Proposed Study to Improve Student Feedback Survey (SFS)

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ABSTRACT

CONTEXT

This research is the first part of a comprehensive investigation into the effectiveness of Student Feedback Surveys (SFS) as a tool for assessing teaching quality. Voss et al., (2011) defines quality of teaching as a construct encompassing pedagogical skills, content knowledge, classroom management, student engagement, assessment practices, and professional development. SFS, developed by Remmers in 1927 and Guthrie in 1953, attempted to address the assessment of teaching quality by directly soliciting student feedback (Stroebe, 2020). Though intended for formative purposes, the ease of administration has led to the widespread adaptation of SFS for assessing teaching quality. To maximise the value of SFS and to contribute to quality education that is inclusive and equitable (United Nations, 2024), the study aims to understand and optimise the SFS design and implementation.

PURPOSE OR GOAL

Assessing and enhancing teaching quality is crucial for universities. This study examines the role and effectiveness of Student Feedback Surveys (SFS) in assessing teaching quality at the a university in Australia.

APPROACH OR METHODOLOGY/METHODS

This study aims to understand the key stakeholder's (students, academics and administrators) perspective on how SFS can effectively measure teaching quality. A survey to gather the perspectives of SFS, including its purpose, benefits and shortcomings, will be administered to the key stakeholders in a university in Australia.

ACTUAL OR ANTICIPATED OUTCOMES

The results from the analysis will capture the nuances of the key stakeholders' attitudes regarding SFS. Most researchers believe that SFS is not fit to measure teaching quality (Hornstein & Law, 2017). Over the past decades, researchers have asserted that SFS is not the best way to assess teaching quality (Richardson, 2005). Anticipated results will provide an overview of key stakeholder's perspectives, highlighting the areas of alignment or divergence in their perceptions of SFS concerning the intended purpose.

CONCLUSIONS/RECOMMENDATIONS/SUMMARY

Despite the widespread implementation of SFSs, the evidence from this research will likely demonstrate that key stakeholders poorly receive and respond to SFSs. The study anticipates uncovering reasons for negative perceptions so that universities may find strategies to enhance the perception and use of SFS. An additional evaluation method to supplement SFS may be required to align with broader educational goals, such as those in SDGs 4 to provide quality education for all.

KEYWORDS
Student Feedback Survey, SFS, Teaching Quality, Assessment

Introduction

Feedback is essential for improvement in all facets of life and business, providing valuable insights. Hattie & Timperley, (2007) define *feedback* as information shared between two parties (individuals or groups) to enhance performance and outputs. Feedback, essential for improvement across sectors, is crucial for assessing teaching effectiveness in tertiary education. Typically, assessing teaching quality has been a challenge, with traditional metrics focusing on research output often overshadowing the teaching component.

Student feedback surveys (SFS) also referred to as Student evaluation of teaching (SET) have emerged as a response to collect feedback on teaching quality to address the challenge of evaluating teaching quality. The ease of online survey administration has led to the widespread adoption of SFS, providing a direct channel for student input. Despite the widespread use of SFS, concerns about their reliability and validity persist (Zhao & Gallant, 2012).

This research explores the role of SFS in evaluating teaching quality at a university in Australia. By understanding the perceptions of the key stakeholders, we aim to suggest strategies to enhance SFS to assess teaching quality. Improving SFS as a valid and reliable tool to assess teaching quality aligns with Sustainable Development Goal (SDG) 4, promoting inclusive and equitable quality education and lifelong learning opportunities for all.

Background

Evaluating the effectiveness and quality of teaching (typically pedagogical skills, content knowledge, classroom management, student engagement, assessment practices, and professional development) is a complex task. Though there are several methods of evaluating teaching quality, such as classroom reviews and observations (Berezvai et al., 2020), SFS has become the default option in most universities. Remmers (1927) and Guthrie (1953) first conceived SFS as formative assessments in the 1920s. However, the ease of administration has led to widespread adoption for summative evaluation purposes.

Despite their ubiquity, SFS's are not without their challenges. Concerns regarding reliability validity, and potential biases have persisted (Heffernan, 2022). The dual purpose of SFS, providing informative feedback while informing performance evaluations, creates conflict. Career decisions based on a tool not designed for performance measurement can be harmful (Boring, 2017).

This research investigates the perspectives of key stakeholder and identifies improvement strategies to optimise the value of SFS and address these challenges. By examining the historical development, current practices, and challenges with SFS, this research seeks to contribute to the ongoing dialogue about enhancing student feedback mechanisms to assess teaching quality in higher education and to the broader goals of ensuring inclusive and equitable quality education, as outlined in Sustainable Development Goal (SDG) 4 to emphasise inclusive and equitable quality education. Improving SFS not only contributes to improvement in teaching practices, but also promotes Equity. Equity allows all students to have access to high quality teaching and therefore learning opportunities and improvement in teaching practices is a direct outcome of valuable feedback from SFS.

The Rise of SFS

SFS have become a staple in higher education, offering a mechanism for gathering student perspectives on teaching and learning. While these surveys have the potential to inform pedagogical improvements, their effectiveness and reliability have been subject to considerable debate. A review of existing SFS research explores their strengths, weaknesses, influencing factors, the relationship between SFS and teaching outcomes, and potential biases within these surveys.

Historical Context

Examining the historical development of SFS assists in understanding the current form of SFS Stroebe (2020). Influential studies by Remmers (1927) and Guthrie (1953) laid the groundwork for the modern SFS in higher education, implementing formal evaluation instruments and examining factors that could influence student ratings. They represent the first systematic attempts to measure teaching effectiveness through student feedback in the tertiary education sector. Understanding the historical context is essential for gauging SFS's usefulness in evaluating teaching quality and improving future practices (Hooke et al., 2021).

Although SFS was created and administered for formative purposes, Flodén (2017) asserts that it is now standard practice for university teachers worldwide to receive student feedback. A primary concern lies in the dual purpose SFS often serve. While SFS's collect feedback for course improvement (Bi, 2020), the same data is also used for performance management and promotion decisions for academics (Boring, 2017).

Reliability and Validity Concerns

Research over the years has consistently highlighted the importance of understanding the factors influencing student responses to SFS. Despite the apparent advantages and collaboration (Forbes et al., 2022), there is focus on reliability, validity and unconscious bias concerns (Zhao & Gallant, 2012).

Bedggood & Donovan (2012) explained that using student feedback is controversial. However, their general conclusion is that this feedback can often be relevant and constructive. Despite widespread adoption, concerns persist regarding the over-reliance on SFS for teaching quality evaluation.

With some excellent possibilities around SFS's, there are also downsides. Researchers, for the most part, have identified SFS's as biased. Bi (2020) suggests that SFS are subject to various biases that can distort their validity in assessing teaching quality. Class size (Feldman, 1983), gender of academics (Winocur et al., 1989), and teaching mode (Husbands, 1996) are some of the factors influencing SFS results.

There is increasing abusive feedback from students that has no direct relation to learning outcomes or teaching quality. Lakeman et al., (2022) suggest that further research and directives from the universities are required to nurture a safe workplace for teachers by protecting teaching staff from harassment caused by non-constructive and offensive comments and a supportive learning environment for students. Foster (2022) also recommends policy changes to address the flaws and prejudices in student evaluations using the SFS.

Stoesz et al., (2023) suggest that non-teaching factors like course difficulty, instructor personality, and institutional context impact SFS ratings. Unconscious biases can further exacerbate these issues, affecting marginalised groups disproportionately. Therefore, the SFS results should be interpreted with additional data points from supplementary assessment methods to ensure accuracy and align with SDG 4, which promotes inclusive and equitable quality education.

A multifaceted approach is necessary to address the limitations of SFS. When universities implement SFS's well and gain broad acceptance from all the stakeholders (students and teachers alike, together with the administrators), they will be in a great position to receive direct and constructive feedback from students. Universities can then review the feedback from SFS to develop action plans for enhancing teaching qualities and student learning outcomes. SFS's, when well received, has the potential to empower students without any fear of retribution to provide constructive feedback, foster collaboration and, eventually, accountability from all stakeholders.

The Need for Reform

To mitigate these challenges, universities need to adopt a balanced approach that considers all the main stakeholders: students, teachers, and administrators. It entails protecting teacher well-being, encouraging constructive feedback, improving survey design, providing training to students and academics, and exploring alternative assessment methods. By adopting such approaches, universities can optimise SFS's effectiveness while maintaining a positive working environment.

Universities would also benefit from reviewing SFS procedures and consider alternative and or supplementary approaches to encourage constructive feedback while discouraging abusive responses. Cunningham-Nelson et al., (2019) call for an approach that values student voice and feedback while safeguarding teachers' mental health and career prospects.

Furthermore, Lakeman et al., (2022) stated that urgent reforms to the SFS process are imperative to reduce and remove the negative consequences of vitriolic feedback. The authors recommend rethinking the survey's intention so that the current framework used to conduct the SFS can be improved, ensuring that it genuinely informs and enhances teaching quality.

Research Focus

This paper endeavours to scrutinise and evaluate the use of SFS, specifically at a university in Australia, by learning how the key stakeholders view SFS. The research will address the reliability and validity concerns to ensure a fair assessment of teaching effectiveness and quality. The study proposes ways to make SFS robust by improving or suggesting supplementary assessment methods. This study is critical to the tertiary education sector to improve assessment practices and align with global education goals (United Nations, 2024).

Aim of the Research

The principal objective of this research is to investigate the significance of SFS's in measuring teaching quality within the tertiary education sector, aligning with SDG 4 to ensure inclusive and equitable quality education for all. The implementation of SFS at a university in Australia, will serve as the primary data source for this study.

The study includes examining the motivations behind the design of SFS, understanding their evolution over time, and assessing their impact on teaching practices and student outcomes. The research will also identify challenges and limitations associated with SFS, explore strategies to enhance their effectiveness and pinpoint potential areas for improvement in SFS design and implementation at a university in Australia.

The suggestions will aim at improving SFS to assess teaching quality and align with broader educational goals, such as those in SDGs 4 to provide quality education for all. The research project will begin with exploring the following key themes together in the current state and identify potential gaps:

- **Understand key stakeholder perceptions:** Explore the perspectives of students, academics, and administrators on the purpose, benefits, and shortcomings of SFS.

- **Assess SFS effectiveness:** Evaluate how SFS accurately reflects teaching quality and informs teaching improvement.

- **Identify SFS limitations:** Explore biases, challenges, and potential negative consequences associated with SFS.

- **Propose enhancements:** Develop recommendations for encouraging more constructive feedback, reduce the incidence of unhelpful comments, and protect student anonymity.

Methodology

Nederhand et al., (2022) highlight the widespread use of SFS in universities worldwide due to their ease of administration. This research aims to enhance the effectiveness of SFS by investigating the primary stakeholders' perspectives on its purpose, benefits, and shortcomings.

A new survey will gather insights into SFS's ability to measure teaching quality among stakeholders at a university in Australia Qualitative analysis of survey responses will identify recurring themes and sentiments. Additionally, SFS results from the last three semesters at a university in Australia will be analysed using descriptive statistics to gauge student satisfaction levels and qualitative analysis of open-ended survey questions to uncover recurring themes. The comprehensive approach aims to provide nuanced insights into the primary stakeholders' attitudes towards SFS, aiding in understanding its perceived strengths and weaknesses.
In addition to administering surveys in the first phase of the research, subsequent research phases will employ methodological triangulation, combining the analysis from the survey with qualitative analysis from focus group and interview data. This comprehensive approach will offer a broader perspective on how SFS assesses teaching quality, identifying potential gaps and informing the need for supplementary assessment methods.

Data collection via a survey of students, teachers and administrators, followed by focus groups and interviews, will begin as soon as the ethics committee at the university approve the ethics application.

Survey Development

Surveys are the first choice for data collection as surveys are a systematic way of gathering information from a group of people (Chu & Ke, 2017). Surveys are one of the best tools to
- Gather data from a large population (Descriptive data),
- Obtain standardised responses (like likert scale questions) and
- Facilitate statistical analysis.

Surveys will be used to gather data on students', teachers', and administrators' perceptions of SFS based on the foundation established by the literature review, which identifies existing knowledge on SFS. The researchers will develop and administer this survey online, utilising a predefined set of questions, pending ethics approval. The data collected will allow for the assessment of trends and potentially lead to a refinement of the research questions initially identified in the literature review phase. Descriptive statistics will help summarise responses, and correlational analysis help with identifying relationships between variables.

The survey instrument will consist of both closed-ended and open-ended questions. Closed-ended questions will assist with gathering quantitative data on respondents' demographics, frequency of SFS completion, and perceptions of SFS effectiveness. Open-ended questions will allow participants to provide detailed feedback on their experiences with SFS and suggestions for improvement.

The first draft of the survey questions was based on the literature review. The survey draft will then refined based on discussions with several students in a class (up to 20) and a few academics (up to 3). Finally, a pilot test with external participants will assess the survey's clarity, comprehensiveness, and validity. Feedback from pilot participants will assist with refining the survey before the final administration, pending ethics approval.

The analysis will incorporate both quantitative and qualitative methods. Descriptive statistics will summarise survey responses, including frequencies, percentages, and means. The correlational analysis will examine relationships between variables. Thematic analysis of open-ended responses will uncover emerging patterns, recurring themes, and patterns in how stakeholders perceive SFS.

Since the analysis incorporates quantitative and qualitative methods, the research will provide information on how the main stakeholders perceive SFS and potentially identify areas for improvement. While the survey aims to gather valuable insights, several factors could influence responses and confound the results. Some of the possible confounding variables as part of this survey are

1. **Student Engagement** - Highly engaged students, deeply involved in university life and coursework, are more likely to participate in surveys promptly and provide detailed feedback. This over-representation of engaged students can skew the sample, distorting perceptions of student opinions on SFS. Consequently, decisions based on these potentially biased results may be misleading (Slade & McConville, 2006).
2. **Course Experience** - Students in challenging courses could give poor feedback relative to students taking a relatively more leisurely course and may distort the survey results (Stoesz et al., 2023).
3. **Recall Bias** - Recall bias occurs when the participants cannot remember the events accurately or omit details (Bell et al., 2019). When students cannot recall their involvement, they provide potentially incomplete or inaccurate information in SFS, and the results could be misleading and unhelpful for the cause.
4. **Teacher biases:** The academics teaching the students may have preconceived notions about SFS and may not take the results seriously. Teachers might focus on teaching aspects they perceive as valued by administrators rather than those that truly enhance student learning (Stoesz et al., 2023).
5. **Administrator biases:** Institutional priorities, resource allocation, and performance evaluation systems can influence how administrators interpret and use SFS data. There might be a tendency to focus on metrics aligning with institutional goals rather than accurately reflecting teaching quality.
6. **Confirmation bias:** Allahverdyan & Galstyan (2014) define confirmation bias as the tendency to evaluate information based on pre-existing beliefs. Both academics and administrators may be susceptible to confirmation bias, seeking information supporting their beliefs about teaching and learning.

The analysis will control for factors such as course difficulty, student engagement level, and time since course completion to address these potential confounding variables. Additionally, the researchers will be mindful of the limitations imposed by recall bias and will interpret the findings accordingly. The recall bias may be mitigated to an extent by guiding the scope of the questions with phrases such as "Thinking back over the last semester…"

The first phase of this research focuses on designing a survey to understand students', teachers' and administrators' perceptions of SFS in assessing teaching quality. The multi-perspective approach will enable the researchers to gather data from all key stakeholders, facilitating data source triangulation to identify common themes and potentially confounding factors and strengthen the overall analysis.

Target Audience

This research study targets all students and academics at a university in Australia. In addition to the students and teachers, the interviews with the technical and administration team managing SFS and, therefore, the SFS administrators will also be part of the target population for this research.

Data Analysis

A mixed-methods approach will be employed to comprehensively investigate student, academic, and administrative perceptions of SFS. Data collection includes conducting Surveys, focus groups, and interviews. Random sampling reduces bias to a minimum as the sample data reflects the target population, allowing for generalisation of the findings within reason. Ethics approval is a pre-requisite to data collection to safeguard participant rights and confidentiality.

The collected data will be subjected to rigorous analysis to extract meaningful insights into student's perceptions of SFS. Descriptive statistics will summarise the respondents' information. Researchers will calculate frequency distributions and measures of central tendency (mean, median, mode) for closed-ended questions. Inferential statistics such as correlation and regression will examine relationships between variables.

Thematic analysis of qualitative data will uncover recurring themes and patterns in how students and staff perceive SFS. This analysis will allow us to dig deeper into the qualitative data to uncover underlying meanings and insights.

By employing rigorous data analysis techniques, this research aims to extract meaningful insights into student perceptions of SFS, which aligns with SDG 4, which emphasises the importance of data for achieving inclusive and equitable quality education. By understanding how students, teachers, and administrators perceive SFS, we can identify strengths, weaknesses, and improvement opportunities, ultimately enhancing teaching and learning experiences.

Anticipated Results

This research seeks to deepen understanding of SFS's role in tertiary education. By examining stakeholder perspectives and identifying the strengths and limitations of SFS, this study seeks to inform strategies for enhancing the effectiveness of SFS as a tool for evaluating teaching quality and also align with SDG 4, promoting inclusive and equitable education. Some anticipated findings are:

- **Student perceptions**: Understanding how students at a university in Australia perceive SFS, including their satisfaction levels and suggestions for improvement.
- **Academic perceptions:** Exploring how academics utilise SFS feedback and their perceptions of SFS's alignment with teaching quality.
- **Identifying improvement areas:** Pinpointing specific strategies to enhance SFS design, implementation, and utilisation, such as improving survey clarity, increasing response rates, and providing more actionable feedback.

By addressing these research questions, the research will contribute to the development of more effective and equitable assessment practices in tertiary education, aligning with SDG 4.

Future work

This study will add to the existing body of research on the role of SFS in tertiary education. SFS can significantly impact teaching quality and practices, student engagement, and learning outcomes. By examining stakeholder perspectives and identifying the strengths and limitations of SFS, the study can inform the development of more effective and equitable assessment practices aligning with SDG 4, which emphasises inclusive and equitable quality education.

To optimise the value of SFS, universities will aim to implement an approach that considers the perspectives of students, teachers, and administrators. The approach should include protecting teacher well-being, encouraging constructive feedback, and refining the survey design. Additionally, exploring alternative assessment methods and providing training on giving and receiving SFS can enhance their effectiveness.

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By addressing these areas, the higher education sector can harness the potential of SFS to enhance teaching and learning outcomes while mitigating their limitations. Future work in this research will explore the following:

- **Actual vs anticipated results:** With ethics approval, a survey will be conducted at a university in Australia to collate data from the primary stakeholders, namely, the students, academics, and administrators, to analyse actual data and compare with the anticipated outcomes.

- **Triangulating results:** Besides administering surveys, conducting focus groups and interviews will help with a deep dive into SFS deign and conduct and their perception among the key stakeholders. Multiple analysis methods through triangulating of the data across multiple methods will be employed.

- **In-depth case studies:** Possibly expand the target population to include other universities to understand how SFS are used and perceived in different contexts and disciplines.

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