Providing Feedback for a Large Writing Class: An Application Prototype for Integrated Academic Writing Online Assessment

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Abstract. Comprehensive feedback and evaluation for students' work in academic writing are essentially imperative for the improvement of the students' writing skills. Yet, providing and receiving such an assessment in a large writing class is still a central challenge. Therefore, WISSE (Writing Integrated Assessment) as a free-access online application needs to be developed to address the said situation. This paper is a part of WISSE development and highlights more on the prototype and manual book of the aforementioned application. Employing process writing principles supported by ready-to-use online applications, WISSE is designed as a web-based service that is user-friendly. A manual book is also arranged to facilitate the operation.

Keywords: Academic Writing, Assessment, Online Teaching, Education, Technology

1 Introduction

In TESOL or EFL discussion, academic writing remains a major complication for numerous academics. Writing journal articles for scientific journals as highly required in any educational field intensifies the challenge in academic writing. In addition to the content of the articles, both organizational knowledge and pragmatic language imply complications during the evaluation of the manuscript [1]. Asserted that writing in English is an activity that is not easy to learn because writing is a process to produce the final product of several separate knowledge, such as grammar, writing coherence, etc. Therefore, assessment in writing should ideally cover all the knowledge applied. Providing a writing assessment that provides comprehensive feedback and monitoring a large number of students' progress seems to be a vital challenge for teachers of academic writing courses. The demanding and pressing workload of teachers leaves teachers with insufficient time to give thorough assessments. Thus, the students' progression failed to be supervised [2]. Pointed out that in the process of learning to write in English at the tertiary level, lecturers are expected to be able to communicate comprehensive feedback of students' writing to get more meaningful outcome from the learning process. However, this is difficult to achieve because of the imbalance of proportion between the large numbers of students for a single teacher and the time allocation for a given writing class in Indonesia [2][3]. It leads to teachers' frustration in providing feedback in learning to write [1][4].

With the fact that many types of writing of the foreign language are proposed to adapt to a large number of students, and that adequate evaluation for each student seems to be an overwhelming task for the teachers, research attempting to provide a solution is crucial. By

employing technology to develop a web-based integrated writing assessment service, WISSE (Writing Integrated Assessment) The integration of technology in the development of WISSE is due to the consideration that the provision of feedback in an online mode can help the students not to lose face [5]. The fact that some technology-based applications to support writing skills have already been available gives hopes to teachers of academic writing to get some assistance in providing feedback for their students. However, amidst the integration of technology to language education, the application of technology in assessing composition comes as a non-integrated feature. It can be seen from some applications such as Grammarly (focusing only on grammatical aspects of writing) and Turnitin (targeting only the similarity editorial of a composition). Although application like e-Rater which is developed by ETS (Educational Testing Service) serves a more integrated assessment for writing which covers grammar, usage, mechanics, style, organization, development, positive features, lexical complexity, sentence variety, dan topic-specific vocabulary usage [6]. Its access is still highly restricted to ETS only.

In addition to the application of technology, WISSE is also developed based on a thorough assessment model. Not only does it involve the already available applications such as Grammarly and Turnitin, the assessment model in WISSE also comprises manual assessment done by humans. This kind of assessment covers certain aspects like context-bound content and possible ideas copying since applications like paraphrasing tools enable copying practice to be undetected by Turnitin. On top of that, this study focused on providing a comprehensive writing assessment to help students improve in writing skills as well as observing the students' betterment. Therefore, process writing principles with a unique twist are put into practice to develop the assessment model. This assessment model is aimed to (1) evaluate accomplishment of the intended learning objective, (2) record learners' competence and performance, and (3) facilitate teachers in effectively providing comprehensive feedback to large numbers of students in writing classes [5].

Having the assessment model, the prototype of WISSE was then developed obeying stages in the ADDIE model. This development is intended to provide a solution for the aforementioned difficult situations encountered in academic writing courses. As a web-based service, the prototype of WISSE is accessible at wisse.id. as a result of the Analysis, Design, and Development stages of the ADDIE model which involves some research processes including survey and qualitative studies. This paper intensifies the discussion on the prototype of WISSE that comes with a manual book to facilitate teachers and students of academic writing courses as its users.

2 Research Method

In developing WISSE, the ADDIE development model [7] was employed with its five phases namely the Analysis phase, Design phase, Development phase, Implementation phase, and Evaluation phase. This approach is heavily prompted by psychology, cognitive, and educational constructivism aspects brought about by Robert Gagne that makes it fits well with the WISSE development process. Two more phases were added in this study namely the Revision and Dissemination phases. The overall stages (Fig. 1) are divided into 3 main phases. The first phase covers the Analysis, Design, and Development stages. The second wrap up the Implementation and Evaluation stages, and the last phase consists of the Revision and Dissemination stages. Considering the stages in the ADDIE model, the 1st phase had been successfully accomplished.



Fig. 1. Research Procedure

In the analysis stage, mapping of students' needs, learners' grouping, instructional setting and substance are carried out Dick and Carey [8] by conducting an assessment of the students' progression with regard to students performance and teacher's feedback in addition to the appraisal of the available automatic scoring system. Next, in the Design stage, an assessment model for Academic Writing courses based on the OBE (Outcome-Based) curriculum was designed. This model involves Process Writing and student-centred learning approaches as mandated by OBE. Several assessment criteria have been set to compile an assessment rubric for this assessment model based on the achievement of the targeted learning outcomes. Next, in the Development stage, the assessment model was further processed into a web-based automatic assessment system software named WISSE. At this stage, validation or expert testing has also been carried out; namely media/design expert and linguist. As what has been stated previously, this paper will focus on the result of the 1st phase, that is a prototype of WISSE along with its manual book.

3 Findings and Discussion

The prototype of WISSE was developed as a follow-up to the results of the Analysis, Design, and Development stages. First, from the Analysis stage it can be learnt that the lecturers' main obstacle was time constraints which did not allow them to examine students' work carefully. This makes it difficult for them to monitor the development of the quality of student writing carefully, which is something that really needs to be improved. This opinion is in line with student feedback which highlights the lack of feedback for their writing. They think that feedback from lecturers is general and does not really help them to improve the quality of writing.

Next, an evaluation of the existing automated scoring system namely Grammarly and Turnit-in showed that even though students have used this application, scores cannot be generated from the application. Therefore, lecturers still need to re-read student writings to be able to give grades. This is not a solution to the limited time lecturers have. In addition, these applications are still used separately. Merging several applications into one integrated system that can also generate value is the answer to the existing problems.

After knowing the needs that were concluded from the analysis stage, the process of designing an online integrated assessment model was carried out [5]. pointed out several fundamental considerations that were put into account as follow:

- 1. Process writing stages are fundamental to integrating OBE principles in the assessment model operated in WISSE.
- 2. Facilitating the realization of student-centered learning, WISSE needs to accommodate interactive interactions between its users.
- 3. Portfolio documentation is required to be part of WISSE to enable students' progression monitoring which is crucial to ensure the achievement of the intended learning outcomes.
- 4. In addition to the integration of the already available grammar and plagiarism checker applications, it is essential for WISSE to enable effective manual feedback provision.

At the end, it resulted in a writing assessment model which adopted process-writing principles and adjusted to OBE principles for assessment in academic writing courses.

The next stage is the online assessment application development stage. WISSE is a web browser-based application. This website aims to simplify, distribute, and grade paperless assignments. WISSE combines the grammar and plagiarism checker applications provided by Prepostseo.com. This website can be viewed on the www.wisse.id page.



Fig. 2. Initial Page of WISSE

WISSE account access rights are administrator, instructor and student. The instructor's authority is to open a new "Class", add a "student", upload manuscripts, return manuscripts, provide individual comments (private comments) and comments on classes. While the student's authority is to upload manuscripts, provide individual comments, and comments to the class. Uploaded script file in Microsoft Word format (doc, docx). Then, this website is validated by media experts and linguists. The instrument used for the expert test is a questionnaire with five Likert scales ranging from 5: very decent; 4: decent; 3: enough; 2: less; 1: very less.

Next, validation by media experts is carried out to test several aspects related to usability, functionality and visual communication. Validation was carried out on November 6, 2020 using a questionnaire. From the results of the questionnaire obtained the percentage of the three aspects assessed on this website product, namely the usability aspect 97.14%, functionality 100%, and visual communication 92% with a mean of 96.38%, so it can be concluded that the WISSE website is "very decent".



Fig. 3. Results of Experts Validation Process

Then, validation by linguists was carried out to test aspects of language and communication. The validation was carried out on November 6, 2020 using a questionnaire. From this validation process, it can be described that the assessment of linguists regarding aspects of language and website communication is 86.66%, so it can be concluded that the WISSE website is "appropriate" and theoretically can be used. Several suggestions and comments regarding product improvements have been made in accordance with expert advice.

Later, a manual book was made as a helpful guide for the users of WISSE. Shand [9] argued that a frequent cause of project failure lies in the failure of a delivered information system to match users' expectations, and that user manuals have proven to be more successful in preventing the failure.



Fig. 4. Initial page of the Manual Book

The user manuals, or manuals book, or manuals are written documents containing information and directions to operate a product. This manual should be concise and simple so that it is easy to be understood. Some pictures and other visual aids are usually presented for a more vivid comprehension. In this study, for an initial step, the manual book is offered in Bahasa Indonesia as the first potential users of WISSE are Indonesian teachers and students.

The manual book contains information of features in WISSE, the functions, as well as step by step directions of how to access and operate each of the features. WISSE accommodates three main types of users namely web administrator, teacher, and students. The website also accommodates teacher-users to create courses, make quizzes, and interact with students. Questions and Answers menu facilitates feedback provision, discussions and monitoring activities. In addition, a Portfolio menu is also presented to sustain students' progression over a certain period of time. WISSE administrator and teacher-user also can make use of Create News and Media menu to supply instructional materials enriched with audio-visual media to make the online learning and assessment more interesting and engaging.

4 Conclusion

The website-based application developed is called WISSE (Writing Integrated Assessment). WISSE is intended to be able to offer solutions for teachers of Writing courses in providing comprehensive feedback as well as monitoring students' progression in a writing class consisting of a large number of students. WISSE integrates manual and technology-based assessment by employing an assessment model that is created based on process-writing principles adjusted with OBE principles. In addition, WISSE also makes use of the already available online applications supporting the writing process such as Grammarly and Turnitin as features in the WISSE websites. By using WISSE, manuscript assessment, especially in the Writing course, can be more effective and efficient. Lecturers are no longer burdened with checking for plagiarism or grammar errors manually and can more quickly provide input on the content of the manuscript. Moreover, features in WISSE enable its users to interact and leave the track for the teachers to monitor the students' progressions. To ensure facilities for novel users of WISSE, manual books are provided.

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