of the following statements concerning what effective teaching is?	A	В	C	D	E
1. Encouraging students to ask questions					
2. Motivating students to learn					
3. Promoting discussion about the subject matter					
4. Transmitting important knowledge to students					
5. Providing up to date and interesting resource material for students					
6. Promoting conceptual changes in students					
7. Setting challenging problems and assignment, and helping students to cope with them					
8. Communicating ideas between lecturer and students					
9. Supporting and caring for students					
10. Providing situations where students can learn from each other					
11. Passing on lecturers experiences to students					
12. Giving interesting presentation, using instructional technology	e e e e e e e e e e e e e e e e e e e				
13. Stimulating Students to think a critical way					
14. Producing independent learners					
15. Equipping students with independent skills for problem solving					
16. Helping students to understand important ideas					
17. Displaying enthusiasm for the subject matter					

**B-Seldom** C-Occasionally **D-Often** E-Very often How often do you use each of the following methods of teaching? 18. Lecture method 19. Seminar method 20. Problem-based learning 21.Project-based learning 22. Case methods 23. Experiential method 24. Collaborative/Cooperative learning

A-Never

25. Peer teaching

A-Never **B-Seldom** C-Occasionally **D-Often** E-Very often

How often do you use each of the following in your teaching?	A	В	C	D E	
26. Transparencies and overhead projector		Н		HH	-
27. White board		H			-
28. Presentation software (e. g power Point)		H			4
29. Web-based software (e. g web CT)		H			4
30. Simulation/demonstration software					-
31. Scientific software (e. g spreadsheets, math tool, databases)					-
32. Electronic bulletin board			_		4
33. chart					
34. Email					
35. Video	TH				
36. Slides			— ļ		

A- 0-20 % E- 80-100 %

B- 20-40 % C- 40-60 % D- 60-80 %

What factors do you find hinder your teaching?	A	В	lc	a	lr
37. Too wide a range of student abilities					
38. Number of students (too many)					
39. Research commitments					************
40. Lack of up-to date equipment and facilities					
41. Lack of library resources		***************************************			
42. Teaching outside area of expertise					

