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The Contribution of Teacher Feedback to the Revision of Student's Work in Primary and Secondary Education: A Systematic Literature Review

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Abstract

Teacher feedback is crucial in the teaching and learning process as it helps describe the learner's performance objectively and guides them in revising their work to improve academic performance. While previous reviews have provided valuable information on different types of feedback and their use, effectiveness, effects on learner learning, and pedagogical benefits at both teaching and learning levels, none have focused exclusively on the connection of feedback with revision. This systematic literature review was based on the revised PRISMA 2020 statement, a widely accepted set of guidelines for reporting systematic reviews and meta-analyses. After removing duplicate studies and applying two levels of research to exclude studies based on title, abstract, inaccessibility, and not meeting quality criteria, 32 relevant surveys were found conducted in primary and secondary education from 2013-2023, assessing the contribution of teacher feedback to the revision of learners' work. The results showed that most studies found significant benefits from applying various types of feedback processes in successfully revising learners' work. These processes led to correcting errors, improving the quality of their texts, assimilating improvement strategies,

and promoting receptivity among teachers and learners. Most research focused on language learning and related skills such as grammar, syntax, spelling, writing, and text comprehension, primarily using quasi-experimental interventions in English as a second and foreign language courses.

Keywords: teacher feedback, student's revision, primary education, secondary education, effects

1. Introduction

Assessment is a complex concept that applies to all areas of human endeavor. It involves identifying both positive and negative aspects, and then comparing them to determine their effectiveness (McAlpine, 2002). One of the main objectives of assessing students is to identify learning deficiencies and provide feedback so that students can develop critical thinking, gain knowledge and skills, take on responsibility, and enhance their academic performance (McAlpine, 2002). The primary purpose of learner assessment is to give feedback and information to learners to bridge the gap between their current performance and their desired goal (Narciss, 2008). Feedback should objectively describe a learner's performance, intended to guide future performance, help learners evaluate the quality of their performance (Hattie & Timperley, 2007), and determine if they have achieved their set objectives, while providing advice on how to improve in the future (Allal et al., 2009). The main goal of feedback is to assist learners in adjusting their thinking and behaviors to achieve better learning outcomes (Shute, 2008) by revising their work and improving their performance (Narciss, 2008).

Revision is the process of making changes at any point in the writing process (Allal et al., 2009). This includes identifying discrepancies between the intended purpose of the text and the actual content, determining necessary alterations, figuring out how to implement the desired changes, and then making those changes (Chanquoy, 2009). Researchers globally have studied the impact of teacher feedback on the educational process. While there are systematic reviews that provide significant evidence on various types of feedback, their effectiveness, and their positive or negative effects on student learning (Shute, 2008; Jonsson, 2013; Liu & Brown, 2015; Chen, 2016; Wisniewski et al., 2020), none of them have exclusively focused on connecting feedback to revision. Furthermore, studies in Greek literature have yet to explore the influence of feedback on trainees' work revisions.

While previous reviews have provided valuable information on feedback types and their effects, none have specifically addressed the connection between feedback and revision in primary and secondary education. This study's clear objective is to fill this gap and provide a comprehensive understanding of the role of feedback in the revision process.

2. The Contribution of Teacher Feedback to Learners' Revision of Work: A Theoretical Approach

Feedback plays a crucial role in the teaching and learning process. Learners can use feedback to improve their academic performance (Taras, 2003; Molloy & Bound, 2013). It provides an objective description of a student's performance, aiming to guide future performance and help

learners evaluate the quality of their work (Kluger & DeNisi, 1996). Additionally, feedback helps learners determine whether they have met their goals and provides advice for improvement (Narciss, 2008). Feedback is information given to the learner about their performance related to learning objectives or outcomes (Wiggins, 1998). Its goal is to help learners adjust their thinking and behaviors to enhance learning outcomes (Shute, 2008) and bridge the gap between actual performance levels and desired learning goals (Hattie & Timperley, 2007).

Effective feedback is not a separate practice, but an essential part of an instructional dialogue between teachers and students or among learners (Molloy & Boud, 2013). For feedback to be effective, it should be targeted, proactive, friendly, continuous, systematic, and timely (Wiggins, 1998). It should aim to clarify what constitutes good performance, promote reflection and self-assessment in learning, offer high-quality feedback to learners, encourage dialogue among peers and between teachers and learners, foster positive motivational beliefs and self-esteem through assessment, provide opportunities for action, and give teachers actionable information to help shape their teaching (Nicol & Macfarlane-Dick, 2006).

The power of feedback lies in its ability to facilitate revision. This could involve revising an assignment or re-evaluating an understanding of a concept. Revision may happen at any stage of the learning process and for written assignments. It includes identifying differences between intended and current goals, determining what modifications should be made to the written assignment, and figuring out how to make the desired changes. These changes might or might not impact the meaning of the task, and they could be major or minor (Fitzgerald, 1987; Haar, 2006; Chanquoy, 2009). Revision involves adjusting a task to improve it (Haar, 2006).

In the classroom, researchers have identified four aspects of revision: a) revision as correction, b) revision as growth and discovery, c) revision as rhetorical goal setting and function, and d) revision as an affirmation of identity, whether personal, political, or aesthetic (Fitzgerald, 1987; Haar, 2006; Chanquoy, 2009; Allal et al., 2009). Revisions to a text can be categorized based on the extent of the learner's involvement. Faigley and Witte (1981) identify two types of revisions. The first type involves changes to the surface of the text, such as spelling, additions, deletions, and other modifications that do not impact the meaning. The second type pertains to revisions in the macrostructure of the text, which includes changes in the microstructure or macrostructure, such as restructuring and reconstruction. Whalen and Menard (1995) expanded on these types by categorizing revisions into three textual levels: a) linguistic revisions at the word and sentence level, b) textual revisions at the macrostructure, coherence, and c) textual coherence level, and pragmatic revisions at the level of pragmatic text function.

3. Research Questions

The aim of this research is to review the impact of teacher feedback on students' revising process in primary and secondary education across various countries. The review will focus on surveys conducted from 2013 to 2023 and address the following research questions: a) Which subjects were included in the studies on the impact of teacher feedback on student

work revision? b) What are the characteristics and sample sizes of the study participants in the research on the impact of teacher feedback on student work revision? c) What types of data were collected in surveys related to the impact of teacher feedback on student work revision? d) What research tools are used to investigate the impact of teacher feedback on student work revision? e) How does teacher feedback contribute to student work revision? The main goal is to draw meaningful conclusions, identify gaps, and propose areas for future research.

The work is structured into five sections. It begins with an extensive review of previous research in the field, highlighting the unique contribution of the present work to scientific knowledge. The methodological design for conducting the review is then outlined, including the search, evaluation, and final selection of the studies to be analyzed. The third section presents the analysis results and addresses the research questions. This is followed by a discussion and critical interpretation of the results of previous research, as well as the listing of conclusions. Finally, a summary of the research results and suggestions for future research in the field is provided.

4. Previous Systematic Review Studies and Contribution of the Present Review

In a 2008 review, Shute examined a wide range of research on feedback, specifically focusing on formative feedback. The review assessed whether formative feedback is non-evaluative, supportive, timely, and specific. It also examined how the feedback is delivered to the learner, including the type (verification of the accuracy of the answer, explanation of the correct answer, hints, worked examples) and timing (immediately after the answer or after some time). This comprehensive review encompassed 180 studies, including articles, theses, abstracts, books, and conference proceedings. The research concluded that formative feedback should concentrate on the student's accuracy in a problem or task and address errors and misconceptions. Furthermore, the research highlighted that various factors, such as individual student characteristics and aspects of the task, interact with the success of formative feedback in promoting learning.

In 2013, Jonsson conducted a review of 103 studies from 1990 to 2010 on how higher education students use feedback. The findings highlighted the importance of feedback usefulness for students and identified factors hindering effective use, such as a lack of feedback utilization strategies and understanding of academic language. Educators should focus on enhancing feedback usefulness and helping students develop effective feedback utilization strategies.

Liu and Brown (2015) conducted a methodological synthesis to review the latest research on the effectiveness of corrective feedback in second-language writing. They examined thirty-two published studies and twelve doctoral theses from 2004 to 2014. The data was then coded using meta-analytic procedures. The results highlighted several methodological limitations, including: a) insufficient reporting of the research context, methodology, and statistical analyses, b) low validity designs, and c) the use of mixed types of feedback as an experimental intervention for a single group, making it impossible to distinguish the effectiveness of a single feedback method, and d) a wide range of outcome measures of

accuracy, making it difficult to compare results across studies.

In 2016, Chen studied the impact of technology-supported feedback from fellow learners in an EFL writing classroom. The study analyzed 95 papers from 1990 to 2010, focusing on specific feedback in ESL, with a particular focus on computer-based peer feedback for learners. Using grounded theory, Chen compared the characteristics of synchronous and asynchronous interaction for this type of feedback. The findings identified significant themes and discussed implications for pedagogy and group dynamics.

In their 2020 meta-analysis, Wisniewski et al. examined 435 research studies conducted between 1960 and 2016 on the effects of feedback on student learning. They found that feedback has a moderate effect on learner learning. The researchers also discovered that the content of the feedback greatly influences its impact, with feedback having a more significant effect on cognitive and motor skill outcomes than on motivational and behavioral outcomes. These findings highlight the importance of understanding different forms of feedback as independent measures in teaching research and practice.

The previous reviews offered valuable insights into different types of feedback, their effectiveness, and their influence on student learning. However, they could have delved deeper into the relationship between feedback and revision. This review intends to fill this gap by concentrating on research that investigates how feedback helps students revise their work in primary and secondary education from 2013 to 2023.

5. Methodology

The review followed the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines developed by Page et al. (2021). These guidelines offer updated reporting standards for systematic reviews, replacing the 2009 guidelines. They include new reporting guidance for the stages of identification, screening, eligibility, and final selection of studies. Figure 1 shows the flow chart of the process, displaying the number of studies at each stage mentioned above.

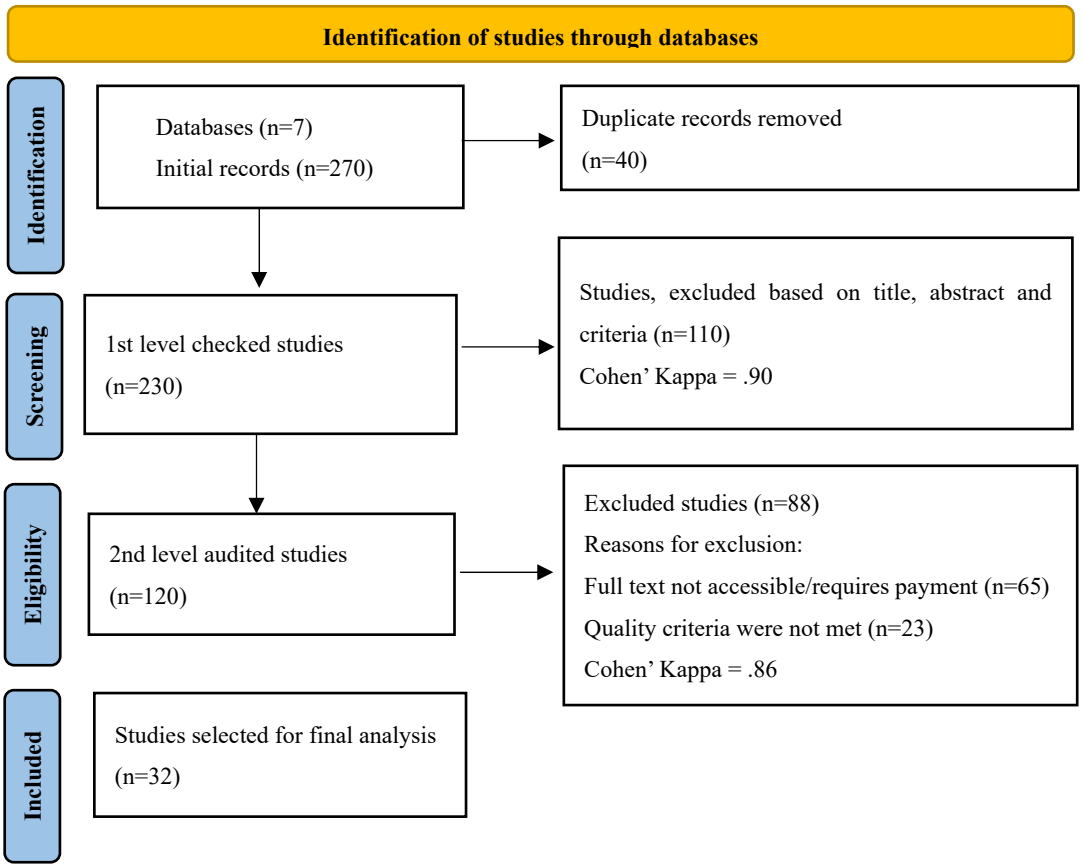

Figure 1. Flowchart of the literature review

The search used the keywords "Feedback" AND "Revision", OR "Feedback" AND "Student Revision" OR "Student Writing Revision*", OR "Teacher's Feedback*" AND "Students' Revision*", OR "Feedback*" AND "Students' Revision*" AND Education*". The search was conducted using English terms, as most of the literature in the field is published in English. Additionally, using Greek terms for the search did not yield any noteworthy results. The rationale for selecting the above terms is as follows: Initially, "Feedback" and "Revision" were chosen to narrow down the research on feedback and revision. The search was expanded to include "Teacher's Feedback*" and "Students' Revision*" to focus on related research. As many investigations covered various fields of medicine and nursing science, the term "Education*" was also included. The search terms used the asterisk symbol to encompass as many relevant studies as possible.

The review used seven bibliographic databases: ScienceDirect, SpringerLink, Scopus, IEEEXplore, SAGE Journals, ResearchGate, and Google Scholar to broaden the search compared to previous reviews. This included large databases like IEEEXplore and Scopus, as well as ScienceDirect and SpringerLink for social sciences and humanities. Google Scholar was also used despite its limitations to ensure a comprehensive search.

The search using the selected keywords and databases yielded 270 surveys. After removing 40 duplicates, 230 studies remained for a thorough level one screening. During this screening, titles and abstracts were carefully compared against the selection criteria (Table 1). To ensure the consistency of the procedure, a small number of the same surveys were assessed, and

Cohen's kappa coefficient was calculated (Figure 1). As a result, 110 surveys were excluded, demonstrating the meticulousness of the screening process.

Table 1. Criteria for inclusion/exclusion of studies in the review

Inclusion criteria	Exclusion criteria
Studies written in English and Greek.	Studies written in a language other than English and no translation available.
Application in the field of education.	They do not concern the application in the field of education.
Reference to the contribution of feedback to the revision of learner work.	They do not refer to the contribution of feedback to the revision of learners' work.
The summary states some information.	Reviews/theoretical studies
Publication year from 2013-2023	

Out of 120 studies, 65 required payments for access, so they were excluded from consideration. The remaining 55 studies were assessed based on specific criteria: a) whether the research clearly described the context of feedback contribution to learner work revision (field of knowledge, type of research), b) whether the research clearly described the methodological design used (type of data collected, sample of participants), and c) whether the research clearly described the method and research tools used for data collection. After this evaluation, 32 studies were chosen for the systematic review as they met all three criteria. The consistency of the procedure was assessed by calculating Cohen's kappa coefficient (Figure 1).

6. Results

Tables 2 and 3 summarize research conducted in primary and secondary education and focus on the impact of teacher feedback on student performance. The tables include details such as the researchers, time and country of implementation, purpose, type of research, sample size and subject, and the results of the studies.

Table 2. Impact of Teacher Feedback on Student Work Revision in Primary Education

Researchers **Year** **Country**	**Purpose of research**	**Type of research** **Sample size** **Subject**	**Results**
Woo, Chu & Li 2013 China	Exploring the use of a wiki for collaborative writing.	Experimental 119 students English as a second language	Receiving various forms of feedback led to precise revisions, ultimately improving the quality of the group writing.
McKeown, Kimball & Ledford 2015 USA	Investigating the effect of asynchronous auditory feedback on the text revision practices of students with emotional/behavioral disorders.	Experimental 6 students Language, texts	After the intervention, students were more inclined to revise, leading to longer and higher-quality stories.
Silva, Almeida Farroupas 2016 Spain	Investigating the effect of feedback on students' revision of texts.	Experimental 45 students Language, text	Students who received feedback and revised their work improved the quality of their written production.
Yim, Zheng & Warschauer 2017 USA	Explore the feedback content and review it in Google Docs.	Mixed 145 students Language, texts	Providing feedback helped students to revise their work and improve their writing.
Philippakos & MacArthur 2016 USA	Examining the effects of providing feedback on the quality of students' persuasive writing.	Experimental 145 students Language, writing	Students who received feedback and revised their assignments produced higher-quality work than those who did not receive feedback.

Sewagegn & Dessie 2020 Ethiopia	Assessing students' perceptions of feedback practices.	Mixed 474 students All the subjects	The results indicated that students hold a positive view of feedback's value and implementation.
Wang, Matsumura, Correnti, Litman, Zhang, Howe, & Quintana 2020 USA	Investigating the implementation of feedback messages through an automated writing assessment system to improve student writing.	Experimental 143 students Language, texts	Electronic feedback via a messaging system helps to review student work and enhance the produced texts.
Zabihi & Erfanitabar 2021 Iran	Investigated the effectiveness of different types of written corrective feedback on revising drafts and creating new texts.	Experimental 130 students English as a foreign language	Students who received immediate corrective written feedback and metalinguistic explanations on their revised papers showed a significant improvement in their writing skills.
Lira-Gonzales & Nassaji 2022 Canada	Comparing different effects of focused and comprehensive written corrective feedback on revision accuracy.	Experimental 87 students English as a second language	Both focused and comprehensive feedback improved students' revising and subsequent writing accuracy. Focused feedback was more effective than comprehensive feedback.

Table 3. Impact of Teacher Feedback on Student Work Revision in Secondary Education

Researchers **Year** **Country**	**Purpose of research**	**Type of research** **Sample size** **Subject**	**Results**
Early, & Saidy 2014 USA	Investigating whether providing revision instructions improved students' actual revision efforts.	Mixed 15 students Language, texts	Experimental group students made more revisions than the control group, and they developed arguments based on their opinion and text interpretation.
Hunt-Barron & Colwell 2014 USA	Exploring online peer review and collaboration to enhance the review process and improve writing quality.	Mixed 36 students Language, texts	Analysis shows enhanced student writing volume and quality through online peer review and collaboration.
Hovardas, Tsivitanidou & Zacharia 2014 Cyprus	Investigating the quality of peer feedback.	Mixed 28 students 14 male, 14 female Language, text	The peer reviewers' suggested changes were scientifically accurate, and reviewer teams used decision-making strategies to process their peers' feedback.
Arege 2015 Botsuana	Determining the role of teacher corrective feedback in successful revision error correction.	Experimental 68 students 28 male, 40 female Language, texts	Students tend to correct most of the mistakes in the original essays after receiving long-term feedback from teachers.
Singh & Tan 2017 Malaysia	Investigating the effects of structured peer feedback on student text revision.	Experimental 20 students English as a second language	Students were able to provide feedback to their peers and, after receiving the feedback, make the necessary changes to their essay drafts.

Poorebrahim 2017 Iran	Comparing the effect of different indirect corrective feedback types on revisions of student work.	Action research 20 students 10 male 10 female English as a foreign language	Indirect corrective feedback has a significant impact on student work revisions. Explicit feedback is preferable for revision purposes, while implicit feedback is beneficial for learning.
Cutumisu 2018 USA	Studying the impact of different types of feedback in a computer-based assessment game on student performance and review time.	Mixed 106 students Language	Critical feedback is associated with students' performance and learning strategies, while positive informative feedback is inversely related to performance and learning strategies.
Cutumisu & Schwartz 2018 Canada	Analyzing students' critical feedback choices and their impact on memory and learning outcomes.	Experimental 98 students Language	Students remember better with critical feedback than with affirmative feedback, and higher levels of critical feedback are linked to better academic performance.
Saidon, Said, Soh & Husnin 2018 Malaysia	Exploring how students' perceptions of the written feedback they receive influence their revisions of work.	Quantitative 90 students English as a second language	Students recognized the value of teacher feedback in revising and improving their writing.
Lee, Pallant, Pryputniewicz, Lord, Mulholland, & Liu 2019 USA	Investigating how the automated text grading and real-time feedback system supported or hindered students' revisions.	Mixed 343 students Language, texts	Their post-test performance on scientific reasoning involving uncertainty significantly improved because of using HASbot.

Gao, Schunn & Yu 2019 USA	To what extent can peer feedback help address issues in original texts within complex writing tasks.	Mixed 58 students Language, texts	Peer feedback had a modest impact on revision and receiving multiple comments on the same topic led to more revisions and improved draft quality.
Fukuta, Tamura & Kawaguchi 2019 Japan	Explored the impact of indirect feedback on student language engagement and its lasting effects on revisions.	Experimental 40 students Language, texts	Participants focused more on grammar when given feedback, leading to greater error correction. They also improved in fluency and slightly in accuracy, but not complexity.
Karim & Nassaji 2020 UAE	Studying the immediate and prolonged impacts of combined written correction feedback on students' accuracy in revising their creative writing.	Experimental 53 students 17 male 36 female English as a second language	Feedback groups significantly outperformed the control group on the revision tasks.
Zhu, Liu & Lee 2020 USA	Investigating a formative feedback system embedded in an online science course module that teaches climate change.	Mixed 374 students Physical Sciences	Students with higher initial scores were more likely to revise after receiving automated feedback. Revisions were positively correlated with score increases. Contextual feedback was found to be most effective in enhancing learning.
Wu & Schunn 2020 USA	Examining the link between peer feedback features, students' perceptions, and feedback application likelihood.	Qualitative 185 students 83 male, 102 female All the subjects	Students feel comfortable providing peer feedback. Understanding, agreement, and presence of solutions are key factors in using feedback effectively.

Dmoshinskaia, Gijlers & de Jong 2021a Netherland	Investigating the impact of product quality on feedback providers' knowledge acquisition and the role of prior knowledge.	Experimental 78 students 36 male, 42 female Language, concept maps	Students who provided feedback on the lower-quality concept maps provided better feedback and achieved higher post-test scores. There was no interaction with the level of prior knowledge.
Hattie, Crivelli, Van Gompel, West-Smith & Wike 2021 USA	Investigating which feedback forms are most predictive of improving student essays using an electronic augmented system.	Mixed 3.204 students Language, texts	Providing feedback resulted in the most significant improvements from the initial to the final submission of assignments.
Rahimi 2021 Iran	Comparing impact of focused vs. integrated written corrective feedback on improving students' accuracy.	Experimental 78 students English as a second language	Compared to integrated groups, focused groups excelled in reducing verbal and sentence errors, enhancing written accuracy through revision.
Kim & Emeliyanova 2021 S.Korea	Comparing students' in-class revision behaviors when working in pairs and individually, as well as the outcomes of collaborative and individual revision through indirect written corrective feedback.	Experimental 36 students English as a second language	The pair-correction group had a higher accuracy in error correction than the self-correction group. Both groups showed significant improvement in their writing accuracy after receiving feedback.
Nia & Valizadeh 2021	Investigating the immediate and ongoing effects of revision-mediated corrective feedback	Mixed 50 students	Each instance of revision-mediated feedback had a statistically significant impact on the written syntactic accuracy of EFL learners in

Iran	on the development of written syntactic accuracy.	7 male, 43 female English as a foreign language	both the short and long term.
Afruzi, Vaez-Dalili & Hadian 2022 Iran	Studying the impact of written corrective feedback and the associated responses on grammatical structure production, with and without revision.	Experimental 260 students English as a foreign language	Students who received written corrective feedback along with the opportunity to revise performed better than all other groups, including those required to make revisions, and their counterparts who did not receive revision.
McCarthy, Roscoe, Allen, Likens & McNamara 2022 USA	Examining the extent to which adding spelling and grammar checkers supports writing and revision compared to providing only writing strategy feedback.	Action research 119 students Language, texts	Writing strategy feedback and the chance to revise improved essay quality, while spelling and grammar feedback had only modest benefits.
Bouwer & Dirkx 2023 Netherland	Understanding feedback engagement processes in written assignments using online and offline metrics, including eye tracking, think-aloud, and text analysis.	Experimental 57 students Language, texts	Students use three processing strategies: surface, local, and deep, to assess and incorporate feedback for revision, resulting in more substantial revisions.

All the selected research is from journal articles. Figure 2 shows the distribution of research by year of publication.

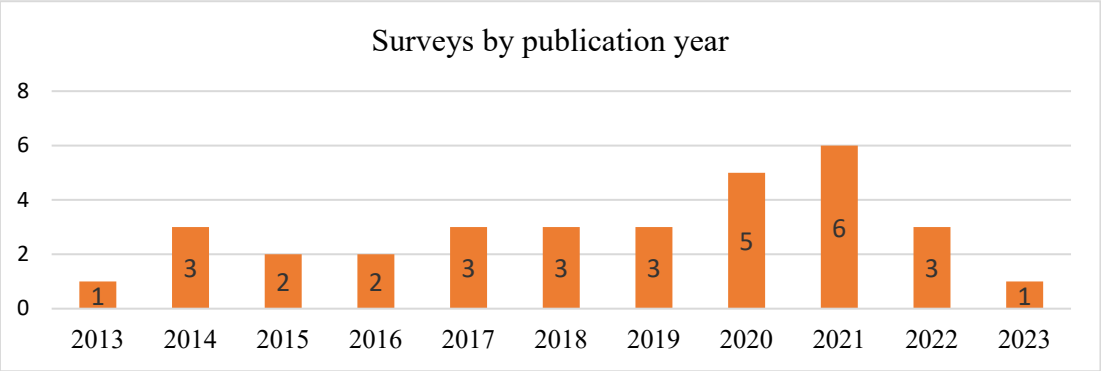

Figure 2. Distribution of review studies by year of publication

The majority of research studies were conducted in secondary education, with 23 studies (71.9%) eight studies in middle school (34.8%), five studies (21.7%) in high school, and ten studies (43.5%) that included both middle and high school. Nine studies (28.1%) were found in primary education. Most of these studies were in the Americas (n=15), followed by Asia (n=11), Europe (n=4), and Africa (n=2). Figure 3 shows the distribution of surveys by country.

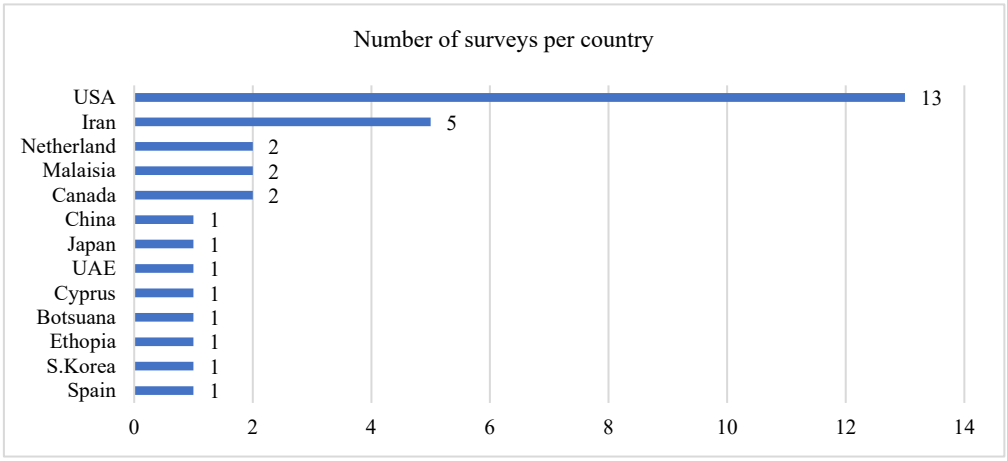

Figure 3. Distribution of review surveys by country

Regarding the type of research examined, most research is experimental, followed by mixed research (Figure 4).

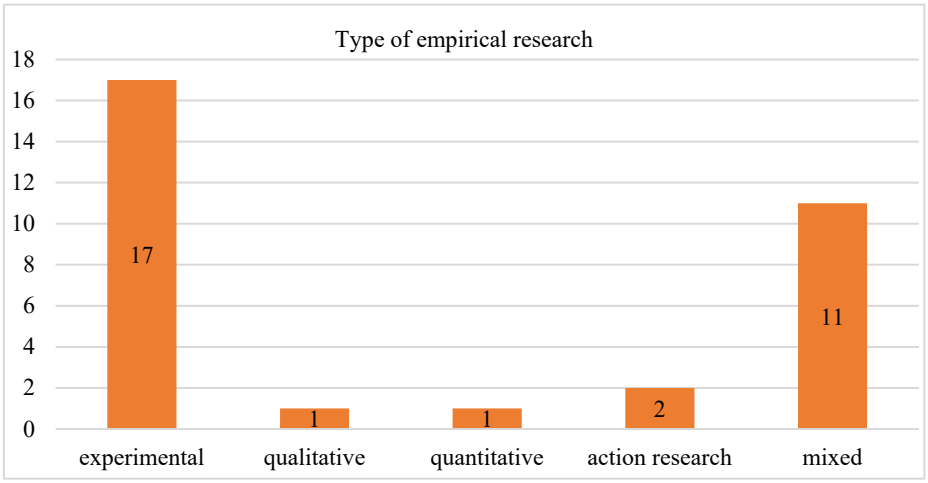

Figure 4. Distribution of review studies by research type

The data analysis showed that feedback and its contribution to the review of student's work had been applied primarily in the humanities, where three fields of application were identified (Table 4).

Table 4. Subjects of the review studies

Subjects	Primary education	Secondary education	Number of surveys
All the subjects	1	1	2 (6,3%)
Language	5	13	18 (56,2%)
English as a foreign language	1	3	4 (12,6%)
English as a second language	2	5	7 (21,8%)
Physical sciences	0	1	1 (3,1%)

In the survey, most studies had 101-500 participants (n=13), followed by 51-100 (n=7), 31-50 (n=5), and 11-30 (n=5). One survey had 1-10 participants, and another had over 500. Experimental research involved 20-260 participants, mixed research involved 15-3,204, and action research involved 20-119. Quantitative research had 90 participants, while qualitative research had 185. Out of 32 surveys, ten (31.3%) used online, digital, and electronic tools, including electronic and digital tools, online environments, Google documents, and Wiki. Figures 5 and 6 illustrate feedback's contribution to revising students' work in primary and secondary education.

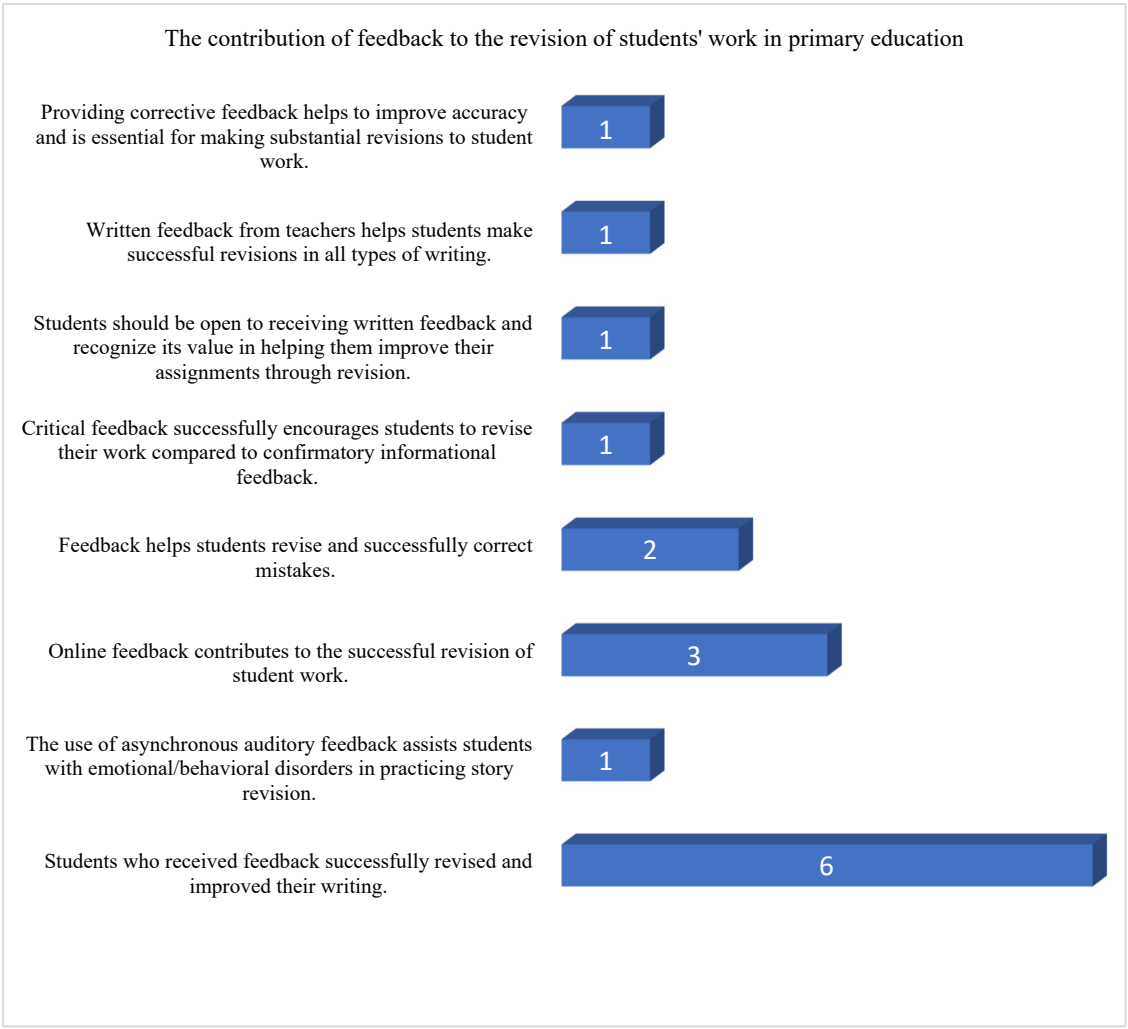

Figure 5. Results showing the impact of feedback on revising student work in primary education.

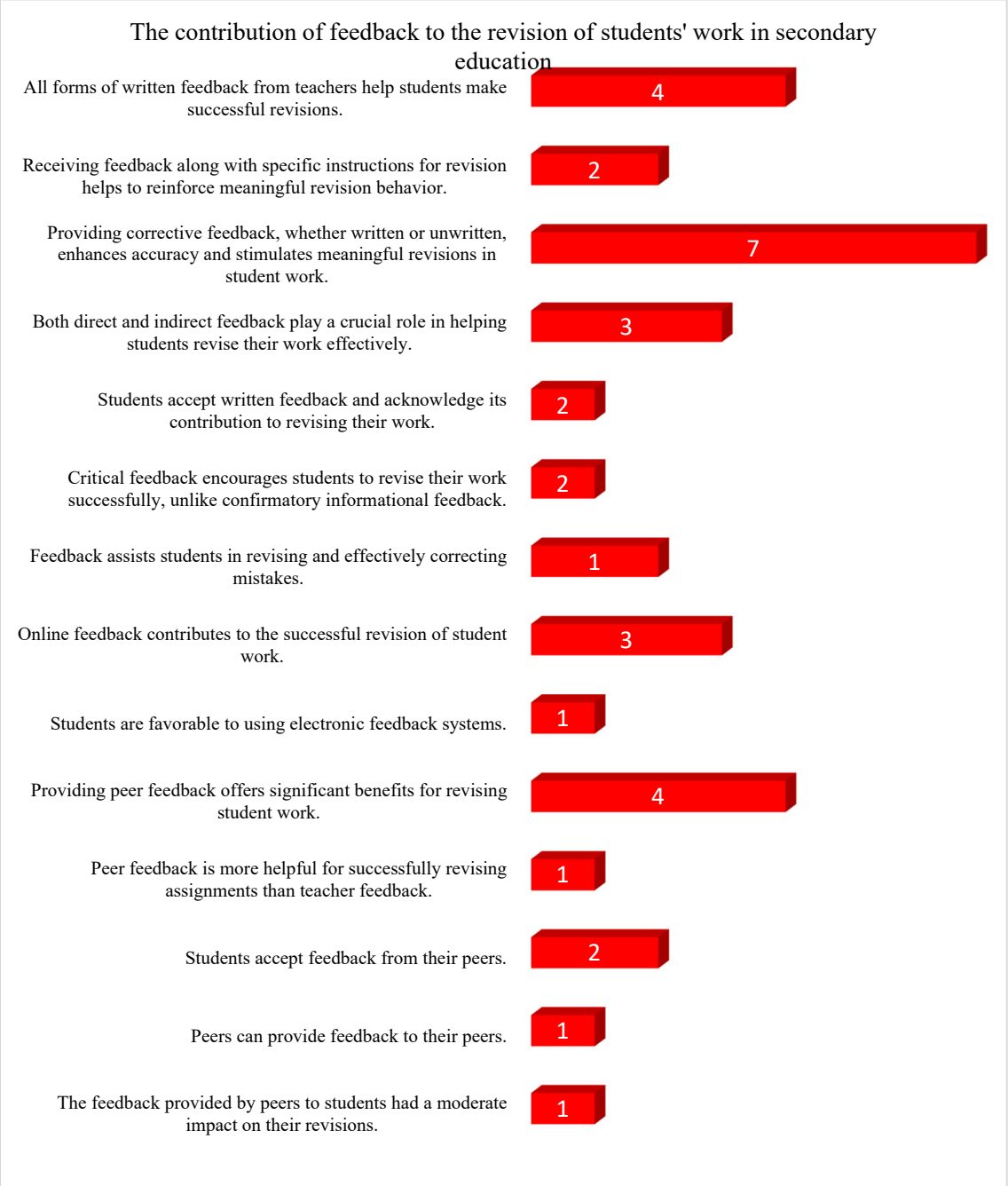

Figure 6. Results showing the impact of feedback on revising student work in secondary education.

7. Discussion

During the period from 2013 to 2023, research on the impact of teacher feedback on trainees' work was not only limited to Greece (n=0) but was also globally dispersed. The studies that addressed the research questions were mainly focused on secondary education (n=23) and, to a lesser extent, on primary education (n=9). Most of the research was conducted in the Americas (n=15), followed by Asia (n=11), with fewer studies in Europe (n=4) and Africa (n=2). The US and Iran had the highest number of surveys (n=18 and n=11, respectively).

The majority of the research followed an experimental research design (n=17), followed by mixed research (n=11) and action research (n=2), and there were also a few instances of quantitative (n=1) and qualitative research (n=1). In terms of sample size, most surveys included 101 to 500 participants, followed by surveys with 51 to 110 participants. The sample size in experimental studies varied from 20 to 260 participants, while in mixed research, it ranged from 15 to 3,204 participants.

In the investigation of how teacher feedback contributes to learners' work revision to achieve specific learning objectives in primary education, five international studies were examined focused on language learning, grammar, spelling, and writing (McKeown et al., 2015; Silva et al., 2016; Philippakos & MacArthur, 2016; Yim et al., 2017; Wang et al., 2020), one study centered on special education (McKeown et al., 2015), three on English as a foreign language (Zabihi & Erfanitabar, 2021) and as a second language (Woo, et al., 2013; Lira-Gonzales & Nassaji, 2022), and a survey covering all subjects (Sewagegn & Dessie, 2020). From the research results, it was observed that: a) Feedback helps learners revise and correct mistakes successfully (Silva et al., 2016; Philippakos & MacArthur, 2016), b) critical informational or non-informative feedback encourages learners to revise their work, while confirmatory informative feedback has a negative impact (Sewagegn & Dessie, 2020), c) electronic feedback facilitates successful work revision by learners (Woo et al., 2013; Yim et al., 2017; Wang et al., 2020), d) asynchronous auditory feedback helps learners with emotional/behavioral disorders in reviewing their practices (McKeown et al., 2015), e) learners accept written feedback and recognize its value in revising their work (Sewagegn & Dessie, 2020). Overall, students who received feedback effectively revised and enhanced their writing skills (Woo et al., 2013; McKeown et al., 2015; Silva et al., 2016; Yim et al., 2017; Philippakos & MacArthur, 2016; Wang et al., 2020).

Thirteen studies have investigated the effects of teachers' feedback on students' work revision in secondary education, particularly in language learning and skills such as grammar, spelling, and writing (Early & Saidy, 2014; Hunt-Barron & Colwell, 2014; Cutumisu, 2018; Gao et al., 2019, Dmoshinskaia et al., 2021a; Hattie et al., 2022; Bouwer & Dirkx, 2023). Also, eight studies specifically focused on English as a foreign language (Poorebrahim, 2017; Nia & Valizadeh, 2022) and second language learning (Singh & Tan, 2017; Saidon et al., 2018; Karim & Nassaji, 2020; Rahimi, 2021; Kim & Emeliyanova, 2021). There was one study dedicated to natural sciences education (Zhu et al., 2020), and another encompassing feedback in all subjects (Wu & Schunn, 2020). The studies addressed various types of feedback, including direct and indirect feedback (Fukuta et al., 2019), critical feedback (Cutumisu, 2018; Cutumisu & Schwartz, 2018), and online feedback (Hunt-Barron & Colwell, 2014; Lee et al., 2019; Hattie et al., 2021; Yamashita et al., 2021), as well as feedback from peers (Hunt-Barron & Colwell, 2014; Hovardas et al., 2014; Dmoshinskaia et al., 2021a), which have been shown to significantly benefit students' assignments. The findings suggest that students accept written feedback (Saidon et al., 2018; Wu & Schunn, 2020), prefer electronic feedback systems (Lee et al., 2019), appreciate peer feedback (Cutumisu & Schwartz, 2018), and recognize its value in revising their work (Saidon et al., 2018; Wu & Schunn, 2020). Research also indicates that peer feedback is more effective than

teacher feedback in helping students successfully revise their work (Rahimi, 2021) and that peers can provide valuable feedback to their peers (Singh & Tan, 2017). Additionally, one study concluded that peer feedback moderately impacts revision (Karim & Nassaji, 2020).

8. Conclusion

The present systematic review searched seven bibliographic databases and found 270 research articles. Following the revised PRISMA 2020 statement by Page et al. (2021), duplicate studies were removed, and a two-level screening process was conducted. In the first level, studies were excluded based on title, abstract, and criteria. The second level focused on access to full text and completeness of quality criteria. This process yielded 32 research articles. The included research articles addressed specific research questions and were published between 2013 and 2023, primarily focusing on secondary education, with some focusing on primary education. All the research articles were conducted internationally. Geographically, most of the research was conducted in America, followed by Asia. The USA and Iran were the primary countries of origin for the included investigations. Most research articles were published in 2020-2021. Action research is distinct from other types of research, such as mixed, qualitative, and quantitative, because it focuses on investigating the impact of feedback on improving work revisions. The sample size for action research typically ranges from 6 to 260 participants, while for mixed research, it ranges from 15 to 3,204 participants, the largest among all types of surveys. Most studies still lack information about the gender split in the research samples. Additionally, most studies use a combination of research tools, with quasi-experimental intervention being the primary data collection method. The systematic review mainly covers language learning and skill development research, particularly in grammar, spelling, and writing, as well as English as a second or foreign language.

The impact of teacher feedback on students' revision in primary education has been extensively researched, particularly in the context of language learning, with a focus on skills such as grammar, spelling, and writing. However, further research is required to understand the impact of feedback in teaching English as a foreign language. Studies have shown that feedback, in its various forms, helps students revise their work, correct errors, and enhance their writing. It also serves as a source of motivation, especially for students with emotional or behavioral disorders. Students themselves acknowledge the significance of feedback in revising their work. In secondary education, the majority of research is centered on learning different languages, particularly English as a second or foreign language, and academic writing. Research indicates that providing various types of feedback on student work yields significant benefits. Students value the importance of feedback in revising their assignments, particularly when utilizing electronic feedback methods and systems. Interestingly, peer feedback has been found to be more effective than teacher feedback in assisting students with their revisions. However, one study found that providing students with peer feedback had minimal impact on their revisions.

9. Limitations - Proposals

The current research has some limitations, such as the limited number of studies reviewed,

the restriction to specific search engines, the inaccessibility of some studies, and the focus solely on the contribution of feedback to non-cognitive aspects of learner performance in primary and secondary education. Suggestions for future research include exploring how feedback contributes to the non-cognitive aspects of student performance and its relation to revising their work, both theoretically and practically.

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