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Utilization of EvalBee Application in Improving Learners' Performance Assessment Recording

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Abstract
Aim: This study was conducted to determine the effectiveness of the utilization of EvalBee application in improving learners' performance assessment recording in Dagohoy National High School, Bohol, School Year 2020-2021. Specifically, this study sought to determine the learners' performance assessment recording and the effectiveness, before and after utilizing the said application.
Methodology: This study utilized quantitative research with a descriptive research approach. Researchers utilized a weekly monitoring log to analyze the status of checking and recording of learners' performance assessments before and after using the EvalBee application.
Results: Teacher-participants have spent an average time of 15.04 hours in checking modules, which signifies a "slow" status before utilizing the EvalBee application, while after using it, they were "very fast" in checking students' assessments as they only spent an average time of 1.82 hours. On the other hand, teacher-participants spent an average time of 3.87 hours recording the data, implying a "slow" status before using the EvalBee app, while after enjoying it, participants were "very fast" in recording data as they have not spent a time doing it due to automation. Teachers were able to save 88% of their time in checking the assessment making it "highly efficient" when utilized for checking.
Conclusion: The researchers conclude that the EvalBee application is immensely useful for teachers in expediting the checking of learners' assessments. Furthermore, the EvalBee application is effective in improving the recording of learners' performance assessments, as it was proven that it is highly efficient to use since participants saved a significant amount of time after using the app. Future researchers could further explore and study the efficiency of the Test Item analysis feature of the EvalBee application and check the difference in its function across all other mobile test evaluators.

Keywords: *Evalbee application, assessment recording, modular learning, descriptive research*

INTRODUCTION

Education is presumably the main instrument to transform one's life. This is an effort to help people reach their full potential, both physically and spiritually, in accordance with societal and cultural norms (Zuhdi, 2021). Due to COVID-19 Pandemic, everything normal has changed; from the usual simple interaction in the community to a major social movement was becoming limited. Aside from health, education is also one of those being compromised today as face-to-face classes were temporarily prohibited. However, the government is continuously finding ways to bring it forth to the learners. One of the most practical methods being considered for the New Normal Education setting was the MDL or Modular Distance Learning.

Teachers' instruction is no longer evident in the classroom because students will be resuming education just in their own homes. Considering the geographical spot and limited internet access, Modular Distance Learning is the only means that the Department of Education -District of Dagohoy, Division of Bohol has employed. The lesson content and the assessment were already placed in modules. Students will be studying those content and eventually answering the assessment all by themselves or with the help of their home facilitators such as their parents or guardians. According to Dealagdon (2021), the educational system in the Philippines is currently based on modular learning, where traditional mother-child interactions have replaced teacher-student interactions because parents serve as their children's first teachers.

Innovation devices can give a more student-centered methodology or empower students to take part in a more genuine degree of learning. Educators can likewise utilize technology tools to manage developmental and summative evaluations (Elliot, 2018). Mobile Device is the standard technology that everyone is using nowadays. With the help of the mobile device, the evaluation of the formative and summative assessment, even in a large number of modules, will be feasible to finish in just a short span of time.

The researchers themselves have tried to use different exam-evaluator mobile applications, but the function and efficacy of the EvalBee app are more noticeably impressive. The detailed report that this app

can provide will help the researchers easily link the data to Microsoft Excel and embed formulas to automate the record for the test Item Analysis. According to Ekodroid labs (2017), the EvalBee software is aimed to assist teachers in establishing a template for multiple choice question tests and generating instant exam reports using phone cameras to scan answer sheets. Among the features is the ability to create a test template with up to 240 questions and support for multiple-choice types (matrix, numerical, 4 to 10 alternatives, true or false) and the ability to send a thorough individual report to students through SMS or email.

Teachers hold an imperative position within the instructive arrangement of any country. Stress among them is a perplexing and diverse phenomenon as they shape the country's most valued asset. According to paragraph 4.d of Memorandum OUCI-2020-307, also known as Suggested Measures to Foster "Academic Ease," During the COVID-19 Pandemic, schools should prioritize teachers' instructional management activities in their workloads or assignments (e.g., the printing and delivery of modules should not be a burden for teachers).

In Dagohoy National High School, each teacher has an average of 220 students to handle a subject load. With the modules containing 15 to 20 pages, it is a very stressful task that each teacher has to check the individual answer and manually record them. Based on the researchers' personal experience, each teacher has an average of 5 days to completely check all the 1-week modules and needs one more day for the manual recording. So, with these voluminous modules needing to be printed, checked, and recorded given a week-long to finish, some teachers were exhausted and burned out from stress.

The premises mentioned above motivate the researchers to investigate the effectiveness of the utilization of the EvalBee application in checking and recording learners' performance assessments. This study aims to expedite the checking of learners' performance assessment and recording of data using the EvalBee app and automated workbook throughout the implementation of Modular Distance Learning (MDL).

Objective

This study was conducted to determine the effectiveness of the utilization of the EvalBee application in improving learners' performance assessment recording in Dagohoy National High School, Bohol, School Year 2020-2021. Specifically, this study sought to answer the following questions:

1. How may the status of the teachers based on checking and recording of students'/learners' data be described before and after the utilization of the EvalBee application?
2. How effective is the EvalBee application in improving the checking and recording of learners' performance assessments?

Proposed Innovation/ Intervention/ Strategy

As an intervention to challenging tasks in checking and recording learners' performance assessments, this study utilized the offline EvalBee Application through a mobile device to aid in checking and recording students' performance assessments.

The teacher-participants of the study have used the said application in making the OMR Sheets and evaluating students' scores facilitated by the teacher-researchers for the entire 4th Quarter of school 2020-2021 for about eight weeks.

Pre-implementation

An orientation was conducted to all 16 Senior High School teachers in Dagohoy National High School to be acquainted with the features and usage of the said application. On the other hand, students were assigned a unique Roll Number based on Learners Reference Number (LRN) for their identification. They were given to them through online or offline platforms before the first distribution of the modules in the 4th week of the 4th quarter. Students' answer sheet was easily identified through the Roll Number even without their names written.

After which, teachers prepared the students' profiles such as their Roll Number, Name, Section, Email Address, and Mobile Number to be imported to the application accordingly. Teachers then created the OMR sheet as their answer sheet to be distributed to the students with their modules. Clear and simple instructions as to the proper ways of answering the OMR and the use of the prescribed marker/pens were also indicated in the modules.

Implementation

Retrieval of the accomplished OMR was collected a week after it was distributed. Modules were sorted per learning area and given to the subject teachers. Afterward, the subject teachers scanned the OMR using the EvalBee application for checking.

After scanning all the answered OMRs, the subject teachers downloaded the captured data from the application and then transferred them to the folder on the computer where these were automatically linked with the automated excel workbook made by the researchers. The summative test data was placed on a separate folder in the computer where a different automated workbook for a detailed Test Item Analysis is situated – the teacher-participants automatically identified the Least and Most Mastered Skills from the learning competencies.

Post-implementation

Students were notified of their respective scores and the correct answers to the test items through SMS / email/messenger. On the other hand, the teacher-participants were given a Weekly Monitoring Log to track the effectiveness of the application as to the time they have spent checking modules and recording data. Finally, with a statistical basis, the teachers could submit the Least and Most Mastered Skills to the Principal's Office and the district subject coordinator for the SDO reporting.

METHODS

Research Design

As the quantitative-descriptive research design was utilized, a weekly monitoring log was used as researchers tend to evaluate the status of checking and recording learners' performance assessment before and after the utilization of the EvalBee application as to the total time they have spent. The validity of the said tool, its structure, appropriateness of the words used, and the type of data to be acquired from the tool based on the study's objective were all considered with the help of the 3 Master Teachers and a school principal of DNHS.

Procedure

Data gathering was done weekly, wherein subject teachers were provided with a monitoring log. Teachers encoded the total number of modules they checked in each week and recorded the time they spent checking and recording. As reflected in the tool, teachers were employing the typical checking and recording within weeks 1 to 4. From the 5th until the 8th week, teachers were already using the EvalBee app and automated workbook for checking and recording. After the whole quarter implementation of the program, the monitoring logs from the teachers were retrieved; then, data were tallied and tabulated for statistical analysis.

Ethical Consideration

Informed Consent. The participants are aware that their involvement in this research is entirely voluntary. They are not bound to participate if they consider it is damaging to their interests. In addition, the participants will be notified that the study is being done strictly for educational reasons and that the information acquired from them would be utilized for that purpose only.

Confidentiality Pledge. The researchers make certain that the information gathered about the study participants' personal information is kept private and not exposed under any circumstances. The following operations will ensure this: the names of the participants will be substituted by codes. When the sheet with the names of the participants is no longer needed for the research, it should be removed and kept or destroyed. The researchers will have exclusive access to the master list of the code. Password-protected and encrypted files holding study data must be used to keep the data private.

Authorization to Gain Access to Confidential Information. Since the participants' interests are protected by Republic Act 10173, generally known as the Data Privacy Act of 2012, any pertinent data or information about them from this study will not be accessed, transmitted, or copied without the approval and cooperation of the Regional Research Committee.

Treatment of Data

Descriptive statistics were used to analyze the data collected from the tool used in the study. Specifically, to measure the status of learners' performance assessment recording before and after the utilization of the EvalBee application, frequency counts and simple Percentages were used. Moreover, to measure the effectiveness of the EvalBee application in improving the checking and recording of learners' performance assessment, the mean of the time spent per week before and after using the app and their percentage difference were calculated. In the process, the data provide the researchers with a better understanding of the intervention's impact, allowing them to improve the intervention's execution as needed.

RESULTS and DISCUSSION

Status of leaners' performance assessment before and after the utilization of the EvalBee application

Checking leaners' performance assessment. As evidently displayed in Figure 1, before utilizing the application, 13 (81%) out of 16 (100%) participants had a "slow" status in completing the checking of students' assessments, while the remaining 3 (19%) were "very slow" in completing the task. On the other hand, after utilizing the application, data revealed that all 16 (100%) participants were already "very fast" in executing the checking of students' assessments.

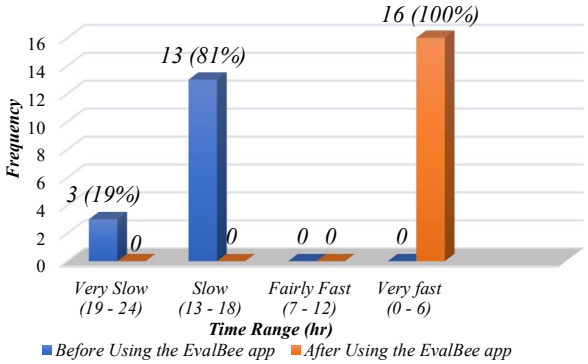

Figure 1. Comparative Graphical Presentation in checking learners' performance assessment before and after the utilization of EvalBee application based on time spent (n=16)

Generally, as presented in table 1.1, teacher-participants have spent a composite average time of 15.04 hours (15 hours and 2 minutes), which signifies a "slow" status in checking students' assessments before utilizing the EvalBee Application. On the contrary, after the participants had used the EvalBee application, they were "very fast" in finishing the checking of students' assessments as they only spent a composite average time of 1.82 hours (1 hour and 49 minutes). The result supports the statement of Patel (2020) who said that OMR software technology is a blessing to all data-gathering sectors and organizations. It has drastically simplified the previous manual procedure, making it both automated and accurate. This is why it has become so well-known across the world and is still widely used for OMR sheet design, printing, scanning, reading, and even assessment.

Table 1.1. Status of checking the learners' performance assessment before and after the utilization of EvalBee app (n=16)

N	Checking of Assessment			
	Before using the EvalBee app		After using EvalBee app	
	Average time spent (hr)	Descriptive Interpretation	Average time spent (hr)	Descriptive Interpretation
1	20	Very Slow	3	Very Fast
2	16.5	Slow	4	Very Fast
3	12.63	Slow	0.7	Very Fast
4	12.69	Slow	0.83	Very Fast
5	12.5	Slow	1.25	Very Fast
6	14	Slow	1.25	Very Fast
7	14	Slow	2.25	Very Fast
8	23.25	Very Slow	1.13	Very Fast
9	13.25	Slow	2.5	Very Fast
10	12.31	Slow	1.02	Very Fast
11	13	Slow	0.85	Very Fast
12	24	Very Slow	2.75	Very Fast
13	13.5	Slow	0.96	Very Fast
14	12.5	Slow	3.75	Very Fast
15	13	Slow	1.75	Very Fast
16	13.5	Slow	1.19	Very Fast
Composite Average	**15.04**	**Slow**	**1.82**	**Very Fast**

Legend: 19 – 24 – Very Slow 7 – 12 – Fairly Fast 13 – 18 – Slow 0 – 6 – Very Fast

Recording leaners' performance assessment. As revealed in Figure 2, before using the EvalBee application, a frequency of 13 (81%) out of 16 (100%) teacher-participants had a "slow" status in recording the data, while the other 3 (19%) participants were "very slow" in doing the same. On the other hand, after utilizing the EvalBee application, it can be seen that all 16 (100%) participants were "very fast" in recording the data.

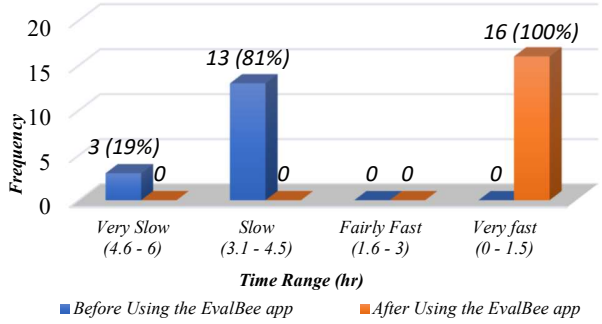

Figure 2. Comparative Graphical Presentation in data recording before and after the utilization of EvalBee application based on time spent (n=16)

Generally, as presented in table 1.2, before utilizing the EvalBee application, teacher-participants have spent a composite average time of 3.87 hours (3 hours and 52 minutes), implying a "slow" status in recording the data. While after enjoying the advantage of the EvalBee application, participants were certainly "very fast" in recording students' data as they have not spent time doing it due to automation.

The finding was conditioned by Watson (2019), who according to him, OMR can handle hundreds of thousands of marked OMR sheets all at once in a matter of hours. It has also been noted that OMR technology has a very low mistake rate, believed to be less than 1%.

Table 1.2. Status of recording learners' performance assessment before and after the utilization of EvalBee application (n=16)

N	Data Recording			
	Before using the EvalBee app		After using EvalBee app	
	Average time spent (hr)	Descriptive Interpretation	Average time spent (hr)	Descriptive Interpretation
1	4	Slow	0	Very Fast
2	5	Very Slow	0	Very Fast
3	4.88	Very Slow	0	Very Fast
4	4	Slow	0	Very Fast
5	3.38	Slow	0	Very Fast
6	3.25	Slow	0	Very Fast
7	3.25	Slow	0	Very Fast
8	5.25	Very Slow	0	Very Fast
9	3.63	Slow	0	Very Fast
10	3.63	Slow	0	Very Fast
11	3.13	Slow	0	Very Fast
12	4	Slow	0	Very Fast
13	3.5	Slow	0	Very Fast
14	3.5	Slow	0	Very Fast
15	3.75	Slow	0	Very Fast
16	3.75	Slow	0	Very Fast
Composite Average	**3.87**	**Slow**	**0**	**Very Fast**

Legend: 4.6 – 6 – Very Slow 1.6 – 3 – Fairly Fast3.1 – 4.5 – Slow 0 – 1.5 – Very Fast

Effectiveness of the EvalBee application in checking the learners' performance assessment

Checking leaners' performance assessment. As revealed in table 2.2, in the first four weeks of Quarter 4, before using the EvalBee application, teachers spent an average time of 15.04 hours (15 hours and 2 minutes) to completely check the students' assessments in a week, while as evidently presented in the last 4 weeks of the same quarter of implementation using the said application, teachers have only spent an average time of 1.8 hours (1 hour

and 48 minutes) in a week. The data confirmed that the EvalBee application is effective because teachers were able to save 88% of their time in checking the assessment; thus, the said application is "highly efficient" when utilized for checking.

Table 2.1. Effectiveness of EvalBee application in checking learners' performance assessment based on the time spent (n=16)

Checking of Assessment Before Using EvalBee		Checking of Assessment After Using EvalBee		Percentage Difference *(Time Saved)*	Descriptive Interpretation
Week #	Average Time Spent (hr)	Week #	Average Time Spent (hr)		
1	16	5	2.4	85%	Highly Efficient
2	14	6	1.9	86%	Highly Efficient
3	14.3	7	1.6	89%	Highly Efficient
4	15.8	8	1.4	91%	Highly Efficient
Avg.	**15.04**	**Avg.**	**1.8**	**88%**	**Highly Efficient**

Legend: *76% – 100% – Highly Efficient*; *26% – 50% – Slightly Efficient*; *51% – 75% – Fairly Efficient*; *0% – 25% – Inefficient*

On the other hand, Figure 3 likewise revealed that the use of the EvalBee application to expedite the checking of assessment implied to be effective as the time being spent by the participants from the first 4 weeks of checking the assessment before using the EvalBee app to the last 4 weeks after using the said application has significantly decreased. According to Virtus (2019), The effectiveness of employing OMR technology to retrieve information obtained from papers is the most immediate advantage. A system's effectiveness is proportional to its efficiency. In a different OMR system, documents are scanned and written at a speed that is many times that of a human.

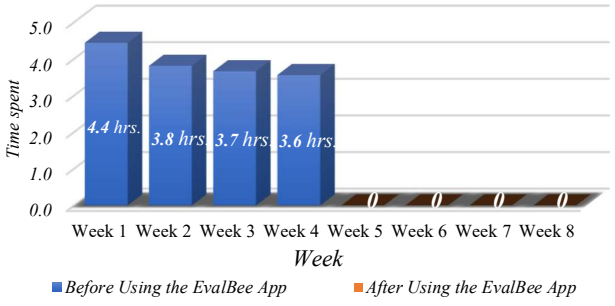

Figure 3. Effectiveness of EvalBee application in checking learners' performance assessment

Recording leaners' performance assessment. As revealed in table 2.2, in the first four weeks of Quarter 4, before using the EvalBee application, teachers spent an average time of 3.87 hours (3 hours and 52 minutes) to completely record the learners' scores, as presented in the last four weeks of implementation using the said application within the same quarter, teachers have not consumed an hour for data recording. The data confirmed that the EvalBee application is "highly efficient" when it comes to data recording because, as indicated, teachers were able to save 100% of their time in doing such.

Table 2.2. Effectiveness of EvalBee application in recording learners' performance assessment based on the time spent (n=16)

Recording of Assessment Before Using EvalBee		Recording of Assessment After Using EvalBee		Percentage Difference *(Time Saved)*	Descriptive Interpretation
Week #	Average Time Spent (hr)	Week #	Average Time Spent (hr)		
1	4.4	5	0	100%	Highly Efficient
2	3.8	6	0	100%	Highly Efficient
3	3.7	7	0	100%	Highly Efficient
4	3.5	8	0	100%	Highly Efficient
Avg.	**3.87**	**Avg.**	**0**	**100%**	**Highly Efficient**

Legend: *76% – 100% – Highly Efficient*; *51% – 75% – Fairly Efficient*; *26% – 50% – Slightly Efficient*; *0% – 25% – Inefficient*

On the other hand, Figure 4 likewise revealed that the use of EvalBee application to expedite the recording of learners' performance assessment implied to be effective, as observed in the graph, the teachers have not consumed an hour in data recording as evidently indicated in the last four weeks of its implementation after using the EvalBee app compared to the first four weeks before utilizing it. According to Camtria (2022), OMR is the most accurate data collection technology for capturing closed-ended responses. It is the only technology capable of achieving 99.9% accuracy without user intervention. With OMR forms and scanners, users can significantly reduce human error.

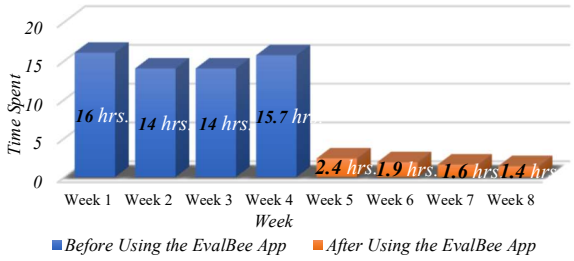

Figure 4. Effectiveness of EvalBee application in data recording

Conclusion

The researchers conclude that the EvalBee application is very useful for teachers in expediting the checking of learners' assessments as the study found out that participants were very fast in checking learners'

performance assessments after using the application. Moreover, the EvalBee application is definitely effective in improving learners' performance assessment recording based on the time spent. The study confirmed that it is highly efficient to use since participants have greatly saved their time after utilizing the app.

Recommendation

Since the EvalBee application has been shown to be helpful in learners' performance assessment recording, teachers may choose to use it as part of their usual process of checking and recording test data. School Administrators may advocate the use of the EvalBee application to their teachers in checking and analyzing test results not just to improve learners' performance assessment recording but also to relieve teachers' clerical duties. Authorities at the Department of Education, Division of Bohol, could develop a package that requires the EvalBee app as one of the development tools that will be studied further to provide educators with 21st-century abilities in assessing and recording students' performance. Future researchers could further explore and study the efficiency of the Test Item analysis feature of the EvalBee application and check the difference in its function across all other mobile test evaluators.

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