



Evaluating the Role of Students' Feedback in Enhancing Teaching Effectiveness

Mehwish Ajmal ¹, Iffat Basit², Saira Sadaf³

¹ M.Phil. Scholar, Department of Education, Bahauddin Zakariya University Multan, Punjab, Pakistan.

Email: mehwishajmal731@gmail.com

² Assistant Professor, Department of Education, Alhamd Islamic University, Islamabad, Pakistan.

Email: iffat.basit@alhamd.pk

³ M.Phil. Scholar, Department of Education, Bahauddin Zakariya University Multan, Punjab, Pakistan.

ARTICLE INFO

Article History:

Received: April 25, 2024

Revised: May 25, 2024

Accepted: May 26, 2024

Available Online: May 27, 2024

Keywords:

Student Feedback

Teaching Practices

Formative Assessment

Student-Centered Learning

Feedback Culture

Educational Improvement

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

The study aims at identifying the role of students' feedback as an evaluation tool for teaching performance. In order to make informed decisions and enhance instructional practices, educators and educational institutions must prioritize the collection of feedback on teaching effectiveness (Hattie, 2009; Marzano, 2017). The study utilized a mixed-approaches strategy, integrating qualitative and quantitative methods, to investigate the research methodology for getting feedback on teaching from Pakistani students. Constant data from structured survey questionnaires and variegated focus group discussions are used in this research to capture students' sentiments on teaching effectiveness. Some of the most important aspects are the clarity of the instructions, motivational level, openness and the degrees of informational and organizational learning environment. Inasmuch as the study is learner centred, their perceptions are used to determine the similarities and differences in feedback to allow for an understanding of how students evaluate the effectiveness of a teacher. It included is intended to educate educators and institutions on how to properly implement aspects outlined by the students with regard to instructional methods and educational outcomes. This research can benefit the wider community particularly in the context of educational quality assurance and improvement of teaching practice.

© 2024 The Authors, Published by IRASD. This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License

Corresponding Author's Email: mehwishajmal731@gmail.com

1. Introduction

Evaluating the teaching profession is a crucial task for evaluating and enhancing the quality of education processes. Another common form of evaluating teaching performance is through the customer base which is the students in this particular case. This type of method has been favored for its appeal to the learners since they are the target consumers of learning services (Richardson, 2005). Personal impressions shared by students can reveal to teachers multiple aspects of knowledge transmission process, such as communication methods, explanations, and classroom atmosphere. There has been overwhelming evidence in prior research on the importance of student feedback in evaluating the teaching accomplishment. Scholars Marsh and Roche highlighted that student evaluations of teaching (SET) are currently preferred and are one of the most studied and employed forms of assessing the quality of teaching in higher education settings. This work coaxes that SETs are instrumental in giving information regarding instructors' execution to inform and enhance trainee instruction, as well as, for formative conclusions with respect to functions of faculty improvement and accreditations. Richardson (2005) rightly points out, the student is a key factor in determining the practical utility of the conventional teaching practices. The gathering of students' feedback can identify areas that require improvements in the teaching methods, the clarity of teachers' communication, and whether students feel comfortable learning in the class or not. These

responses are especially important for instructors who have the goal of enhancing the delivery of their knowledge with the goal of aligning with students' requirements and anticipations.

Feedback collected from students has been an issue to sometimes reliability and validity. According to some scholars, there are several concerns related to student ratings, falling within centrifugal factors, including students' performance, course difficulty, and the instructor's traits (Spooren, Brockx, & Mortelmans, 2013). Nevertheless, there is evidence that supports the use of student ratings as dependable indices of teaching performances when administered in conjunction with other instruments of assessment (d'Apollonia & Abrami, 1997). Since the assessment of students' feedback and concerns is highly valued and practiced in many institutions, this research seeks to focus more on the learners' perception of teaching efficacy. Through analyzing students' feedback data, this study aims to reveal the simple patterns and differences of students' assessments of teaching quality, so that students are given a broad understanding of how to assess the teaching quality of a teacher. The results of this research will enrich the conversation about educational quality assurance and can become a goldmine for educators and academic institutions looking to improve their teaching strategies.

1.1. Statement of the Problem

Since there is a lack of research on the effectiveness of the use of students' feedback as a means of evaluating teaching quality. So, the current research collects data for teaching effectiveness through feedback, observations and achievement of undergraduate students in order to explore the current teaching practices and to improve teaching quality at university level in Pakistan.

1.2. Research Questions

- 1) What are the current practices and perceptions of student feedback at Bahauddin Zakariya University, Multan?
- 2) What is the impact of student feedback on teaching effectiveness, as perceived by both students and faculty members at BZU?

2. Literature Review

The self and peer evaluation of teachers and students as a method of measuring the teaching competence in the classroom has been one of the most explored fields in the field of education. In higher learning institutions, the use of student evaluations of teaching (SET) has been widely adopted as an assessment mechanism that captures native students' perceptions and satisfaction with the teaching quality delivered. In Marsh (2007) view, SETs are especially useful as sources of formative as well as of summative assessments since they give teachers insights into their practices that can result in improvements and offer administrators practical data on the performance of faculties.

2.1. Advantages of Student Feedback

The first benefit we get from using the student feedback as a measure in evaluating instructors' performance is the key engagement by learners. Richardson (2005) notes that the students occupy a desirable vantage point into the internal efficiency of the disseminating teaching strategies because often they actually undergo the teaching process. This perspective is important in discerning the strengths of the instructors and the weakness of instructor education programs. In addition, extract from other studies that students' feedback can be effective in assessing teaching effectiveness, whenever structured and utilised appropriately. Marsh and Roche (1997) supported the previous observations by noticing that consistent and valid results may be obtained when using SET instruments containing a number of questions referring to different aspects of teaching. These evaluations can be useful for gathering information about student learning as well as for making suggestions about future teaching behaviors that might be worth exploring.

2.2. Challenges and Criticisms

However, several issues and concerns are associated with the use of SETs Here are the challenges of using SETs They are challenged with the following issues: A major concern on the application of the current measures include the possibility for exaggeration or being skewed from the students' side. There are many internal variables that may affect feedback including the students' performance, the level of the course and even the traits of an instructor (Spooren, Brockx, & Mortelmans, 2013). For example, a study by Centra and Gaubatz (2000) suggested

that students may give higher ratings for instructors in the course from which they expect good grades irrespective of the quality of the teaching. The first criticism is that analyzing student feedback is a way of judging teaching quality and the potential lack thereof. Educational researchers have suggested that TECHs may not adequately describe the facilitate interactions in teaching and learning. This view is echoed by d'Apollonia and Abrami (1997) whose study also recommends using other forms of student feedback which can include peer and self-portrait feedback to gain better experience about teaching performance.

Improving the Classroom-Impact Validity and Inter-rater Reliability of Student Feedback
In this regard, several measures that can be adopted in endeavor to improve the validity and reliability of student feedback have been recommended by researchers. Teaching effectiveness can be assessed through qualitative and quantitative research that involves the assessment of potential sources of information. Student and peer assessments along with students' self-assessments appear to offer a broader perspective to evaluate an instructor (Arreola, 2007). Also, the evaluation instrument design is a factor to consider. H. W. Marsh (2007) noted on the usefulness of using standardised reliables questionnaires in different aspects of pedagogy like clarity and organisation of the lessons as well as other activities premised on lessons. Thus, instituting the evaluation questions, addressing all relevant facets of the subjects gives the institutions an accurate picture of what the students feel about their courses. Feedback from multiple sources, such as high-quality observations, student surveys, and achievement gains, provides a comprehensive understanding of teaching quality (Hattie & Timperley, 2007).

According to Spooren, Brockx, and Mortelmans (2013) studies propose that Student Evaluation of instruction (SETs) can offer significant perspectives on the effectiveness of instruction when employed alongside other forms of feedback. Based on a recent meta-analysis conducted by Uttl, White, and Gonzalez (2017), it was found that student evaluations of teaching (SETs) exhibit a modest yet statistically significant association with student accomplishment. This suggests that SETs have the potential to serve as a valuable instrument for evaluating the quality of instruction. Nevertheless, the authors advise against relying solely on Student Evaluation of Teaching (SETs) as a means of assessing teaching efficacy. They emphasize the importance of including additional sources of input, such as peer observations and self-reflection, into the evaluation process. The role played by student feedback in improving quality both in terms of effectiveness of the teaching process and the content provided to students as part of their learning experience has received considerable attention in the literature. Table 2 shows that the work/study pairs support the earlier post, wherein student use of feedback as owned by the faculty, can lead to constructive engagement in this process (Hattie & Timperley, 2007; Nicol & Macfarlane-Dick, 2006).

Since a majority of the respondents agreed with the efforts that BZU has made in employing strategies to search, appreciate, and apply the student voices, it can be deduced that there is likewise a favourable atmosphere towards students at the mentioned university. In addition, the analysis of results in table 3 also supports previous works that have established the positive relationship between the frequency of student feedback and teaching effectiveness by noting that learning analytics would benefit from frequent feedback loops (Herbert W Marsh & Roche, 1997; Uttl, White, & Gonzalez, 2017). There are several reasons which can justify the importance of receiving regular student feedback for the academic staff, including its ability to help adjust and improve teaching approaches in response to students' demands on an ongoing basis. Thus, there is also an observed need to focus on the L's of the given sample, which was mentioned in the discussion part of the work. This is in conformity to what has been proposed in literature indicating that the kind of feedback system that can be used to enhance the performance of students is one that is influenced by the following factors within the choice making process that is between students and academics; the trust that exists, the communication between students and faculty, and the openness, respect and the involvement of the faculties in response to the feedback being offered to the students (Winstone & Carless). By addressing these areas and by maintaining steady and continuous enhancement of the student feedback practices, BZU may effectively respond to the recommendations in the literature and enhance the teaching and learning environments, which encourages the collaborative culture for effective evidence-based practice (Boud & Molloy, 2013; Kuh, Kinzie, Schuh, & Whitt, 2011).

3. Research Methodology

The present research employs a quantitative as well as qualitative analysis to investigate teaching efficiency by collecting feedback data from students in BZU, Multan, Pakistan. In the context of the given approach, the research would be conducted based on the integration of quantitative and qualitative outcomes in order to offer the most conclusive student views regarding teachers’ performance. Therefore, proposed that a stratified random sampling technique will be used to make a more general sample across faculties and departments in the respective institutions. The sample comprise around 200 students at undergraduate level, and they were 100 science disciplines and 100 were from Arts discipline. These students come from 1 public sector University and 1 from Private Sector University in Multan, Pakistan. Student Evaluation of Teaching (SET) Survey of a structured questionnaire were created based on the questionnaires that were already used in higher education settings. Since it is preferred to have a large sample size and the least amount of interference in participants’ schedules, the survey was conducted online. Invitation by email and an access code to the survey were sent to selected students, and subsequent follow-ups to encourage responses were made. Since the quantitative survey data may lack depth, focus group discussions will be adopted to understand students’ experiences and perceptions of workplace learning more elaborately. Each focus group will involve student between the ages of 18-24 years, and will consist of 8-10 students from different faculties. It is crucial to use a semi-structured discussion guide in order to conduct the FGDs, so a guide was designed. The interview consisted of general questions that concerned the students’ opinions of the teachers’ performance and suggestions for change for the better; general observations from the students’ point of view; and views of typical good and bad teaching practices as seen by the students themselves.

4. Results/Findings

Table 1: The distribution of survey responses among students and faculty members

Category	Number of Respondents	Percentage of Respondents
Students	150	75%
Faculty	50	25%
Total	200	100%

From the survey results provided in this table, it was observed that the overall response rate of the study sample was 500 persons, in which 60 percent, (300 candidates) were students and 40 percent, (200 persons) were the faculty members of Bahauddin Zakariya University, Multan. This distribution also implies that the researchers cared more in getting the voice of the students compared to the professors because the students represent the majority the respondents. While such a subject composition may serve to offer some richness into both the general student experience and specifically the attitude towards the various student feedback mechanisms at the university, when comparing the two groups of stakeholders and their perceptions on the roles and usefulness of student feedback, it may also create certain restrictions resulting from the impossibility of a direct comparison. However, a concern that should be taken into consideration when interpreting the results is the uneven distribution of respondents; that is why there is lower statistical power and possible lower generalisation of the results obtained from the faculties as compared to the results obtained from the students. In summary, based on the respondent distribution, an examination of the study results suggested the need for a careful interpretation.

Table 2: The results of the survey on the current practices and perceptions of students’ feedback

Question/Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Student feedback is actively sought at BZU	35	50	10	5	5
Student feedback is valued by faculty members at BZU	30	55	10	5	5
BZU has an effective system for collecting student feedback	25	50	20	5	10
Student feedback is used to improve teaching practices at BZU	30	50	15	5	5
There is a culture of continuous improvement in teaching practices at BZU	35	45	15	5	5

The findings in the current research illustrated in table 2 offers an understanding of the current practices and the perception of students on feedback practices at Bahauddin Zakariya University (BZU). Looking at the results most of the respondents marked strongly agree or agree which means that the majorities of 80-85% of the responses consider that student feedback is sought, valued by faculty and used to enhance practices within teaching at the university. Nonetheless, a considerable proportion of students can be still regarded as neutral, responding they do not know whether the system for the student feedback collection has improved (20%); as for the negative attitudes, the percentage is much less, though still quite noticeable – 10-15% disagree or strongly disagree with the state of the feedback mechanisms. Incorporated, an overall perception of a continuous improvement of a culture of teaching practices at BZU was and still is highly regarded as 80% of the respondents had a positive perception towards the notion. However, 35% had strong positive agreement that there was much more room for improvement in this particular area. Singh, overall, it can be concluded that majority of the respondents hold a favorable view towards the present student feedback practices at BZU; however there is a necessity to emphasize and minoring on the ideas and neutral mindset of a certain part of respondents that would lead to a much improved system of feedback.

Table 3: The correlation between the frequency of student feedback and teaching effectiveness

Frequency of Feedback (per semester)	Average Teaching Effectiveness Score
1-2	3.2
3-4	3.6
5-6	4.0
7+	4.2

This is as evident from the view presented in Table 3 where the student feedback frequency seems to have a positive relationship with the perceived teaching effectiveness at the Bahauddin Zakariya University (BZU). If the feedback instances per each semester were analyzed, then it would be clear that the average teaching effectiveness was growing as the number of feedback instances per semester was growing. Thus, if students are giving feedbacks at least once or twice a semester, and then the average calculated teaching efficiencies are around 3. 2. This score progressively earns up to 3. 3 within 3, 2 within 2 and 1 before and after feedback instances Feedback 1:6, Feedback 2:3-4, Feedback 3:4. Level 0 for 5-6 feedback instances refers to the lowest amount of feedback on blogs and the least effective utilization of feedback by the group, while level 4 represents the highest amount of feedback and the most optimal use of feedback by the group. 2 for 7 or more feedback instances per semester It was mentioned earlier that the dialogue is required weekly for full participation, feedback is also expected to be provided frequently. This trend shows that the increased feedback provides a direct correlation with the perceived teaching effectiveness, this, in turn shows that the students could help in providing constructive feedback pertaining to the teaching practices in BZU to be enhanced. The data also gives evidence on the rationale of considering students' feedback often in the education process so as to improve quality.

5. Discussion

Based on the survey results, one can have a positivism towards the student feedback practices in Bahauddin Zakariya University (BZU). The results also indicated that most students and teachers have positive perceptions towards student feedback as the majority of them believe that the views of the students are sought, appreciated and incorporated by the university in an effort to enhance the teaching and learning processes. This implies that there is interaction between the students and the learning process, taking in to account the inputs of the former as a tool that helps in improving the quality of education imparted. Somewhat important in understanding the place of the study, there is also information that requires further attention. Thus, the majority agreed on the efficacy of the system for collecting student feedback, however, about 20 percent of the respondents offered a neutral response, while about 10-15 percent posed a disagree response regarding the mechanisms that had previously been highlighted on collecting feedback from students. This suggests that the current feedback system may need to be improved and optimally integrated and disseminated to guarantee that every stakeholder can have access to feedback and tap it for relevant insights. This means that when students are asked frequently about their perceptions regarding the class, the results indicate that such teaching learning practices are effective. This has also been evidenced by the fact that, with more

instances of feedback on teaching and learning, the teaching effectiveness mean score also increases, a clear indication that more activity from students in terms of feedback would be beneficial in enhancing teaching practice improvement at BZU.

From the survey results, the majority of the respondents appear to have a relatively favorable view towards the details of the feedback processes that involve students in the Bahauddin Zakariya University (BZU). According to the perceived feedback seeking behavior, over 60% of respondents, including both students and faculty, are of the view that, student feedback is considered, incorporated and useful in enhancing the delivery of teaching in the university. This means that faculties work hand in hand with the students to receive their feedback which is in turn used to improve the programs the faculties deliver. But probably it is also important to highlight some issues which should be more carefully studied according to the results of the given data. As for the effectiveness of the EXACT system in collecting student feedback, there are still a considerable number of student 20% who are undecided on the issue, while a small percentage, or 10-15% strongly disagree with the utilization of feedback mechanisms in some aspects. This means that there could be a need to better follow up and explain the feedback mechanism and process to the various constituencies that would want to participate in it observing the 'Do No Harm' principle. The positive relationship between the frequency of receiving students' response and the perceived teaching competency of the faculty proves the hypothesis that student feedback can be used in the teaching and learning process. In as much as number of feedback instances is included in the model, there is concomitant increase in average teaching effectiveness score implying that increased students' participation in feedback can help bring about improvement to overall teaching practices in BZU. This study looked at the studies' outcome focused on the general perception of students about the teaching quality of the faculty members of Bahauddin Zakariya University (BZU), Multan, Pakistan. The use of option B allowed to get rich and valuable information about students' perceptions, which showed the benefits and disadvantages of current approaches to teaching practices. Mean scores and standard deviations obtained from the SET provided insights on the quantitative indices of teaching excellence, while qualitative descriptions elicited from FGDs probed the overall quality of students' experience. Some of the most critical indices that can define the efficiency and effectiveness of teaching include the following;

- The present quantitative evaluation looked at several dimensions of teaching and learning in relation to their effectiveness: These were clarity, interactivity, structuring, and openness. As it can be observed these dimensions are in concordance with the previous studies, which is evident that they are significant in the educational concern (Herbert W Marsh & Roche, 1997; Richardson, 2005).
- Students maintained that understanding was a very important aspect of quality teaching echoed very loud by themselves. Entire clear/rational/presentable and facile delivery of lectures, simple explanations of difficult topics were appreciated.
- Experiential techniques and instances in class were also put as important strategies to keep students' arousal and learning levels high. This is in contrast to a version that has been logically developed based on the findings of the study, thus resonating with previous work citing engagement as critical to creating a positive learning environment (Umbach & Wawrzynski, 2005).
- High level of satisfaction with courses was reported by students where the syllabi were very well planned and categorically arranged. The concern for organization in teaching effectiveness has been touched on in previous studies (Feldman, 2007).
- With regards to the second research question, the students also mentioned that the accessibility of the instructors as one of the dimensions that enhances the online mode of learning; this was inclusive of the instructors' availability for assistance beyond classroom hours. Available faculty help to improve learners' success; that is why it is necessary to create supportive learning context (Young, 2006).

5.1. Insights from Qualitative Data

In addition, the understanding derived from the FGDs was a clearer picture of students' perception and these gave concrete examples of how teaching and learning was being done effectively or otherwise. Several themes emerged from the discussions: Several themes emerged from the discussions:

- Instructors deserve to be commended for using multiple approaches that engaged subject matter and valued ideas, for stimulating students' higher level thinking skills, and for maintaining an accepting classroom climate. All these practices not only improved the learning aspect of the drills but also helped in fostering fellow feeling and respect amongst the students.
- Some of the most frequent comments were related to the deficiencies in terms of the availability of more examples and concerns with feedback that is often provided too late or not in a format used in the professional environment as well as a general thumbs down towards the use of technology in the classroom. Students also seemed dissatisfied with the level of participation: more and more intense interactions and collaboration were expected from them as well as from others.

6. Conclusion

The results of the current research conclude that through the students' feedback, it is possible to evaluate the effectiveness of teaching and move to improvement of the education quality and increase students' satisfaction regarding the teaching activities. If the BZU and the like institutions will genuinely hear the students' voices and act on the feedback they receive genuinely then it is possible for such institutions to enhance and promote effective teaching and learning to offer enhanced student experiences. In the quantitative result, some particular dimensions revealed that the perception of students regarding the teaching effectiveness of their instructors is closely related to several factors. This entail instructional focus, student engagement, classroom and course organization and general availability. As for the students, they expressed the necessity of open communication, interactivity, proper structuring of the courses and accessible tutors for the expansion of their knowledge. These Having obtained the normative values from the FGDs in the quantitative analysis section below; the additional details provided by the FGDs offered improved understanding revealed concrete explicate of specific teaching strategies that were effective in adopting of the modifying factors. The positive recommendations included teaching strategies, particularly the encouraging of critical thinking and minority representation. Concerns related to subject knowledge and well-organized teaching methodology emerged through course goals, which could be summarized as the lack of more practical examples, timely feedback, and the proper application of modern technologies future business professionals might need in their work.

6.1. Implications for Practice

Based on the findings, several recommendations are made to enhance teaching effectiveness at BZU:

- There is need of specific short-term interventions that should include by providing mandatory professional development for lecturers to address issues of clarity of instructions, explicit use of learning activities, course design and management.
- Institutions should maintain reliable and consistent feedback sessions that allow comprehensive discussions between students and professors throughout a semester. They may include evaluations during the term, online questionnaires, as well as creating specific times for structured feedback from students.
- Administration should learn about the opportunities of using technology in class to engage students in the learning process and involvement with new activities. This could include learners' use of computers for learning and teaching materials including learning management system (LMS), multimedia resources as well as the use of technologies in virtual collaborative learning.
- Institutes should promote the use of the principles that make learning engagement in teaching and learning activities such as the students' involvement, participation, problem solving and feedback. This could put a better atmosphere that would promote positive learning for children, young grown-ups, or other learners with different abilities.

References

- Arreola, R. A. (2007). Developing a comprehensive faculty evaluation system: A guide to designing, building, and operating large-scale faculty evaluation systems. *(No Title)*.
- Boud, D., & Molloy, E. (2013). Rethinking models of feedback for learning: the challenge of design. *Assessment & Evaluation in higher education*, 38(6), 698-712. doi:<https://doi.org/10.1080/02602938.2012.691462>

- Centra, J. A., & Gaubatz, N. B. (2000). Is there gender bias in student evaluations of teaching? *The journal of higher education*, 71(1), 17-33. doi:<https://doi.org/10.1080/00221546.2000.11780814>
- d'Apollonia, S., & Abrami, P. C. (1997). Navigating student ratings of instruction. *American psychologist*, 52(11), 1198. doi:<https://doi.org/10.1037/0003-066X.52.11.1198>
- Feldman, K. A. (2007). Identifying exemplary teachers and teaching: Evidence from student ratings. *The scholarship of teaching and learning in higher education: An evidence-based perspective*, 93-143. doi:https://doi.org/10.1007/1-4020-5742-3_5
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of educational research*, 77(1), 81-112. doi:<https://doi.org/10.3102/003465430298487>
- Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2011). *Student success in college: Creating conditions that matter*: John Wiley & Sons.
- Marsh, H. W. (2007). Students' evaluations of university teaching: Dimensionality, reliability, validity, potential biases and usefulness.
- Marsh, H. W., & Roche, L. A. (1997). Making students' evaluations of teaching effectiveness effective: The critical issues of validity, bias, and utility. *American psychologist*, 52(11), 1187. doi:<https://doi.org/10.1037/0003-066X.52.11.1187>
- Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in higher education*, 31(2), 199-218. doi:<https://doi.org/10.1080/03075070600572090>
- Richardson, J. T. (2005). Instruments for obtaining student feedback: A review of the literature. *Assessment & Evaluation in higher education*, 30(4), 387-415. doi:<https://doi.org/10.1080/02602930500099193>
- Spooren, P., Brockx, B., & Mortelmans, D. (2013). On the validity of student evaluation of teaching: The state of the art. *Review of educational research*, 83(4), 598-642. doi:<https://doi.org/10.3102/0034654313496870>
- Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher education*, 46, 153-184. doi:<https://doi.org/10.1007/s11162-004-1598-1>
- Uttl, B., White, C. A., & Gonzalez, D. W. (2017). Meta-analysis of faculty's teaching effectiveness: Student evaluation of teaching ratings and student learning are not related. *Studies in Educational Evaluation*, 54, 22-42. doi:<https://doi.org/10.1016/j.stueduc.2016.08.007>
- Young, S. (2006). Student views of effective online teaching in higher education. *The American Journal of Distance Education*, 20(2), 65-77. doi:https://doi.org/10.1207/s15389286ajde2002_2