

## Traditional Versus Nontraditional Methods of Teaching: the Impact on Nursing Teaching Effectiveness and Student's Achievements at Nursing Colleges

تأثير طريقة التدريس التقليدية مقابل طريقة التدريس غير التقليدية على فاعلية التدريس وتحصيل الطلبة في كليات التمريض في الجامعات الأردنية

Mohammed Abu Hasheesh\*, Omar Al-Mostafa\*\* & Hala Obeidat\*\*\*

محمد أبو حشيش، عمر المصطفى، وهاله عبيدات

\*Faculty of Nursing, Al-Israa University. \*\* Head of Community Health Nursing Department, \*\*\* Head of Maternal Child Health Nursing Department, Princess Muna College of Nursing, Mutah University, Jordan.

E-mail: abuhasheesh2005@yahoo.com

Received: (4/4/2010), Accepted: (26/1/2011)

### Abstract

**Purpose:** The purpose of the present study was to examine the effect of traditional (lecture) versus nontraditional methods of teaching (role-play, and case study) on the students' achievement and teaching effectiveness in Nursing Colleges at Jordanian Universities. **Method:** An experimental research design was utilized to compare the effect of Traditional (lecture) versus Non- traditional (role-play and case study) teaching methods on student's achievements and teaching effectiveness. Data was collected from Princess Muna College of Nursing in Jordan. A total of (72) second -year baccalaureate female nursing students were included in this study. This sample was randomly assigned into three groups, namely; group one taught by lecture, group two taught by role-play, and group three taught by case study. The three groups were exposed to an infection control and disease prevention program. Data was collected using the Reeve Questionnaire (1994) to assess teaching effectiveness and instructor- made test to measure student's

achievements. **Results:** The present study showed the presence of significant differences in the student's achievements attributed to the type of teaching strategy utilized ( $F=6.01$ ;  $p\leq 0.05$ ). Moreover, there were significant differences ( $F=14.93$ ;  $p\leq 0.05$ ) in teaching effectiveness related to teaching strategy used. **Conclusion:** Based on the study findings, improving nursing student's achievements as well as teaching effectiveness require nursing educators to shift from teaching methods that promote passive learning to those that encourage active learning and engage students in the educational process. As for effective teaching, students must read, write, and discuss the material they are learning. They must also participate in high order thinking exercises, such as analysis, synthesis, and evaluation.

**Key words:** Teaching, effectiveness, nursing students, achievements, teaching methods/strategies, lecture, role-play, and case study.

### ملخص

**الهدف:** هدفت هذه الدراسة الى اختبار تأثير طريقة التدريس التقليدية (المحاضرة) مقابل طريقة التدريس غير التقليدية (لعب الأدوار، دراسة الحال) على فاعلية التدريس وتحصيل الطلبة في كليات التمريض في الجامعات الأردنية. **الطريقة:** لتحقيق هدف هذه الدراسة تم استخدام التصميم التجريبي، كما تم اختيار (٧٢) طالبة من طلبة السنة الثانية من كلية الأميرة منى للتمريض-جامعة مؤتة، حيث تم توزيعهن عشوائياً على ثلاثة مجموعات متساوية. كما تم اختيار ثلاثة أعضاء هيئه تدريس من حملة الماجستير بالطريقة العشوائية من الكلية نفسها وقد درست كل مجموعة من المجموعات الثلاثة برنامجاً دراسياً موحداً وبشكل متزامن في موضوع ضبط العدوى ومنع انتشار الأمراض المعدية في المستشفيات، إذ قامت كل مجموعة بدراسة البرنامج بإحدى الاستراتيجيات الثلاث المستخدمة. ولغرض جمع البيانات، تم استخدام اختبار تحصيلي طور من قبل الباحثين لقياس تحصيل الطلبة في البرنامج التدريسي الذي اعتمد في التجربة، ومقاييس ريف (١٩٩٤) لقياس فاعلية التدريس. **النتائج:** أظهرت النتائج باستخدام تحليل التباين الثنائي وجود فروق ذات دلالة إحصائية في تحصيل الطلبة تعزى لاستراتيجية التدريس المستخدمة من قبل المدرس. وكشف التحليل الاحصائي كذلك عن وجود فروق ذات دلالة احصائية في فاعلية التدريس تعزى لاستراتيجية التدريس المستخدمة. **الاستنتاجات:** خلصت نتائج الدراسة إلى أن يتبنى المدرسوں استراتيجيات التدريس التي تجعل الطالب مشاركاً نشطاً في تعلمها وبما يناسب قدرات طلابهم والماده الدراسية التي يقومون بتدريسيها.

**الكلمات المفتاحية:** فاعلية، التدريس، التحصيل، طلبة التمريض، طريقة/ إستراتيجية التدريس: المحاضرة، لعب الأدوار ودراسة الحال.

## Introduction

Nursing education principally concentrates on transmitting nursing knowledge, and assisting nursing students to acquire the necessary skills and attitudes associated with nursing practice (Salsali, 2005). To meet the diverse needs of today's educational climate, nursing educators must develop an understanding of a variety of learning environments and skills in contemporary teaching strategies. Nurses must also maintain the ability of divergent thinking to solve the health problems of patients (Yalie et al., 2002).

One way to enhance nursing education is to determine the effect of teaching methods on nursing student's achievements and teaching effectiveness at nursing colleges. In this regard, the effectiveness of teaching methods in nursing education has been supported by numerous studies (Bergman & Gaitskill, 1990; Thompson & Sheckely, 1997). These studies support the positive effect of delivering nursing education through active learning techniques and innovative teaching strategies on student's achievements and thinking abilities. Delivering nursing education through the traditional lecture format, on the other hand, is criticized for its emphasis on the learners' passive receipt of knowledge rather than learning to think critically (Alexander et al., 2002; Biley, 1998).

Moreover, in nursing education the interest in improving student's achievements and the quality of teaching effectiveness have been increased over the time. As for teaching effectiveness, defining what we mean by effective teaching, however, presents a challenge to the nursing profession (Salsali, 2005). According to Fitzpatrick (2004), teaching is a complex and demanding activity that involves mastery of content, classroom discipline, techniques of organization, and demanding of teaching skills. The researcher goes on to say that the profile of effective teachers is as diverse as the students they teach. Additionally, in qualities of effective teachers, Stronge (2002) synthesizes research to identify specific behaviors that contribute to student's achievement, rather than look at outside factors like demographics, district leadership, and state

mandates. This corroborates to the experiences of Zygmont and Schaefer (2003) who also found that

effective teaching requires nursing educators shift from a teacher-centered to student – centered approach, which can foster independence in learning, creative problem- solving skills, a commitment to life- long learning and critical thinking.

### **Literature review**

Chickering and Ehrman (1996) indicate that different researches have shown that performance, satisfaction, and achievement are improved when colleges and universities are systemically engaged in the use of best practices, and innovative teaching learning strategies in education. They also stated that faculty members, who already work with students in ways consistent with the principles of best practices, need to incorporate these principles into technology- assisted instruction and other innovative teaching methods that they create and promote.

Thompson and Sheckley (1997) studied differences in classroom teaching between traditional and adult Bachelor of Science nursing students and found that BSN students preferred situations in which they engage in thinking about content, framing questions, identifying assumptions, and predicting consequences. Traditional lecturing is one of the oldest and by far the most widely used methods of teaching. According to Ebert-May, Brewer, and Allerd (1997), lecturing is ineffective as an instructional method. They also assert that lecturing creates a passive, non-thinking, information-receiving role. Furthermore, a paradigm shift is indicated by those researchers from the lecture model to the one that uses a variety of approaches which focus on effective teaching and stimulating students to think critically, and more specifically , to analyze and synthesize information .

According to Jeffries (2001) the current paradigm shift in higher education from teacher-centered to student-centered instruction, makes nursing colleges design more self-paced, versatile, and independent strategies to teach nursing knowledge and skills. The researcher goes on

to say that traditionally, nursing skills have been taught in a lecture and demonstration format. However, this strategy does not ensure that content is delivered in a consistent manner, nor does it accommodate diverse learning style. In contrast, Miller (2003) compared student outcome following problem-based learning instruction versus traditional lecture in a graduate pharmacology course. Control (n=12) and experimental (n=10) group means for middle-of-term examinations, final examinations, end-of-course numerical averages, and numerical scores of satisfaction were analyzed with a (t) test for statistically significant differences. The result showed that there were no significant differences between groups, suggesting that problem-based learning and traditional lecture format may be equally effective course delivery methods.

Johnson and Migheten (2005) compared two teaching strategies: lecture notes combined with structured group discussion versus lecture only. They compared the examination scores of two groups of students who took a 3- credit medical – surgical nursing course as experimental and control group. The researchers found statistical significant differences between the means of the experimental and control group in favor of the experimental group. Additionally, Levitt and Adelman (2010) examined the use of role play in teaching nursing theory in an online Baccalaureate program. In this study nursing students adopted the persona of a specific nursing theorist, interacting with other nursing theorists played by their peers. The results revealed that student engagement and active learning reflect excitement and interest, and course evaluations have been extremely positive for this content and method. Students also developed a sustained interest in nursing theory well beyond the end of the actual course.

Effective teaching is important in the teaching learning process. Salsali (2005) determined the perceptions of Iranian nurse educators and students regarding the teaching effectiveness in university –based program. The researcher identified specific teacher behaviors that contribute to student's achievements, and recommended better and more comprehensive measures of teaching effectiveness to be developed.

A study was conducted by Schonwetter et al. (2006) to assess student's perception of effective classroom teaching in dental education. In this study, seven categories of effective teaching qualities were identified namely; individual rapport, organization, enthusiasm, learning, group interaction, exams and assignment and breadth. Based on this study, the researchers concluded that, educators attempting to impact student's learning and achievements should stress their efforts on the organization of contemporary teaching strategies that facilitate and foster student's learning and achievements.

In another study performed by Russelt et al. (2007) to examine teaching strategies prompting active learning in health care education. This study revealed that strategies such as questioning techniques, self-directed learning, concept mapping, role playing, problem based learning and case-based instruction are used by educators within several allied health programs to promote active learning and encourage students to become critical thinkers and problem solvers. Moreover, in a study conducted by Bangert and Easterby (2008) for designing and delivering an online Trends and Issues Nursing course for 53 nurses with the evolve electronic classroom using the seven principles of effective teaching. Results indicated that most learners perceived that the course was generally a positive learning experience and that constructivist-based principles were used to design and deliver instruction that effectively promoted student learning.

In conclusion, nursing is a practice-based profession, over indulgence in teaching knowledge through teacher-centered methods may result in ineffective teaching effectiveness and low student's achievements. Students are also required to use the material they are learning to become active participants instead of being passive bodies sitting in a lecture hoping to absorb the concept being taught. As far as the researchers know, Jordanian research that has been conducted on teaching strategies that facilitate nursing student's achievements and teaching effectiveness in nursing education is limited. Thus, the current study sought to compare the effect of traditional (lecture) versus nontraditional methods of teaching (role-play, and case study) on the

students' achievement and teaching effectiveness in Nursing Colleges at Jordanian Universities.

### **Problem of the study**

Over the past years, the health care system has undergone a rapid and unprecedented change because of a diminished life span of useful information and an increasing complexity of practice (Williams, 2004). Because of the increase in the amount of information to learn in a relatively short period of time, educators have to reconsider their teaching strategies to meet the demands of a new health care system (Akinsanya & Williams, 2004). Educators agree that lasting improvements in the health care delivery system will ultimately depend on change in the education of those who provide the care. So, nursing educators must help students develop critical thinking skills and encourage problem-solving abilities through non-traditional methods of teaching. Effective teaching also implies that nursing educators shift from a teacher-centered to student-centered approach, which can foster independence in learning, creative problem-solving skills, a commitment to life-long learning and critical thinking.

### **Study Questions**

Based on the study problem, the following research questions were explored:

1. What is the effect of teaching strategy (lecture versus role play & case study) used by the teacher on the student's achievements in nursing colleges at Jordanian Universities?
2. What is the effect of teaching strategy (lecture versus role play & case study) used by the teacher on teaching effectiveness in nursing colleges at Jordanian Universities?

### **Study Hypotheses**

The study hypotheses tested at the .05 level of significance were:

1. There are no significant statistical differences ( $\alpha= 0.05$ ) in student achievement related to teaching strategy (lecture versus role play & case study) used by the teacher.
2. There are no significant statistical differences ( $\alpha = 0.05$ ) in teaching effectiveness related to teaching strategy (lecture versus role play & case study) used by the teacher.

### **Methodology**

**Research design:** An experimental research design was utilized to accomplish the purpose of this study through exploring the effect of teaching strategy (lecture versus role-play, and case study) on the students' achievement and teacher's effectiveness in the Nursing Colleges at Jordanian Universities

**Setting:** The study was conducted at Princess Muna College of Nursing which is run by the Royal Medical Services in Amman as well as Mu'ta University, Jordan. This college was randomly selected from the nursing colleges at Jordanian Universities using stratified sampling method.

**Population and Sample:** The study population consisted of nursing students in Jordanian universities. A (72)- second- year nursing students from Princess Muna College of Nursing were assigned randomly into three groups; namely; group one taught by a lecture, group two taught by role-play, and group three taught by case study. In addition, three qualified faculty members were selected randomly to conduct the teaching sessions mentioned above. The three groups studied an infection control and disease prevention course by using one of the three teaching strategies, i.e., lecture, role-play, and case study as arranged before.

**Instruments:** The following two instruments were utilized for the purpose of the present study.

1. The Reeve Questionnaire (1994). This questionnaire was used to assess the teacher's effectiveness. The questionnaire was translated into Arabic (see appendix 1). It was reviewed in terms of content and

face validity by the specialized people in the field of education in public and private education colleges. As a result of the review, time needed to complete the questionnaire was estimated, an adjustment was made to some questions to give more clarity and appearance, and formatting change was made. Test- retest reliability of (0.84) has been demonstrated using Spearman correlation coefficient. The questionnaire includes 30 statements on a 5-point likert scale: strongly agree, agree, not sure, do not agree, and strongly disagree. The questionnaire was concerned with the following domains: professional traits for effective teacher, Personal traits, relationship with others, and mastering the teaching content.

2. Instructor- made test. This test was used to assess student's achievement. It consists of 50 multiple- choice questions. Validity of this test was obtained through the analysis of the test items by six experienced faculty members in teaching infection control courses working at Princess Muna College of Nursing. Test- retest reliability of (0.81) was demonstrated using Spearman correlation coefficient. In addition, the difficulty and discrimination indexes were (0.50-0.70; 0.50-0.90) respectively. This has demonstrated the suitability of the test for achieving the objectives of the study.
3. Teaching program: The program utilized in teaching the three groups was on infection control and disease prevention. This program is one of the educational programs used at Canasas University Hospital for the purpose of preventing and controlling the spread of infection (Gilliand, 1998). This program has also been used at Royal Medical Services in Jordan as a continuing educational program (Abu-Zaid, 2003). It is worth mentioning that this program consists of the following 3 sections:

Section 1: Finding infection prevention and control information.

Section 2: Reducing blood and body fluid exposure to health care workers.

Section 3: How to protect yourself and others

**Data Collection Procedure:** Once the official permission was obtained from Princess Muna College of Nursing administration to proceed with the present study, the purposes and nature of the study were explained to the research subjects. Voluntary participation and confidentiality were ensured for the subjects by anonymity, and utilization of consent form to participate in the study. Pre-test in relation to program taught (Infection control) was administered, and nursing teacher's effectiveness was evaluated by his group. Every nursing teacher taught a nursing program (infection control) to one group using a specified teaching strategy, i.e., lecture, role-play, and case study. The researcher provided all of the instruments and teaching aids needed by the teachers. Upon completion, the researcher made a post-test to measure the student's achievement and evaluated the teaching effectiveness for each teacher by his group. The study was conducted during the period of January to March, 2008.

**Data Analysis:** SPSS program was used for data entry and analysis. Descriptive statistics were used to describe the study sample. The two-way ANOVA and Scheffe test were used to measure differences among study variables. The multiple A NOVA was not utilized for the analysis of this study for the following reasons: The limited simple size ( $n= 72$ ), and Inavailability of homogeneity among groups in this study as determined by Box's M test ( $F = 4.251$ ;  $\alpha = 0.05$ ).

## Results

A total of (72) second -year baccalaureate female nursing students aging 19 - 20 years participated in the study. Of the (16) MSc faculty members working at Princess Muna College of Nursing, three males, aging 35-40 years were randomly selected.

### **Results related to the pre-test**

**Table (1):** Means, standard deviation and (F) test of the student's achievements in the pre-test by teaching strategy used by the teacher.

<b>teaching strategy</b>	<b>Mean</b>	<b>S D</b>	<b>F</b>	<b>Sig.level</b>
Lecture	54.75	4.6	0.441	0.645
Role-play	53.58	9.16		
Case study	55.42	5.45		

Table one demonstrates mean scores with standard deviations for student's achievements by the three strategies, i.e., lecture, role - play and case study used to teach the program. The analysis of results shows that the mean scores of student's achievement taught by case study were the highest (55.42), followed by those taught by lecture, with the lowest mean score for the group taught by role-play (53.58). In comparing the effect of teaching strategy on student's achievements among the three groups, the Table indicates that differences were not found at  $\alpha = 0.05$  using two- way ANOVA ( $F=0.441$ ) in student's achievements among the three groups.

Teaching effectiveness was not calculated in the pre-test because the faculty members who were selected to conduct this study did not teach the nursing students before in order to exclude their previous influence on the study outcome.

### **Results related to the post-test**

**Table (2):** Mean scores, standard deviation and (F) test of the student's achievements in the post-test by teaching strategy used by the teacher.

<b>Teaching strategy</b>	<b>Mean</b>	<b>SD</b>	<b>F</b>	<b>Sig. Level</b>
Lecture.	63.08	7.6	6.01	0.004
Role-Play	65.17	10.81		
Case study	71.67	8.84		

Table two demonstrates mean scores with standard deviations for student's achievements by the three strategies, i.e., lecture, role - play and case study used to teach the program. The analysis of results shows

that the mean scores of student's achievement taught by case study were the highest (71.67), followed by those taught by role-play, with the lowest mean score for the group taught by lecture method (63.08). In comparing the effect of teaching strategy on student's achievements among the three groups, the Table indicates that a difference at  $\alpha=0.05$  using two -way ANOVA ( $F=6.01$ ) was found in the student's achievements in the three groups.

**Table (3):** Scheffe test for comparison of student achievement in the post test by teaching strategy.

Sources of differences		The difference in means	Standard Error	Sig. level	Level of Confidence for Means	
Strategy (1)	Strategy (N)				Lower Mark	Higher Mark
Lecture	role-play	-2.08	2.58	0.723	-8.55	4.38
	Case study	-8.85*	2.58	0.006	-15.05	-2.12
role-play	Lecture	2.08	2.58	0.723	-4.38	8.55
	Cass study	-6.50*	2.58	0.049	-12.97	-3.27
Case Study	Lecture	8.58*	2.58	0.006	2.12	15.05
	role-play	6.50*	2.58	0.049	3.27	12.97

Table three shows the sources of differences in student's achievement among the three groups, i.e., case students, role-play and lecture. Scheffe test was used and revealed differences between students taught by case study and those taught by lecture in favor of the ones taught by case study, between student's taught by case study and students taught by role-play in favor of those taught by case study, and no significant differences were found in achievement between students taught by lecture and those taught by role-play.

**Table (4):** Mean scores, standard deviation and (F) test of the teaching effectiveness in the post-test by teaching strategy used by the teacher.

Teaching strategy	Mean	SD	F	Sig. Level
Lecture	68.46	9.33	14.93	0.000
Role-Play	76.38	10.47		
Case Study	81.58	6.9		

Table four demonstrates mean scores with standard deviations for the teaching effectiveness according to the utilized teaching strategy. The mean score of teacher's effectiveness using case study was the highest (81.58), followed by the mean score of teacher's effectiveness using role play, i.e., (76.38). Thus, the mean score of teacher's effectiveness using lecture strategy was the lowest (68.46). In comparing the teaching effectiveness among the three groups, the two-way ANOVA results revealed that a difference ( $F=14.93$ ;  $p\leq 0.05$ ) was found in the teacher's effectiveness in the three groups.

**Table (5):** Scheffe test for comparison of teaching effectiveness in the post-test by teaching strategy.

Sources of differences		The difference in means	Standard Error	Sig. level	Level of Confidence for Means	
Strategy (1)	Strategy (N)				Lower Mark	Higher Mark
Lecture	role-play	-7.9167*	2.4191	0.007	-13.9749	-1.8585
	Case study	-13.1250*	2.4191	0.000	-19.1832	-7.0668
role-play	Lecture	7.9167*	2.4191	0.007	11.8585	13.9749
	Cass study	-5.2083	2.4191	0.106	-11.2665	0.8499
Case Study	Lecture	13.125*	2.4191	0.000	7.0668	19.1832
	role-play	5.2083	2.4191	0.106	-0.8499	11.2665

Table five shows the sources of differences found in the teacher's effectiveness in the three groups. Scheffe test was used and revealed that those differences were between teachers employing case study and teachers using lecture in favor of those taught by case study, between teachers using role play and teachers using lecture in favor of those

taught by role play, and no significant differences in teaching effectiveness were found between teachers using case study & those using role play.

### **Discussion**

In this study the non-traditional teaching methods, i.e., case study and role-play resulted in increasing student's achievement as well as teaching effectiveness. These results are consistent with the findings of (Chickering & Ehrman, 1996; Ebert-May et al., 1997; Jeffries, 2001; Johnson & Mighton, 2005 and Russelt et al. 2007). However, the greater student's achievement and teaching effectiveness were found among students taught by case study compared with those taught by role-play and lecture methods respectively. These differences may be due to different thinking patterns provided by case study as a teaching method for solving nursing problems, and through assisting nursing students to utilize their experience in choosing from different alternatives. This demonstrates that nursing students can be taught effectively by using student-centered teaching methods.

In addition, case study as a teaching method provides learners with direct feedback about their learning and makes them active learners instead of being passive receivers as in the lecture methods, this is on one hand. On the other hand, decreased student's achievements taught by lecture method may be due to deficiencies of this method as it restricts student's abilities for thinking and makes them totally dependent on the teacher as a source of information without taking into consideration the individual differences among students and the limited ability of the instructor to know if the students understand the information. This method does not also help students in attaining and retrieving knowledge.

The above- mentioned results are consistent with (Chickering and Ehrman, 1996) who found that student's performance, satisfaction, and achievement are improved when colleges and universities are systemically engaged in the use of innovative teaching learning strategies in education. Similarly, on 11 fourth- year undergraduate nursing students, Andrews (1996) explored the use of problem-based learning by

employing the case study as a teaching method. Andrews's study indicated that case study accommodates various students' learning styles, facilitates discussion, group work, and negotiation within the learning situations. Furthermore, Ebert-May et al.,( 1997 ) indicated a paradigm shift from lecture model to the one that uses a variety of approaches which focus on effective teaching and stimulating students to think critically, and more specifically , to analyze and synthesize information .

The current study results are also in agreement with the results of a study conducted by (Smith, 2003) who found that active group cooperative learning leads to more engagement of nursing students at the college level and increases their achievements. The same study also showed that (79%) of students taught by the cooperative methods complete their studies successfully as compared with 57% of those who completed their studies successfully by using the traditional teaching methods.

As for teaching effectiveness and teaching strategies, the present study revealed that there were differences in teaching effectiveness according to the teaching strategy used by the teacher in which the teaching effectiveness was significantly better for teachers using case study and role -play compared with those using lecture method as indicated in Table three p. ( 10). These differences may be due to the teaching method which allows nursing educators to directly interact with nursing students, and to share their opinions, discuss and convince them of the possible solutions to the encountered problems. Advantages of the case study and role-play also produce a positive attitude toward the nursing educators and lead to elevated teaching effectiveness scores given by nursing students compared with those given to the one using the lecture method. This is on one hand. On the other hand, the disadvantages of lecture as teacher centered- method which does not give the opportunity for discussing or asking questions may lead to forming negative attitudes toward the nursing educator and subject matter. This, in turn, gives the educator low scores on teaching effectiveness measurement. These results are consistent with those of (Schor et al., 1995) who found that teaching effectiveness using case study as a

teaching method was better than teaching effectiveness using lecture method among medical students in Pittsburg University. Moreover, the researchers in the present study found that students taught by case study and role-play have better achievements. The present study results are congruent with (Patten, 2001) who concluded that there were a positive significant relationship between student's achievement and teaching effectiveness. This study results are also consistent with those of the one conducted by (Morozowski, 2002) who revealed that students with high achievements give their teachers more rating in their effectiveness compared with low achievement students.

### **Conclusion and Recommendations**

Based on the study findings, improving nursing student's achievements as well as teaching effectiveness require nursing educators to shift from teaching methods that promote passive learning to those that encourage active learning and involve students in the educational process. As for effective teaching, students must read, write, and discuss the material they are learning. They must also participate in high order thinking exercises, such as analysis, synthesis, and evaluation. This study can serve as a benchmark for identifying other effective teaching methods in increasing nursing student's achievement as well as teaching effectiveness. The researchers of the present study recommend further researches to be conducted at nursing colleges by other researchers in the years to come.

### **References**

- Abo-zaid, R. (2003). "Infection control health education program. Assessing the impact on paramedic nurses knowledge at King Hussein Medical Center". The second Nursing Conference. Alzytneh University. Jordan.
- Akinsanya, C. & Williams, M. (2004). "Concept mapping for meaningful learning". Nurse Educator Today. 24(1). 41-46.

- Alexander, J. McDaniel, G. Baldwin, M. & Money, B. (2002). "Promoting, applying and evaluating problem-based learning in the undergraduate nursing curriculum". *Nursing Education perspectives*. 23(5). 248-253.
- Andrews, M. (1996). "Problem -based learning in an undergraduate nursing program. A case study". *Journal of Advanced Nursing*. 23(3). 357-365.
- Bangert, A. & Easterby, L. (2008). "Designing and delivering effective online nursing courses with the evolve electronic classroom". *Journal of Nursing Informatics*. 26(5). 545-605.
- Bergman, K. & Gaitskill, T. (1990). "Faculty and Student perception of effective clinical teachers. An extension study". *Journal of Professional Nursing*. (6). 33-44.
- Biley, F. & Smith, K. (1998). "Exploring the potential of problem-based learning in nurse education". *Nursing Education Today*. (18). 353-361.
- Chickering, A.W. & Ehrmann, S.C. (1996). "Implementing the seven principles". Technology as a lever *AAHE Bulletin*. (49). 393-396.
- Ebert-May, D. Brewer, C. & Allerd, S. (1997). "Innovation in Large Lectures. Teaching for active learning". *Bioscience*. (47). 601- 607.
- Fitzpatrick, J. (2004). "Evaluating teaching effectiveness". *Nursing Education Perspectives*. 25(3). 109. PubMed abstract.
- Gilliland, M. A. (1998). "Infection prevention and control education module". <http://www.kumc.edu/control/manual.pdf>.
- Jeffries, P. R. (2001). "Computer versus lecture. A comparison of two methods of teaching oral medication administration in a nursing skills laboratory". *Journal of Nursing Education*. 40 (7). 323-329.
- Johnson, J. & Mighton, A. (2005). "A Comparison of teaching strategies. Lecture notes combined with structured group discussion versus lecture only". *Journal of Nursing Education*. 44 (7). 319-322.

- Levitt, C. & Adelman, D. (2010). "Role- play in nursing theory. Engaging online students". Journal of Nursing Education. 49(4). 229-232.
- Miller, S.K. (2003). "A comparison of student outcomes following problem-based learning instruction versus traditional lecture learning in a graduate pharmacology course". Journal of the American of Nurse Practitioners. 15(12). 550-556.
- Mrozowski, J. (2001). "Study links teacher quality and student progress". The Cincinnati Enquirer. a Gannett co. Inc.
- Patten, P. (2001). "How teacher quality affects students achievement and how parents can help". (NPIN) Parent News November. December 2001. How Teacher Quality Affects Students Achievement and How Parents Can Help htm.
- Reeve, M. M. (1994). "Development of an instrument to measure effectiveness of clinical instructors". Journal of Nursing Education. 33 (1). 15-20.
- Russelt, A. Comello, R. & Wright, D. (2007). "Teaching strategies promoting active learning in health care education". Journal of Education and Human Development. 1(1).
- Salsali, M. (2005). "Evaluating teaching effectiveness in nursing education. An Iranian perspective". BMC Medical Education. [Http://www.biomedcentral.com/1472-6920/5/29](http://www.biomedcentral.com/1472-6920/5/29).
- Schaefer, K. & Zygmont, D. (2003). "Analyzing the teaching style of nursing faculty". Nurse Educator Perspective. 24(5). 238-245.
- Schonwetter, D. Lavigne, S. Mazurat, R. & Nazarko, O. (2006). "Student's perceptions of effective classroom and clinical teaching in dental and dental hygiene education".
- Schor, N. Troen, O. Adlers, S. Williams, J. Kanter, S. Mahling, D. Sorrows, B. Skogseid, I. & Bernier, G. (1995). "Integrated Case Studies and Medical Decision Making". A Novel Computer-

Assisted Bridge from the Science to the Clinics. Academic Medicine. 70 (9). 814-817.

- Smith, I. (2003). "Engagement and Student Achievement. Who Care?" <Http://www. Ed. Napier. Ac.UK/staffconference/hune2003/paperssmith. PDF>.
- Stronge, J.H. (2002). "Qualities of effective teachers". Association for Supervision and Curriculum Development. 129.
- Thompson. C.. & Sheckley. B.G. (1997). Differences in classroom teaching preferences between traditional and adult BSN students. Journal of Nursing Education. 36.163-169.
- Williams. B. (2004). Self direction in a problem based learning program. Nurse Educator Today. 24(4). 277-285.
- Ya-Lie, K. Chi-Hui, K. Jing-Jy, W. Jane, L. & Kuei-Min, C. (2002). "The effectiveness of teaching strategies for creativity in a nursing concepts teaching protocol on the creative thinking of two- year RN-BSN students". Journal of Nursing Education. 10(2). 105-112.

**الملحق رقم (١)**  
**مقياس فاعلية المدرس**

**تقييم فاعلية المدرس**

الرقم الجامعي :

عزيزى الطالب :-

ان مشاركتك في الاجابة على هذه الاستبانة تعد مساهمة علمية قد تعود بالنفع على كل من الطالب والمدرس وذلك بهدف تحسين عملية التعليم والتعلم.

أرجو قراءة جميع الفقرات على الصفحة التالية بدقة ووضع إشارة (✓) تحت درجة التقدير الذي تعتقد أنه يناسب درجة امتلاك المدرس لما يقابلها من صفات اتصف بها أو امتلكها أثناء تدرسيه، مع توخي الموضوعية عند إعطاء تقديرك على كل فقرة.

لا أوفق بشدة = المدرس لا يمتلك الصفة نهائياً  
 لا أوفق = المدرس يمتلك الصفة بدرجة قليلة جداً  
 غير متأكد = المدرس يمتلك الصفة أحياناً  
 أوفق = المدرس يمتلك الصفة في معظم الأحيان  
 أوفق بشدة = المدرس يمتلك الصفة دائمًا .

الرقم	الصفة	لا أوفق بشدة	لا أوفق	غير متأكد	أوفق	أوفق بشدة
١.	يتصرف كنموذج للشخص المهني					
٢.	يتصرف كشخص مصدرى					
٣.	يظهر حماساً للدور التربوي					
٤.	يشجعني على الإحساس بالحرية لطرح الأسئلة والبحث عن المساعدة					
٥.	وأعيباً في توقعاته لقدرائي					
٦.	يبدى اهتماماً بالمرضى					
٧.	يحفزني لزيادة التعلم الذاتي					
٨.	يربط المفاهيم النظرية بالتطبيق					
٩.	يوفر إشرافاً كافياً					
١٠.	بشكل عام لم يكن يتدخل بي أثناء تقديمي الخدمة					
١١.	يشجعني لأنعمل					
١٢.	قادراً على توفير التوجيه دون أن يتولى تنفيذ الإجراء التربوي					

١٣.	يوفّر التحدي لي لامتلاك مهارات جديدة
١٤.	يستخدّم معايير مناسبة للتقييم
١٥.	يجعلني واعياً بالمسؤوليات المهنية
١٦.	يعرض قدراته العملية كممرض
١٧.	يعين المرضى بما يناسب مستوى التعليمي
١٨.	قادرً على إيصال ما يمتلك من معلومات لي
١٩.	يشكل إجمالي هو مدرس فعال
٢٠.	كان بعيداً عن أثناء التدريب
٢١.	يظهر الصراحة في تعامله معى
٢٢.	حاضر المساعدتي في التدريب العملي
٢٣.	يقدم لي التغذية الراجعة في أوقات التقييم والتدريب
٢٤.	ورهف الحس لاحتياجاتي
٢٥.	يظهر الاحترام نحوى
٢٦.	يتقاول بطريقة حسنة معى
٢٧.	يحترم خصوصياتي
٢٨.	يقدم لي التصحيح المناسب وقت الخطأ
٢٩.	يظهر الدفء والصبر في علاقاته مع الآخرين
٣٠.	لم يكن واضحاً في التعليمات التي أعطيت لي