



International Journal of Advanced Academic Studies

E-ISSN: 2706-8927

P-ISSN: 2706-8919

www.allstudyjournal.com

IJAAS 2023; 5(3): 32-37

Received: 14-01-2023

Accepted: 18-02-2023

Allah Mohammad Hassand

Department of Science,
Faculty of Information and
Communication Technology,
Kabul University, Afghanistan

Parniyan Kosha

Department of language and
Business Communication,
Faculty of Information and
Communication Technology,
Kabul University, Afghanistan

Corresponding Author:

Allah Mohammad Hassand
Department of Science,
Faculty of Information and
Communication Technology,
Kabul University, Afghanistan

Comparing result of students' feedback about teaching of teachers before and after exams in information and communication technology faculty of Kabul University

Allah Mohammad Hassand and Parniyan Kosha

DOI: <https://doi.org/10.33545/27068919.2023.v5.i3a.952>

Abstract

Evaluating teaching and sharing feedback by students is used as the most common method of evaluation throughout the world's higher education institutions. The goal of this research is to compare results of students' evaluation of teachers' teaching before and after exam, and to find the factors which affect the results of the evaluation process. The results of this research points out that the average of students' evaluation scores before exam is higher than the average of their evaluation scores after passing exam. Also, the correlation factor shows that there is a positive and significant relationship between these two evaluations.

Keywords: Evaluation, teaching, exam, students, correlation

Introductions

Nowadays there is an increasing need for higher education in Afghanistan, which causes more attention to quality of higher education. Despite of, the higher education institutes achievements in the past decade, there were and there are a lot of problems and challenges. The higher education system of this country was a reliable and well-known system in the region that unfortunately, has damaged heavily because of three decades of war in Afghanistan. Education and learning is taking place for achieving specific purposes. The educational and learning objectives are achieved when the learning tools are properly predicated and used. Evaluation is an appropriate and effective tool for attaining learning objectives. By using evaluation, we can assess the usefulness of an educational program, achieving its learning objectives and based on its assessment we can improve the educational program^[1].

Humankind always need evaluation to assess their own and the others abilities and behaviors and the continuation and control of their behavior is also assessed by this tool. In the present century, the need for doing such kind of evaluation is increased and people are always evaluating themselves and others. In higher education system which aims to educate society's needed professional manpower, evaluation has a great importance as a factor that can lead teaching quality from an old and traditional way to a dynamic way. Teaching process without evaluation and receiving feedback is an unsuccessful and useless process. Those teachers who do not believe the power of evaluation, do not teach the lesson for students to learn it but as a responsibility which has given to them and they do not think about its result. But, evaluation is the outlook and core for any learning decision which is made. It means that evaluation ensures the usefulness of teaching and learning and shows that effective teaching is impossible without evaluation. Therefore, it is worth mentioning that evaluation is the most effective tool for learning. A systematic process for obtaining, analyzing, and interpreting data is called evaluation which aims to set and achieve the expected objectives^[2].

Evaluating teaching of teacher is also a kind of evaluation and relates to success level of the teacher for reaching to learning objectives which helps teacher in improvement and betterment of learning and teaching methods. In fact, evaluation is used as an assessment tool for assessing academic cadre performance including ways of quality improvement of

learning programs and for determining strengths and weakness for reformation of learning systems. Because of this reason there are different models of evaluation for evaluating teaching process including evaluation by high rank officials, teachers, students, self-evaluation and etc....Among all mentioned models of evaluation, teacher’s evaluation which is done by students is one of common models of evaluating which is done by using a questionnaire that contains a list of questions about learning and teaching activities of teacher and students are asked to answer the questionnaire [3].

Evaluating teaching which is done by students is an important and a main source for assessing academic cadres’ performance which is used in all educational institute all over the world. In spite of different ideas about using evaluation of teacher by students, the researches show that using this kind of evaluation is increasing day by day as a reliable and acceptable source in universities for decision making process. Teaching evaluating by students has a great impact in teaching. Lack of students for judgment about quality of teaching, interfering of personal judgments related to teacher’s behavior and being strict, the time of doing the evaluation (whether it is before or after exam) and the way of doing the evaluation are the most challenging parts of the evaluation. Because of the mentioned challenges some people disagree with teacher evaluation which is done by the students but some others assume this kind of evaluation as an important source of receiving constructive feedback for improving teaching quality.

Students’ evaluation from teaching does not have a long term history in Afghanistan’s universities. It is about one decade that this kind of evaluation is used by quality assurance committee via a questionnaire. Quality assurance and accreditation authority has established under the supervision of ministry of higher education in 1391 (2012). The aim of establishing this authority is to improve qualified higher education system. Evaluating teaching quality committee is working under the supervision of quality assurance and accreditation authority which assesses the

quality of teaching in higher education institutes [5].

In Information and Communication Technology faculty the teachers’ teaching evaluation by students is done via a Google online questionnaire form which contains 26 questions. For more confidentiality and privacy principles this questionnaire does not require name, father name and any other personal information of students. In each semester this evaluation is done by students before announcing the result and score of students by teachers. Most of the teachers believe that hardness of exam is an important factor which directly impacts the score and results of the evaluation by students.

The goal of this research is to study the manner of evaluation done by students via online questionnaire before exam and manually via printed questionnaire forms after exam in Information and Communication Technology Faculty and to compare the attained results.

Research Methodology

The goal of this research is to study and compare the results and correlation of teachers’ evaluation done by students before and after exam. Teachers’ evaluation is done before exam by an online Google form and after exam, manually by printed questionnaire. This research has studied the evaluation of teaching 15 subjects in freshman, sophomore, junior and senior classes of bachelor degree during (2021 and 2022) educational years in two semesters which is done by 405 students. The subjects for studying in this research is selected randomly that includes 57% subjects of year 2021’s second semester and 56% subjects of year 2022’s first semester which has been taught in ISE (Information Systems Engineering) and TCE (Telecommunication Engineering) departments of Information and Communication Technology Faculty of Kabul University. The data of students’ evaluation is gathered by the questionnaire as below table (1) which is designed by the Quality Assurance Authority of Ministry of Higher Education and includes 26 multiple choice questions with (yes, no, nearly and very little) options [5].

Table 1: Questionnaire for Evaluating Teaching Quality in Universities by students

No	Questions	Yes	No	Nearly	Very little
1	Did the teacher distribute and explain the course policy in the beginning of semester?				
2	Is the teaching of the teacher based on course policy?				
3	Is the lecture note accessible on time?				
4	Is the lecture note prepared based on your knowledge level and understanding?				
5	Is there a mentioned reference source at the end of the lecture note?				
6	Is the teaching of teacher understandable?				
7	Does the teacher teach confidently?				
8	Are you satisfied with the teacher’s teaching method?				
9	Does the teacher engage students in teaching process (student-centered)?				
10	Can teacher manage the class?				
11	Are your satisfied with the teacher’s behavior and manner?				
12	Does the teacher come to class planed, organized and well prepared?				
13	Does the teacher give satisfactory and appropriate answers to your questions?				
14	Does the teacher consider logical sequence in presenting lecture and teaching materials?				
15	Is the teacher punctual and on time?				
16	Are you satisfied with the communication potential of the teacher?				
17	Does the teacher have good behavior, manner, character and academic standards?				
18	Are you satisfied with teacher’s evaluation method?				
19	Are you satisfied with teacher’s physical appearance and enthusiasm toward her/his profession?				
20	Does the teacher have the skill of using technology in teaching?				
21	Is the teacher’s teaching updated and fits the academic and international standards?				

22	Does the teacher use different teaching methods in teaching and is he/she familiar with different teaching methods?				
23	Does the teacher assign group work, filed study and class projects for students?				
24	Does the teacher assess the mentioned activities in question (23)?				
25	Is the teaching of teacher alike and boring or he/she gives time for asking question and analyzation?				
26	Does the teacher solve your lesson related problems?				

The used method of data collection in this research is that at the end of two semesters of 2021 and 2022 the evaluation of teachers is done before exam via Google form and two weeks after announcing the results of exams the evaluation is done by using the same questionnaire which is printed. The second time the evaluation is not via Google form and students are required to fill the questionnaire with hand. Data analyzing is done by using Excel 2022 and SPSS 26 software and Pearson correlation coefficient is used for finding the correlation of evaluation before and after exam. Karl Pearson correlation coefficient is one of the most popular method of measurement for correlation between two quantitative variables whichn is showed in below equation. r is the correlation coefficient, X_i, Y_i are the tow parameters and \bar{X}, \bar{Y} are the averages [6].

$$r = \frac{\sum_{i=1}^n (X_i - \bar{X})(Y_i - \bar{Y})}{\sqrt{\sum_{i=1}^n (X_i - \bar{X})^2 \sum_{i=1}^n (Y_i - \bar{Y})^2}}$$

This coefficient calculated the correlation between two variables and varies between +1 and - 1. If $r = +1$ it means if one variable increase the other variable will also increase. If $r = -1$ the two variable act opposite of each other and it means if one variable increase the other will decrease and vis versa. If $r = 0$ it shows that there is not any correlation between two variables. The below table shows different correlation values and its meaning [7].

Table 2: Correlation Coefficient Values and its Meaning

Description	(r) correlation coefficient
Very Strong Positive Correlation	$r \geq 0.70$
Strong Positive Correlation	$0.40 \leq r \leq 0.69$
Moderate Positive Correlation	$0.30 \leq r \leq 0.39$
Weak Positive Correlation	$0.20 \leq r \leq 0.29$
Poor Positive Correlation	$0.01 \leq r \leq 0.19$
No Correlation	$r = 0$
Little negative Correlation	$-0.01 \leq r \leq -0.19$
Weak negative Correlation	$-0.20 \leq r \leq -0.29$
Moderate negative Correlation	$-0.30 \leq r \leq -0.39$
negative Strong Correlation	$-0.40 \leq r \leq -0.69$
Very Strong negative Correlation	$r \leq -0.70$

Analyzing and Discussion

Despite, using evaluation as a tool for measuring learning objectives, there are some objection about it. The first objection about evaluation is its low number of participants. Commonly, a small group of students fill this evaluation form. Usually, the most satisfied or unsatisfied students which have the highest motivation for filling the questionnaire and taking part in evaluation process are filling this evaluation and other students are taking less part in this evaluation [8, 9].

The next objection is the problem with finding the average of results. As most of students are filling the questionnaire and they are in two sides of satisfied and unsatisfied, the possibility for finding the average of results is very difficult. Even in some cases, in evaluation process of a subject only those students are taking part who are unsatisfied with the teaching of the teacher and give the lowest marks in the evaluation. In some other cases, in evaluation process of another subject all satisfied students are participating. These students are giving the highest marks for the responses therefore there will not be the possibility of equilibrating the results and their responses in the normal curve [10].

The finding of this research shows that students before exam have marked 83% Yes, 7% No, 9% Nearly and 2% very little options. Whereas, in the next evaluation which has happened after announcing the results of exam they have marked 65% Yes, 17% No, 11% Nearly and 7% very little options. Figure (1) shows the result of evaluation which has been done by students before exam, Figure (2) shows the result of evaluation which has been done by students after exam, and figure (3) shows the comparison of evaluation results, before and after exam. There are different factors especially after exam which affected the results of evaluation. For example, students' inattention toward evaluation, being unsatisfied with their exams results and scores, being score orientated, students lack of awareness about teaching process, lack of ability in correct judgment during evaluation, students' interest toward teacher and the subject, students' personal view points for example teacher's fame and popularity among students, teacher and students relationships, teacher's behavior and being easygoing, also teacher's personal and social characteristic and nature, are used instead of judgment about teaching quality. Also, some other factors like age, sex, scores average, students' personality, size of class, number of students and lesson duration has impact on the result of evaluation [11, 8].

It is worth mentioning, that in the first evaluation which has been done before the exam because of the fear feeling that students have toward the teacher they may fill the questionnaire carelessly and the evaluation may seem as a tool for getting scores. Researches show that students give lower marks for those teachers who are stricter and have high level of expectation from students. Mostly, those students who are high achievers are more satisfied with those teachers who are motivating them for studying hard, learning deeply and long life learning. Likewise, researches show that students gave highest marks for easygoing teachers who were giving high scores for them in exam but in the next semester these students got lower scores from exam vis versa those students how have given lower marks to strict teachers could learn deeply and had better performance in the next semester.

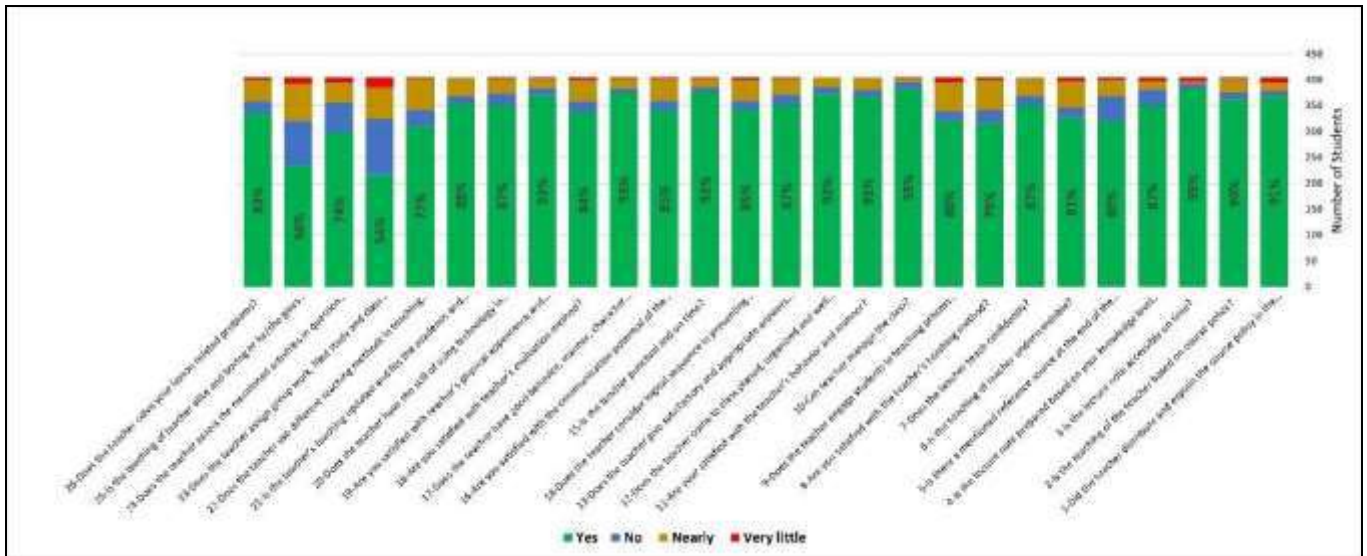


Fig 1: Teaching Evaluation by Students before Exam in ICT Faculty of Kabul University

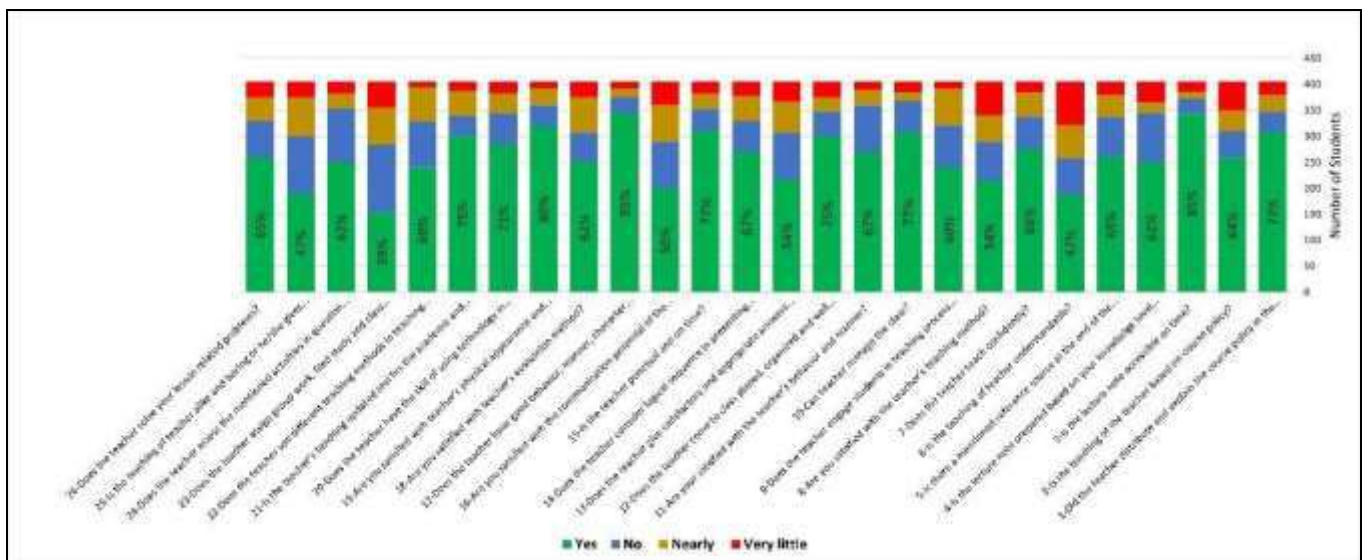


Fig 2: Teaching Evaluation by Students after Exam in ICT Faculty of Kabul University

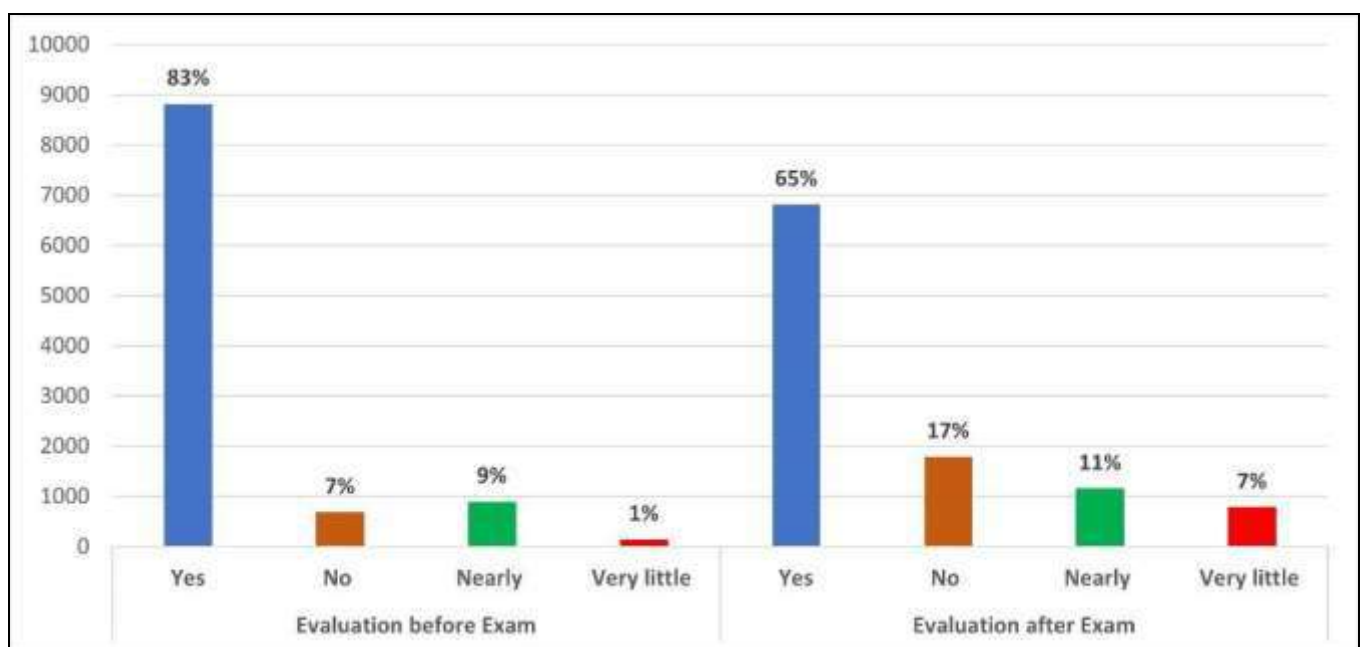


Fig 3: Comparison of Teaching Evaluation Results by Students before and after Exam

The results of this research show that the average score of evaluation before exam is 96.069 and the average score of evaluation after exam is 84.064. The notable point in this evaluation is the correlation between the results of evaluation before and after exam. Frequently, most of students have marked (Yes) option for some questions before and after exam and that requires calculating and assessing the coefficient of correlation before and after exam. The coefficient of correlation is always a number between 1 to -1. 0 to 1 correlation coefficient shows positive

correlation. As much as this coefficient get closer to 1 the correlation is stronger.

Positive correlation means that by increasing score of one variable the score of other variable also increases ^[12]. As Table (3) shows ($r > 0$) correlation coefficient and positive correlation of ($p < 0.05$), except question number 23 the ($P > 0.05$) in other question in evaluation before and after exam there is a positive correlation.

Table (3) shows average of students' evaluation before exam (average 1), average of students' evaluation after exam (average 2) and correlation coefficient between them.

Table 3: Average and Correlation Coefficient of Teaching Evaluation by Students before and after Exam

No	Questions	Average 1	Average 2	Correlation Coefficient (r)	Positive Correlation (P)
1	Did the teacher distribute and explain the course policy in the beginning of semester?	3.82	3.51	0.999	0.0007
2	Is the teaching of the teacher based on course policy?	3.81	3.25	0.994	0.006
3	Is the lecture note accessible on time?	3.87	3.65	1	0.0003
4	Is the lecture note prepared based on your knowledge level and understanding?	3.70	3.04	0.964	0.036
5	Is there a mentioned reference source at the end of the lecture note?	3.54	3.20	0.995	0.005
6	Is the teaching of teacher understandable?	3.68	2.91	0.964	0.036
7	Does the teacher teach confidently?	3.78	3.31	0.992	0.008
8	Are you satisfied with the teacher's teaching method?	3.64	3	0.965	0.035
9	Does the teacher engage students in teaching process (student-centered)?	3.67	3.16	0.967	0.033
10	Can teacher manage the class?	3.88	3.41	0.992	0.008
11	Are you satisfied with the teacher's behavior and manner?	3.84	3.17	0.96	0.040
12	Does the teacher come to class planned, organized and well prepared?	3.85	3.43	0.997	0.003
13	Does the teacher give satisfactory and appropriate answers to your questions?	3.76	2.99	0.972	0.028
14	Does the teacher consider logical sequence in presenting lecture and teaching materials?	3.75	3.30	0.994	0.006
15	Is the teacher punctual and on time?	3.86	3.50	0.999	0.001
16	Are you satisfied with the communication potential of the teacher?	3.73	2.93	0.97	0.030
17	Does the teacher have good behavior, manner, character and academic standards?	3.88	3.66	0.998	0.002
18	Are you satisfied with teacher's evaluation method?	3.71	3.26	0.997	0.003
19	Are you satisfied with teacher's physical appearance and enthusiasm toward her/his profession?	3.83	3.56	0.998	0.002
20	Does the teacher have the skill of using technology in teaching?	3.75	3.35	0.995	0.005
21	Is the teacher's teaching updated and fits the academic and international standards?	3.80	3.49	0.999	0.001
22	Does the teacher use different teaching methods in teaching and is he/she familiar with different teaching methods?	3.61	3.12	0.966	0.034
23	Does the teacher assign group work, filed study and class projects for students?	2.95	2.61	0.936	0.064
24	Does the teacher assess the mentioned activities in question (23)?	3.42	3.05	0.972	0.028
25	Is the teaching of teacher alike and boring or he/she gives time for asking question and analyzation?	3.11	2.85	0.982	0.018
26	Does the teacher solve your lesson related problems?	3.69	3.22	0.989	0.011

Conclusion

Teaching evaluation by students is done for the purpose of enhancing the quality of teaching and learning and it is time bond which is completed at the end of each semester. There are different factors which affect the results of evaluation like, teacher' strict behavior, getting low scores or failure in exam, and other reason that has been pointed out by this research. Therefore, if the evaluation is used as the only tool for finding teaching effectiveness, it would not have positive results. So, the evaluation should be done by considering other effective and related factors of teaching like teaching evaluation by the colleagues, evaluation by educational specialists and other professionals.

Teaching evaluation by students necessarily can not be a reliable and trustworthy way for evaluating teaching methods and teaching quality. Some other ways of evaluation should also be considered for evaluating teachers' teaching quality like, evaluating teaching materials, teaching method inside class and etc.... which can present more reliable results from teachers' success in teaching. It is worth mentioning, that students- centered evaluation is totally not useless but this evaluation can be used making judgment in some cases like, evaluating the numbers of teaching sessions, teaching duration and teachers' behavior and interaction with students.

References

1. Douglas J, Douglas A. Evaluating teaching quality. *Quality in Higher Education*. 2006;12(1):3-13.
2. Tyler RW. Basic principles of curriculum and instruction. *Curriculum Studies Reader E2: Routledge*; c2013. p. 60-8.
3. McPherson MA. Determinants of how students evaluate teachers. *The Journal of Economic Education*. 2006;37(1):3-20.
4. Sánchez T, Gilar-Corbi R, Castejón J-L, Vidal J, León J. Students' evaluation of teaching and their academic achievement in a higher education institution of Ecuador. *Front Psychol*. 2020;11:233.
5. Kabul Afghanistan: Ministry of Higher Education, 2012 [Available from: <https://qaad.edu.af/%D9%86%D9%85%D9%88%D9%86%D9%87-%D9%BE%D8%B1%D8%B3%D8%B4%D9%86%D8%A7%D9%85%D9%87-%D8%A7%D8%B1%D8%B2%DB%8C%D8%A7%D8%A8%DB%8C-%D8%AE%D9%88%D8%AF%DB%8C-%D8%A7%D8%B3%D8%AA%D8%A7%D8%AF%D8%A7%D9%86/>].
6. Jebli I, Belouadha F-Z, Kabbaj MI, Tilioua A. Prediction of solar energy guided by pearson correlation using machine learning. *Energy*. 2021;224:120109.
7. Ratner B. The correlation coefficient: Its values range between+ 1/- 1, or do they? *Journal of targeting, measurement and analysis for marketing*. 2009;17(2):139-42.
8. Boring A, Ottoboni K. Student evaluations of teaching (mostly) do not measure teaching effectiveness. *Science Open Research*, 2016.
9. Kamenetz A. Student course evaluations get an 'F'. *NPR Ed: How Learning Happens*, 2014.
10. Marsh HW. Students' evaluations of university teaching: Research findings, methodological issues, and directions for future research. *International journal of educational research*. 1987;11(3):253-388.
11. Kulik JA, McKeachie WJ. 7: The Evaluation of Teachers in Higher Education. *Review of research in education*. 1975;3(1):210-40.
12. Gogtay NJ, Thatte UM. Principles of correlation analysis. *Journal of the Association of Physicians of India*. 2017;65(3):78-81.