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ORIGINAL ARTICLE

Effect of formal training workshop on teachers' quality of written feedback in higher education

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A B S T R A C T

Introduction: The significance of written feedback in students' learning is well established in the literature; however, it is contingent on several factors, particularly the quality of written feedback. Many teachers are not formally trained to give feedback that could affect the student learning.

Objective: This study was designed to investigate whether teachers modify their written feedback in response to a formal training workshop on written feedback.

Methodology: Using a quasi-experimental design with pre and post within subject design, 94 teachers participated in this study. As a pre-test, participants were made to provide written feedback on a sample script at the beginning of the workshop. This was followed by a two-day interventional workshop that included discussions and hands on exercises on multiple aspects of written feedback. At the end of the workshop, the participants were again asked to provide feedback on the same script.

Results: Comparisons between the pre- and post-intervention data revealed several differences. The quantity of feedback increased subsequent to the intervention. Reflective questions and suggestions increased as well while appraising, critical, vague, and teachers' own contemplative comments decreased. A rise in feedback on form and writing style was observed after the workshop, as opposed to a slight drop in feedback on content, leading to a more balanced focus. Preceding the workshop, participants gave feedback using symbols such as underlines, tick marks and cross-outs, but after the workshop they were observed to use more phrases or complete sentences. Although some of the desired differences, such as avoiding vague comments and criticism, were statistically insignificant, most of the other, differences in the pre-test and post-test were statistically significant.

Conclusion: This study affirms that a formal training workshop could improve the quality of teachers' written feedback.

Keywords: *Intervention workshop, written feedback, faculty development*

Introduction

Written feedback (WFB) has received tremendous attention from researchers in higher education in recent decades. The increasing demand from university students to submit written assignments requires a comprehensive understanding of the process of feedback on their writing.[1,2] Several researchers have pointed out the value of WFB,[3–8] as an important teaching-learning tool that makes learners aware of their strengths and weakness, enabling them to modify their subsequent performance.[6,7] However, it is quite challenging for the teachers to identify the most effective written corrective feedback[1,9,10] to enhance students' learning.

Dekker et al.[3] has identified that positive questions aligned with the particular student's reflective level triggered more reflection than negative statements. Additionally, the format of WFB was found to have the most significant reflective effect, whereas tone and focus were observed to have moderate and no effect, respectively.[4] Additionally, a disproportion between praise, criticism, correction and suggestions in teachers' feedback is also reported in earlier studies. A study conducted in a private university in Pakistan identified several factors that determine the students' level of acceptance of the feedback.[5] It was observed that teachers fail to strike a balance among praise, criticism and suggestions while giving WFB, which can be discouraging for students. When WFB is centered only on the accuracy[11] of assigned work or correcting errors[12] rather than suggesting ways to improve the work, the opportunity for students' learning is lost.

The feedback often targets the content and fewer comments are given on the style and language.[13] Resultantly, the focus of teachers' feedback directs the students' perception of what aspects are important in academic writing[14] and influences students' response.[15] Providing suggestions to enhance assignment quality promote students' learning as compared to rectifying the errors the made. Another aspect of WFB that affects students' response is the way it has been expressed. While symbols and punctuation marks can be rather cryptic for students, sentences render the feedback clearer. In an analysis of teachers' WFB on 174 student essays, Lee found only 8.6% complete sentences from a total pool of 5353 feedback units. Of these units, 91.4% of the feedback was expressed in the form of symbols such as encircling or underlining.[15]

Numerous studies [3,5,6,16–18] have isolated significant qualities of WFB that affect students' uptake, understanding and utilization of the feedback. Where studies have reported great variations in teachers' practices of providing WFB [5,11,12,14]; there is an emphasis on the provision of context-specific feedback.[1,19,20] Thus, earlier studies have considered teachers' training as instrumental to provide effective feedback.[3,5,21–23] Training can enable the teachers to determine the most effective method of providing feedback in their own teaching context.[1] Nonetheless, hardly a handful of studies, have attempted to examine the effects of teacher training in any aspect of WFB to date.

Ferris [22] trained graduate students of TESOL (Teaching English to Speakers of Other Languages) on how to provide effective feedback to their future students on their written assignments. The study emphasized on providing encouragement and personalized comments. This multi-phasic training required trainees to provide feedback to at least one of their existing students in three ways, verbal, written and electronic. Ferris further emphasizes the need to train and encourage students to utilize the feedback given.[21] This study concluded that quality of feedback is pivotal to reliable assessment and reminded trainees to constantly evaluate their own feedback and its effectiveness.

Salerno et al.[23] reported that brief faculty development workshops were found effective in improving the quality and quantity of feedback provided to students. Their analysis of feedback by faculty members before and after a three-and-a-half-day workshop showed an average of 2.8 to 3.6 comments in the post workshop assessment. Categorization of the comments demonstrated that specific, formative and student-skills-focused comments were provided more often after the workshop.

Even though research [23] bolsters the present study because it also centers on improvement of feedback provided by teaching staff, it is different from the study at hand in two significant ways. First of all, Salerno and colleagues[23] analyzed both verbal and written feedback provided by teachers, even though their focus was on written feedback, while our study is based solely on the latter. Second, the participants in their study gave written feedback on students' performance during encounters with outpatients. Whereas, in this study WFB included teacher's response to students' writing using symbols, codes, comments or overwriting, that aim to guide students.

The present paper describes the effect of interventional workshop, which was part of the second phase of a large-scale research on written feedback. In the first phase of the study, data were collected about teachers' perceptions and practices of WFB [24] and students' perceptions and utilization of WFB. The aim of the second phase of the study was to examine the effect

of a formal training workshop on teacher's performance in providing WFB in higher education institutes in Karachi. Specifically, this study was undertaken to answer the following questions:

1. Is there any effect of a formal training workshop on the quantity of teachers' feedback comments?

2. Is there any effect of a formal training workshop on the expression, tone and focus of teachers' feedback?

For the purposes of this paper, quantity refers to the number of feedback units, including symbols, words, clauses, etc. Likewise, expression means whether the feedback was given in the form of a symbol such as a tick mark or a single word, OR a phrase or sentence. Tone means whether the feedback was framed as praise, criticism, suggestion [25] or reflective question. Focus refers to whether the feedback unit targeted form, content or writing style.[26]

Methodology

Design and Sampling

A quasi experimental design with pre and post-test within subjects [27] was used to measure the outcome of a formal training workshop on teachers' performance for providing written feedback. Considering that teachers' self-development requires interest and commitment, a non-probability sample of teachers was employed from the four disciplines that were represented on a Research group with a goal to improve the practices of Written Feedback in Higher Education. The disciplines included medicine, nursing, education and applied linguistic.

Sample Size and Recruitment of Participants

The total population (N) of teachers across four disciplines was estimated to be 1165. Using the formula of n= Npq / (N-1)D + pq with a bound on error of 0.1, N of 1165 and p of success 0.36 (based on findings [28]) and attrition of 10%, a sample size of 100 teachers was desired for the intervention phase of the study. Heads of the institutions who participated in the first phase of the study were approached and were requested to nominate teachers from their respective institutions. Simultaneously, teachers who had indicated interest for participation in workshop during the survey were

contacted via their contact numbers, if provided. They were encouraged to indicate their interest to their institutional head and request for nomination through institution, without declaring their participation in phase I of the study. Not all the teachers who had demonstrated willingness to take part in the workshop accepted the invitation. Thus, other teachers who had not participated in the first stage of the study, were also invited. As shown in table-1, 143 potential participants registered for the workshop, only 99 came to attend the workshop. Of that, 5 teachers couldn't attend the 2nd day of the workshop due to unforeseen circumstances. However, 94 teachers completed the two-day program and took the post test.

Table 1: Number of participants in each workshop

Workshop	Registered participants	Participants who completed two-day workshop
1	27	19
2	28	16
3	28	20
4	40	22
5	20	17
Total	143	94

Description of the Intervention

The intervention consisted of a two–day workshop that aimed to enhance the participants' competence in providing effective WFB. The contents of the workshop included functions of feedback and its link to assessment and students' learning; characteristics of effective feedback including balanced annotation; use of hedges in writing feedback; factors affecting the utilization of feedback; and the development of tools such as rubrics for effective assessment of student work. The contents of the workshop were selected on the basis of a thorough review of the literature on WFB. This content was then contextualized for the teachers' needs as observed in the findings of the first phase of the aforementioned large-scale study on written feedback. The workshop was led by the members of research team, who are faculty members of professorial ranks working in different disciplines of the university. A variety of methods including group reading, presentations, role-plays, intense discussions, and interactive exercises were used to

educate the participants about feedback in the 16 hours' workshop spanning over 2 days,

The workshop was conducted five times and attended by a separate group of participants each time. On the first day, each individual participant was provided with a folder that contained an informed letter of consent, a form enquiring participants' demographic information, the itinerary of the workshop, and a summary of the learning contents of the workshop in the form of general guidelines on WFB. After obtaining their consent, each participant was asked to give written feedback on a sample script of 805 words. The script, taken from an undergraduate student, was on a general topic of – child abuse, so as to avoid being discipline-specific. Folder of workshop was given to the participants after the pre-test was completed. At the end of the intervention, the participants were given another copy of the same sample script which they had corrected on the first day; and were once again asked to provide feedback on it.

Data Organization and Analysis

All the feedback comments were first typed and numbered to save. Next, the quality of the feedback was assessed using a structured tool[13]. This enabled the researchers to code the frequency of various elements of the feedback comments in terms of expression, tone and focus. When a single feedback unit comprised of both symbol(s) and text, it was the text which was used to categorize that particular entry. To ensure consistency in interpretation of the data, it was analyzed by a single researcher (AT), and the principal investigator of the study was consulted for clarification whenever required.

Tone of the comments was interpreted under categories of praise, criticism, suggestion or reflective questions. Praise included comments that highlighted a positive aspect of the student's writing, for example, 'Description of the issue was well-stated.' Criticism referred to comments that highlighted a negative aspect of the student's writing such as 'Minimal and irrelevant literature support.' Suggestions consisted of comments/punctuation that proposed a change in the student's writing, for instance, 'If you remove some points from here you will have more space in the analysis' or made the required correction e.g. 'Most of the people think that the time of childhood is the happiest time in one's life'. Reflective questions were those that prompted learners to think more carefully about what they have written such as 'Do you think society can play any part to combat this issue?'

This data was then entered into SPSS for analysis. Descriptive statistics were applied on the demographic information of the participants and the various aspects of the feedback including the number, expression, tone, and focus of comments. Since the data did not fulfil the assumptions of normal distribution, Wilcoxon sign rank test was used to test the differences between the expression, tone and focus of the comments before and after intervention.

Ethical Considerations

The study was approved by the Institutional Review Committee (2032-SON-ERC-11). Research ethics were strongly abided by in the execution of this study. The participants were free to refuse the invitation to attend the workshop or to drop out at any time. They were asked to sign letters of informed consent to ensure their autonomy, and the comfort of the participants was our utmost concern. Participants' pre-test and post-test papers were marked with ID to ensure their complete anonymity and confidentiality as well as that of their institutes. For the same reason the data analysis files were protected with passwords.

Results

This section briefly describes the demographic details of the participants before presenting an analysis of the results. Results described here include changes noted between pre- and post-intervention, regarding quantity, expression, tone and focus of teachers' feedback comments.

Participants' characteristics

As shown in table 2, of the 94 participants, most were females, had Master's qualifications and were working as senior instructors. A majority of them hailed from the private sector and from the nursing discipline. Ninety percent were teaching in graduate and undergraduate programs. Their responses about their background knowledge of WFB are shown in table 3.

Table 2: Demographic and professional information about the participants

Construct	Categories	N (%)
Gender	Female	73 (78%)
	Male	21 (22%)
Qualification	Bachelors	37 (39%)
	Masters	49 (52%)
	Post-Basic Diploma	8 (9%)
Designation	Instructor	25 (27%)
	Senior instructor	38 (40%)
	Assistant Professor	8 (9%)
	Associate Professor	4 (4%)
	Others	19 (20%)
Discipline	Nursing	72 (77%)
	Education	13 (14%)
	Linguistics	7 (7%)
	Medicine	1 (1%)
	Linguistics	1 (1%)

Table 3: Prior learning about WFB

Method of learning	N (%)
Trial and error	48 (51.1%)
Formal course	20 (21.3%)
On-the-job training	54 (57.4%)
Peers	35 (37.2%)
Supervisor	36 (38.3%)
Attended workshop	9 (9.6%)

Analysis of pre-intervention and post-intervention feedback

Comparison of the pre- and post-intervention feedback showed that the overall mean of the comments increased significantly from 11.9 to 16.3. The number of feedback units given by a single teacher ranged from 0 to 40 in the pre-test and 0 to 60 in the post-test. Although the overall quantity increased, it is noteworthy that similar to the pre-test, 2% of the participants provided no feedback in the post-test. However; these were not the same participants who provided zero feedback in both pre- and post-test.

Feedback was expressed in either the form of single words or symbols such as tick marks, underlines, question marks, crosses or happy faces, or in the form of sentences or phrases such as 'Well done!'. The use of both expressions in pre- and post-test is shown in Table 4. Results indicate that the use of symbols or single words remained more or less stable while the use of phrases or sentences increased after the workshop. However; the difference was trivial.

Table 4: Expression of written feedback

Unit of expression	Pre-intervention N=94 Mean $\pm$ (SD)	Post-intervention N=94 Mean $\pm$ (SD)
Symbols or single words	6.16 $\pm$ 6.9	6.22 $\pm$ 8.25
Sentences or phrases	9.05 $\pm$ 6.44	10.07 $\pm$ 6.01
Total Units	15.21 $\pm$ 10.56	16.30 $\pm$ 11.16

Level of Significance=0.05

During data analysis, two additional categories had to be created that had not been anticipated by the researchers. These had to be formulated due to their occurrence in the WFB. One was teachers' contemplation, which consisted of statements expressing teachers' extempore thought on the students' writing, such as 'Children should share their bad and good experiences with their parents, which can help minimize crime. The second was vague comments, which referred to unclear/ungrammatical statements, for example, 'Psychological abuse explanation' or 'Argument of mentioning of problem would resurrect with corp. and relevant to actual problem.' Some participants even re-wrote extracts from the sample script instead of giving actual feedback. Such comments were also classified as vague. In terms of tone of the feedback, as can be seen in table 5, suggestions and reflective questions significantly increased after the intervention (p-value <0.05) whereas appraising, critical, contemplative and vague comments decreased.

Feedback comments were analyzed as targeting particular aspects of the student's writing in the sample script. One aspect was 'form'; that is, language, grammar and mechanics. A second aspect was 'content', including subject matter, usage of literature, relevance, flow of ideas, completeness, etc. Comments also focused on 'writing style'; for example, word choice, originality, referencing and citation. Table 6 summarizes the

differences in focus of comments between the pre- and post-tests.

Table 5: Tone of the comments

Comment type	Pre-intervention Mean (SD)	Post intervention Mean (SD)	p value
Praise	1.54 (1.96)	1.35 (1.68)	0.468
Criticism	3.91 (4.1)	3.82 (4.95)	0.319
Suggestion	4.86 (6.22)	6.34 (8.24)	0.019*
Reflection	1.04 (2.09)	1.83 (2.47)	0.001*
Teachers' Contemplation	0.5 (1.19)	0.29 (0.70)	0.215
Vague	3.26 (4.45)	2.64 (3.80)	0.018*
Total Comments	11.95 (9.8)	16.3 (11.1)	0.000*

*Level of Significance: 0.05

Table 6: Focus of the comments**

Focus area	Pre-intervention Mean (SD)	Post-intervention Mean (SD)	p value
Form	3.70 (5.4)	4.01 (6.83)	0.870
Content	5.0 (4.1)	4.96 (3.12)	0.987
Writing Style	3.33 (3.83)	4.68 (4.78)	0.001*
Total	12.04 (9.87)	13.66 (11.1)	0.076

*Level of Significance: 0.05

**Excluding vague comments

Focus on form did not deviate much while focus on content decreased slightly. The only statistically significant difference was observed in this dimension of feedback, that is, a considerably greater focus on writing style (p-value <0.05).

Discussion

This study aimed to examine the effect of formal training on teacher's performance in providing WFB through a two-day interventional workshop. Notably, a majority of the sample came from nursing while most of the refusals were from medicine and linguistics. The higher percentage of female teachers in our sample is representative of gender composition in Nursing. One possible reason for the refusal from the field of medicine may have been that in Pakistan, WFB is not generally practiced at both undergraduates and graduate levels in most of the medical schools. And, the good response from nursing could be that WFB is an important component of nursing programs at all levels. Moreover, three out of six members of this research team were nurse educators whose credibility might have attracted more nursing faculty from their networks to attend the workshop. The outcome of the post-test yielded a few anticipated results yet other findings were unexpected.

Quantity of feedback had been one of the topics of discussion in the interventional workshop. Perhaps this is why the total number of feedback units increased from 1419 to 1500 which was expected, albeit not by a significant number. This is in line with findings [23] that feedback comments given by teachers increased from an average of 2.8 to 3.6.

Lee[15] reports that teachers more frequently use symbols instead of complete sentences, while teachers in the present study were observed to use more sentences in both pre- and post-tests. Nonetheless, the frequency of symbols was still high. In the post-test, there was a 2% decline in the use of symbols. One of the topics discussed in the workshop was that single words and symbols were often unclear to students, which is why it was recommended that teachers write phrases or complete sentences. Yet the decrease in the use of symbols was low. Perhaps it takes time to change the practice. This reason for the underuse of sentences is especially plausible because language has already been acknowledged as a limitation for some of our participants. Another reason for the continued prevalence of symbols in WFB could be due to the fact that grading checklists were part of the discussion and participants had been given a sample checklist which contained symbols, so they may have assumed that the symbols given in the sample checklist would be comprehensible to the researchers. In reality, however; the symbols in the provided checklist were meant to be used only after explaining each to the students.

Both pre- and post-test results contrasted with findings that teachers' comments are seldom suggestive. [11,12] Roughly 35% of participants' comments in both tests of

the present study were suggestive. It also came as a surprise that praise decreased in the post-test by nearly 2%. This was despite vigorous discussions in the intervention that the literature on WFB[3] highlights students' demand for a balance between praise and criticism, and that the former serves as an important motivator for learners. Criticism also decreased by 2.5%. It is conjectured that the reduction in praise was correlated with an increase in focus on writing style because there were some serious organizational problems with the paper that teachers might initially have overlooked before they learned in the workshop that content was not the only aspect of students' writing that mattered.

Similarly, on average, less number of vague comments were found in the post-test of a study,[23] but the difference was statistically insignificant in the current research. The nature of most of the vague comments in our sample betrayed teachers' low level of proficiency in English as such comments contained misspelling and mechanical errors, incorrect word choice and tense, as well as awkward sentence structure. Lack of proficiency might in fact have been the main underlying cause of vague feedback. This conjecture is supported in research[29] which suggest that effectiveness of WFB is hindered by teachers' own incompetence in English.

The percentage of reflective questions increased by a statistically significant margin subsequent to the intervention. This was an encouraging finding, because the literature[3,5] shows that reflective questions have the most considerable effect in terms of facilitating students' own reflection on their writing.

Markers' own contemplations on the sample script were puzzling. Such comments, as exemplified in the findings, seemed to serve a cathartic purpose rather than aiming to guide students. Occurrence of such type of WFB has not been highlighted in any previous study. It was encouraging to note that contemplative comments nearly halved following the workshop. This shows, although not inarguably, that the workshop facilitated participants in developing a better understanding of the desired and undesired practices in the provision of WFB, which could improve the quality of their WFB. It is recommended that teachers should keep their contemplations to themselves, so as not to confuse students or waste their time. Usually, students expect that all the comments are for them so if the teacher writes something for her/his own sake it could overwhelm students. If, however, such comments are to be retained, it should clearly be mentioned that they are for the teacher's own use.

With regard to the focus of WFB, it was varied throughout the sample as reported in a previous study.[14] For instance, focus on form stayed nearly the same in both pre- and post-test. On the other hand, focus on content decreased by approximately 4%, which likely happened due to the discussion in the workshop that content was not the only important aspect of students' writing. Participants were seen to provide considerably greater WFB on writing style after the intervention, including comments on word choice, originality and referencing.

On the whole, the present study confirmed findings[23] that interventional workshops can indeed bring about a change in teachers' feedback in terms of quantity, expression, tone and focus. One must bear in mind though that they studied the effects of the workshop for 3 months whereas in our study, only the immediate effects of the intervention were observed. However; both studies show that improving teachers' written feedback practices through a workshop is a plausible strategy.

One major limitation of this study was the lack of a record of feedback practices over a period of time, which could have served as a more credible indicator of change in practice. "In-service workshops designed to improve teaching skills often have only short-term effects and rarely involve teachers in an ongoing process of examining their teaching".[30] In the present study, the differences between the pre- and post-test could have been a result of the Hawthorne effect[31] which is a risk inherent in nearly all intervention studies in which humans are under observation. If post-intervention outcomes are observed in the long term, it is likely to minimize the Hawthorne effect, because human behavior can be modified to please an observer only for a limited period of time.

Although four disciplines were including in the study, most participants came from nursing. Therefore, some caution should be exercised in generalizing the findings to

all four disciplines. In addition, sampling was non-probability, which may also have slightly skewed the results.

Conclusion

In concurrence with Haughney[22] this paper reaffirms the need to train teachers in the provision of helpful feedback. The present paper clearly showed that interventional workshops have the potential to enhance the quality of teachers' WFB. This judgment is especially significant for the health sciences or other similar disciplines, in which teachers are hired on the basis of their expertise in the field without formal training in education. Teachers from such disciplines would need mandatory in-service training, enabling them to reap maximum benefits from WFB. That being said, the eventual goal of research in this field is to discover the optimum means to facilitate teachers in making their WFB practices sufficiently effective and meaningful to enhance student learning and utilization.

Acknowledgement

References

1. Dawson P, Henderson M, Mahoney P, Phillips MR. What makes for effective feedback: staff and student perspectives. Ass Eval High Edu. 2019; 44(1):25-36.
    DOI: https://doi.org/10.1080/02602938.2018.1467877
2. Parker M, Winstone NE. Students' perceptions of interventions for supporting their engagement with feedback. Prac Res High Edu. 2016; 10(1):53-64.
3. Dekker H, Schönrock-Adema J, Snoek JW, van der Molen T, Cohen-Schotanus J. Which characteristics of written feedback are perceived as stimulating students' reflective competence: an exploratory study. BMC Med Edu. 2013; 13(1):1-7.
    DOI: https://doi.org/10.1186/1472-6920-13-94.
4. Gedye S. Formative assessment and feedback: A review. Planet. 2010; 23(1):40-5.
    DOI: https://doi.org/10.11120/plan.2010.00230040
5. Ghazal L, Gul RB, Hanzala M, Jessop T, Tharani A. Graduate students' perceptions of written feedback at a private university in Pakistan. Int J High Edu. 2014; 3(2):13.
    DOI: https://doi.org/10.5430/ijhe.v3n2p13
6. Paterson C, Paterson N, Jackson W, Work F. What are students' needs and preferences for academic feedback in higher education? A systematic review. Nur Edu Today. 2020; 85:104236.
    DOI: https://doi.org/doi.org/10.1016/j.nedt.2019.104236
7. Shellenbarger T, Gazza EA, Hunker DF. Advancing scholarly writing of baccalaureate nursing students using the knowledge, skills, and attitude self-assessment for writing development. Nur Edu Today. 2018; 69:109-12.
    DOI: https://doi.org/10.1016/j.nedt.2018.07.006
8. Wang T, Jiang L. Studies on Written Corrective Feedback: Theoretical Perspectives, Empirical Evidence, and Future Directions. English Lang Teach. 2015; 8(1):110-20.
    DOI: https://doi.org/10.5539/elt.v8n1p110
9. Ellis R. A typology of written corrective feedback types. ELT J. 2009; 63(2):97-107.
    DOI: https://doi.org/10.1093/elt/ccn023
10. Sadler DR. Beyond Feedback: Developing Student Capability in Complex Appraisal. Asses Eval High Edu. 2010; 35(5):535-50.
11. Harvey P, Radomski N, O'Connor D. Written feedback and continuity of learning in a geographically distributed medical education program. Med Teach. 2013; 35(12):1009-13.
    DOI: https://doi.org/10.3109/0142159X.2013.827332
12. Glover C, Brown E. Written feedback for students: too much, too detailed or too incomprehensible to be effective? Biosci Edu. 2006; 7(1):1-16.
    DOI: https://doi.org/10.3108/beej.2006.07000004
13. Ghazal L, Gul R, Khowaja AA. A step by step methodological approach to appraise the quality of written feedback using comment analysis. J Edu Soc Behav Sci. 2015 ;1-10.
    DOI: https://doi.org/10.9734/BJESBS/2015/17713
14. Ferris D. Does error feedback help student writers? New evidence on the short-and long-term effects of written. Feed Second Lang Writ Context issues. 2006; 81.
15. Lee I. Understanding teachers' written feedback practices in Hong Kong secondary classrooms. J Sec Lang Writ. 2008; 17(2):69-85.
    DOI: https://doi.org/10.1016/j.jslw.2007.10.001
16. Ferguson P. Student perceptions of quality feedback in teacher education. Asses Eval High Edu. 2011; 36(1):51-62.
    DOI: https://doi.org/10.1080/02602930903197883
17. Nicol D. From monologue to dialogue: improving written feedback processes in mass higher education. Asses Eval High Edu. 2010; 35(5):501-17.
    DOI: https://doi.org/10.1080/02602931003786559
18. Weaver MR. Do students value feedback? Student perceptions of tutors' written responses. Asses Eval High Edu. 2006; 31(3):379-94.
    DOI: https://doi.org/10.1080/02602930500353061
19. Alroe MJ. Error Correction of L2 Students' Texts–Theory, Evidence and Pedagogy. Asian EFL J. 2011; 50:35-73.
20. Shute V. Focus on formative feedback. Rev Edu Res. 2008; 78(1):153-89.
    DOI: https://doi.org/10.3102/0034654307313795
21. Ferris D. Preparing teachers to respond to student writing. J Sec Lang Writ. 2007; 16(3):165-93.
    DOI: https://doi.org/10.1016/j.jslw.2007.07.003
22. Haughney K, Wakeman S, Hart L. Quality of feedback in higher education: A review of literature. Edu Sci. 2020; 10(3):60.
    DOI: https://doi.org/10.3390/educsci10030060
23. Salerno SM, Jackson JL, O'Malley PG. Interactive faculty development seminars improve the quality of written feedback in ambulatory teaching. J Gen Int Med. 2003; 18(10):831-4.
24. Gul RB, Tharani A, Lakhani A, Rizvi NF, Ali SK. Teachers' perceptions and practices of written feedback in higher education. World J Edu. 2016; 6(3):10.

25. Hyland F, Hyland K. Sugaring the pill: Praise and criticism in written feedback. J Sec Lang Writ. 2001; 10(3):185-212.
     DOI: https://doi.org/10.1016/S1060-3743(01)00038-8

26. Magno C, Amarles A. Teachers' feedback practices in second language academic writing classrooms. Int J Edu Psychol Asses. 2011; 6(2).

27. Evans AN. Using basic statistics in the behavioral and social sciences. Sage Publications; 2013.

28. Khowaja AA. Students' perceptions and their responses to written feedback in the nursing degree programs in Karachi. Unpublished Master's Thesis. Aga Khan University; 2011.

29. Khowaja AA, Gul RB, Lakhani A, Rizvi NF, Saleem F. Practice of written feedback in nursing degree programmes in Karachi: the students' perspective. J Coll Phy Sur Pak. 2014; 24(4):241.

30. Richards JC, Jack C, Lockhart C. Reflective teaching in second language classrooms. Cambridge university press; 1994.

31. Roethlisberger FJ, Dickson WJ. Management and the worker: An account of a research program conducted by the Western Electric Co. Science Editions; 1939.