**Introduction**

An online grading system plays a key role in the management of any school. It is a method used by teachers to assess student's educational performance. In early times, educators used a simple marking procedure. But now, every educational institute follows a proper grading system. These systems can cut down on the grading time, reduce the amount of paper grading necessary, provide fewer errors in feedback to students, reduce the time it takes for students to get graded, and can, in general, centralize the way we grade. They may also provide data analysis packages that can help educators recognize patterns in student performance and use data to inform instruction. The success of e-grading systems depends on the system, the degree to which that system is integrated into other instructional technology, and the support and training teachers receive to use the system well e (Wilson, T. n. d. 2020).

According to Denise Pope( 2023), "Grading is evaluation, putting a value on something. However, grades are not the same as assessments, and to talk about Grading, we have to know the difference between the two terms. Feedback is used to teach students. The idea is to help them know where they are and push them to understand more. While Grading may fail to do this, assessment should not. Grading entails giving value or rank to a student's performance based on various tests, while assessment includes examining what one has learned and giving feedback. In education, tutors and other parties involved in the sector must distinguish between these two words. Feedback is one of the components of assessment that guides growth and development by offering information through reactions that help identify areas where learners want attention. This recognition assists in realizing the levels of knowledge but still backs up towards deepening comprehension. Nevertheless, Grading might not effectively achieve its intended purpose since it mainly focuses on giving scores or letters according to performance without promoting learning and development.

The system of grades used by the K–12 Basic Education Program is standard and based on skills. These can be found in the curriculum manuals. All marks will be based on the weighted raw scores from the learners' summative assessments. To pass an academic topic, a student must obtain a minimum grade of 60, which on the report card is 75. 60 is the lowest possible final and quarterly grade score that might appear on the report card. (Diana Pérez-Marín)

Manual Grading can be seen as an effective technique that can be used for any type of project, including essays, problem sets, and lab reports. While hand grading is accepted to be accurate, it is claimed that it takes teachers much time and effort. Despite these challenges, it is still chosen for its accuracy in evaluating student work. Teachers work directly with students on tasks, providing personalized feedback based on their learning requirements. Although time-consuming, manual Grading ensures thorough review, contributing to a complete picture of student achievement. (Julio Penagos, 2023)

Ijasre (2022), systems for manual Grading of students, such as those involving entry of grades by hand or on paper, tend to consume a lot of time. This is because it takes longer for the grades to be collected, leading to delays and inaccuracies in calculating grades. Moreover, when scores are summarized on paper sheets, they lack proper management, making them prone to misplacement. Moreover, mishandling records results in loss, possibly causing inconvenience, if not disaster altogether. All these processes also have risks, like accidentally destroying information since everything is done manually with papers involved, thereby creating room for error. This may lead to only one thing: inefficiency beyond repair for any institution involved within this educational sector.

In the interview of the researchers with Ma'am Irene C. Parado, one of the problems that the registrar encountered was when they input the grades of the students in their system, it didn't match the average that the teacher gave them; that's why for academic purposes, there has to be a way of keeping records on student grades. It becomes doubtful whether the data is correct and if the grading method is fair. This could seriously affect students' futures, the school's image, and even the teacher.

Teacher evaluation systems provide an organized system for rating and assessing a teacher's performance and teaching effectiveness. The primary purpose of teacher assessment systems is to improve student performance and learning experiences while promoting teacher development. Developing effective teacher evaluation systems can significantly improve pupil outcomes and instructional effectiveness. Effective teachers are better positioned to help students improve their performance on tests. (Lisa Tunnell,M.Ed.2023).

The system must be updated frequently to keep up with technology improvements and increasing educational expectations. Regular updates maintain its effectiveness and efficiency in addressing user needs. Continuous improvement is needed to increase the system's usability and efficiency. If the system is not secure, some vital information could be leaked. Strong security measures are required to avoid information theft. Some staff and students struggle to adjust to new systems because they prefer the traditional ways they grew up. The doubt from the teachers could be caused by the lack of exposure to technologies (AspiringYouths.2024)

In a year (2019), the University of Toronto, Canada, stated that some systems were only semi-automated, providing limited support for Grading and testing. The automated features are confined to Grading and testing. Additionally, some systems are restricted to specific operating systems. They are unsuitable for international courses because they lack suitable identification mechanisms. These limitations underscore the need to develop new techniques to address these gaps.

In April 2019, in the Philippines, the Development of an Online Grading System for the ICT Department of Bestlink College was undertaken to investigate the logistical concerns connected with collecting, Grading, and delivering ICT senior high grades. Having difficulties seeing each student's grades. The system is not accessible to all users, including those with disabilities who use screen readers or other assistive technology. The system may also encounter technical issues such as response latency, server issues, and difficulties authenticating into user accounts.

Last April 2022, Quezon City University, Philippines, Quezon City University used the manual grading system for grade recording, computation, processing, and approval. When creating the students' grades, the professors have their templates to fill out, which will be their daily record-keeping document and a grade sheet or template that the MIS will provide once the term ends or the grade creation has started. They also have the delinquency reports, a separate document to filter out all failed grades during the semester. They are having problems viewing each student's grades. The system may not be accessible to all users, including those with disabilities who use screen readers or other assistive technology. The system itself may experience technological faults, such as delayed loading times, server errors, or problems with user authentication.

Last April 2022, Quezon City University, Philippines, Quezon City University used the manual grading system for grade recording, computation, processing, and approval. When creating the students' grades, the professors have their templates to fill out, which will be their daily record-keeping document and a grade sheet or template that the MIS will provide once the term ends or the grade creation has started. They also have the delinquency reports, a separate document to filter out all those who failed during the semester.

Online grade management and teacher evaluations are essential features of modern education, with digital platforms used to collect and review data on academic performance. These systems give valuable insights for educators to improve their teaching methods. They are essential in allowing continual growth and improvement inside educational institutions by making tracking student achievement and teacher effectiveness easier. In addition, both platforms contribute significantly to accessibility by providing users with accurate and consistent evaluation standards. The implementation indicates a commitment to responsibility, as educational outcomes are monitored accurately and consistently.

The researchers wanted to develop an online grade management system and teacher's evaluation, a web-based tool for Dr. Ruby Lanting Casaul Educational Foundation, Inc. An online grade management and teacher evaluation is a software application or platform for monitoring, managing, and reviewing students' academic grades and performance over time. This system enables the teachers to input their students' grades every semester. It also offers real-time or near-real-time updates on grades and performance, allowing the administrator to track progress throughout the semester or academic year.

The system will send alerts and notifications to teachers about the upcoming grade deadlines to remind them. This will help the administrator track those teachers who have already posted their students' grades in the system. The teacher's evaluation has the questions to be answered by the students according to their observations on how their teachers teach and perform. Both online grade management and teachers' evaluations involve using digital platforms to collect and analyze data on academic performance. They aim to provide feedback to students and educators to support growth and improvement. Additionally, both systems contribute to enhancing transparency and accountability in educational processes.

**Statement of the Problem**

This study assessed the presence of Dr. Ruby Lanting Casaul College Online Grade Management and Teacher's Evaluation. The aim Is to computerize the records of Dr. Ruby Lanting Casaul College Online students.

The researchers specifically answer to the following:

1. The software requirements for developing the Online Grade Management and Teacher's Evaluation.
2. The features of the Online Grade Management and Teacher's Evaluation.
3. The Level of Usability of the Online Grade Management and Teacher's Evaluation.
4. The problems encountered using the Online grade management and Teacher's Evaluation.
5. The recommendation of the user to improve the Teacher's Evaluation.

**Assumption**

The following assumptions are made regarding this study:

1. The study presumes that the requirements are important in developing the Online Grade Management and Teacher's Evaluation.
2. The study assumes that the suggested system will help provide administrators with a practical and user-friendly online grade management experience.
3. The researchers assume that the suggested system's usability level will guide determining the issues or difficulties related to using the system.
4. The research further assumes that the problem noticed will help in the discovery of best practices to improve the suggested system.
5. The study assumes that online grade management provides accurate and valuable feedback to administrators and helps them manage the students' grades.

**Review of Related Literature and Studies**

This part of the study will discuss various literature and studies related to the present study. The following are collected literary works supporting the researcher's further knowledge of the study.

**The software requirements for developing an Online Grade Management and**

**Teacher's evaluation.**

Based on the study of Celo S. B. III (2021), uploaded a system titled Online-Grading-System-With-Examination. The researcher used some applications and languages that will function in the system: (PHP, javascript, Ajax, HTML, Xampp, CSS, and Bootsrap4). The researcher created a user-friendly system so users could easily manage or control the website. Since the system is about Online Grading with examination, the researcher created a design that would fit their school's needs. The study is relevant because it focused on providing a secure and reliable system, given its hardware/software requirements.

According to Janobe (2021), The project uses the Javascript and Hypertext Transfer Protocol (HTML) programming languages for its front-end apps, JSP and Servlets for its server-side programming, and a MySQL database to store its data. The student can view their grades online using their ID number. This will allow them to determine which subjects they excelled in or failed. Students will no longer need to visit the registrar's office to submit and seek grades because the system will offer accurate grades and records. This also calculates each student's final grades at the end of the semester. The study is relevant to the Online Grade Monitoring System because the software/hardware requirements can be used to become practical and effective in our study or system.

Darling-Hammond (2019) The evaluation system needs a clear and transparent objective. These goals should match the educational aims. They provide a framework to assess teacher performance. Clear objectives help everyone understand the process. Teachers and administrators can then accept the evaluation system. It ensures everyone knows what is expected. This makes the evaluation fair and reliable.

In Kane's (2019) study, multiple data sources are essential for a complete evaluation. This includes classroom observations and student test results. It also includes instructor self-evaluation and feedback from students. This combination method provides a comprehensive assessment of a teacher's performance. It helps avoid the challenges associated with relying on a single data type. Different sources present different viewpoints. This makes sure evaluations are fair and accurate. Multiple data sources ensure a fair evaluation.

Kitchen Hannah (2019) Adaptability and Inclusivity is one of the features of the evaluation system to work in all kinds of educational situations, including global ones. It requires processes verifying instructors' and students' identities in different places. The requirement should apply to many educational systems. This keeps the system flexible. Accessibility is essential for its broad use. The system should be suitable for all kinds of educational situations. This makes it equitable and applicable everywhere.

The problem statement is based on Donald A. Norman's User-Centered Design in 1986, which significantly influences the development and improvement of systems by ensuring that they meet the needs, preferences, and expectations of their users, instructors, students, and administrators. Under the umbrella of UCD, Norman's work supports the need to design products and systems that correspond with users' mental models and expectations. This includes iterative design, which allows designers to develop prototypes early and frequently test them with people to get feedback and evolve the design.

User-centered design is relevant to Online Grade Management and Teacher Evaluation because it considers each user's perspective, such as the students and teachers. In so doing, the systems become more functional and efficient regarding experience and results.

**The features of the Online Grade Management and Teacher's Evaluation**

About Codeastro (2022), the study was created 2 years ago; the proposed project contains features such as Admin Panel, Course management, Grading management, and Student result management. It has several features. For the Admin Panel, an administrator has complete control over the system. The researchers can manage students and so on. For Course Management, the admin will do the courses. For Grading Management, the system allows the administrator to request the computing of the student's grades. The user can view the results for Student Result Management and Grading Criteria. The study is relevant to Online Grade Management because they stated the features of the Online Grading System that are the same as the present study. The proposed system also has an admin panel and grading management like the study that Codeastro developed.

The study of Anthony R.M. in 2023 showed that a grading system encompasses grade viewing, student scores, attendance management, class schedules, and educational information. In the study by the researcher, a system was proposed that will offer an easy-to-use interface for students and parents so that both can keep track of their grades and academic performance. It displays real-time student marks, attendance records, class schedules, and other academic information. This tool assists parents in close contact with their child's academic development and ensures they have all the help needed in case of a shortfall. This study is essential to online grade management since it describes features of an online grading system similar to the current study.

As believed by Forrest S. and Daniel R. (2021), the researcher stated some features such as viewing grades, grading a student, and submission viewing grades, which are where they will view their assignments and submit code. For student code submissions, students will be given a report that will mimic what they would see if they were compiling their code. Usually, this is done to make the system seem more familiar and friendly. For Instructors, the main feature of COGS is the single-page Grading. Instructors will be given all the information required to grade a student submission on one page. This page will include the student's source code and executable, student comments, and tools to assign a grade and give feedback to the student. There are other functionalities for instructors, such as MOSS cheating detection and student management. For professors, this is where they will create assignments and manage different aspects of the course, such as sections, students, and instructors. This study is relevant to our Online Grade Management study because it states the system's features and can be used as our guide to make the system.

SafetyCulture(2024) stated that It has 12 components divided into 4 domains: Domain 1: Planning and Preparation, Domain 2: Classroom Environment, Domain 3: Teaching and Learning, and Domain 4: Professional Responsibilities. Domain 1 demonstrates student skills and creates educational outcomes. Domain 2 is applied to the development of the learning environment and the management of learner behavior. Domain 3 is applied in the strategies used in questioning and discussion to get students involved in learning, use evaluation to lead instructions, gauge results and student learning, and carry out lessons evenly. Domain 4 evaluates the teaching and learning of students, the system for keeping student data, and communication with guardians.

Darling-Hammond (2019) developed the features of teacher evaluation systems with a Multidimensional Evaluation Metrics for assessing teacher performance. This included classroom observations, student test scores, and feedback from peers and students. Classroom observations put teaching methods into action. Achievement test scores showed tangible results of the quality of teaching. Feedback from other teachers and students contributed to more information. This is a balanced and comprehensive approach to evaluating a teacher.

Based on Kane's study (2019), integrating student performance data as a metric for evaluating teachers was a key feature. The idea was that good teaching should improve student learning. Systems were created to link student progress to teacher effectiveness. This meant teachers were judged by how well their students did. Data on student achievements helped measure teacher performance. The goal was to ensure teaching quality. If students did well, it suggested their teachers were effective.

The statement of problem number 2 was based on the theory of User-Centered Design (UCD) by Donald A. Norman (1986), which plays an essential role in the development and improvement by ensuring that the systems meet the needs, preferences, and expectations of their users, including teachers, students, and administrators. Based on the UCD framework, Norman's work underlines the need to develop goods and systems that correspond with users' mental models and expectations. This involves iterative design, where prototypes are tested with consumers early and frequently to collect feedback and develop the design accordingly.

The User-Centered Design is related to Online Grade Management since it focuses on the user's preferences and what will be included in the system. Such systems can be more effective and practical if user preferences are included, resulting in better experiences and outcomes.

**The Level of usability of each feature in the Online Grade Management and teacher evaluation**

Hendra, S.Kom., MT (2018)For quantitative analysis, respondents will be given five options on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The feasibility test of the USE Questionnaire is necessary to ensure that the collected data will be suitable for analysis. Research instruments must be legitimate, dependable, and fit for use. The questionnaire's feasibility was tested using validity and reliability tests. The system that the researchers developed resulted in a 75.23% feasibility percentage, indicating that the measurement result usability of a web-based student grade processing information system has the value Feasible. Our system, "Online Grading System," also has the chance to get the same result.

Based on Reynalen C. Just's study on the online student grading system, 64 students said that the system is "Very Good" with a 48.5% rate, while 39 students said it is "Excellent" with a rate of 29.5%. The researchers assume that our proposed Online Grade Management is feasible and will be implemented after our survey. There were 26 students, or 19.7%, who replied "Good," two (2), or 1.5%, answered "Fair," and one, or 0.8%, answered "Poor."The researcher concluded and found that the evaluation of the Online Student Grading System was indeed feasible and implemented. The researchers assume that our proposed Online Grade Management is feasible and will be implemented after our survey.

According to FB Quinito, in the system, they developed the users of the administrators-user account. The users' evaluation results for general items show that GBMS is functional (mean = 4.2), efficient (mean = 4.3), usable (mean = 4.5), and reliable (mean = 4.3). An overall mean of 4.3 suggests that GBMS generally performs well. Users of the administrators-user account "Strongly Agree" that the system is helpful for administrators in monitoring updated class records and supports permanent and centralized class record keeping.

Alejandra Pensabe-Rodriguez (2020) According to the results of the usability assessment of the faculty evaluation system's services are accepted by users (professors and high school students) at an average rate of 82.4%, with the learning reinforcement service via SMS messages having the highest acceptance among teachers, with 91.5% positive perception. Meanwhile, the Mobile Learning Objects (MLOs) suggestion service had the most significant approval rate among high school students, with 81%. Based on the results, it has broad support, satisfaction, and applicability among teachers and students. The usability assessment presented that the study is usable.

Judith Balanyà Rebollo 2024 The results show that the overall score is good, as the highest scoring categories are "Excellent" and "Good," with 84.62% and 75.90%, respectively, compared to the other categories. An overall median score of 70.65 indicates that the foundation for usability is excellent, but parts could improve from enhancement. This could signify teachers' broad range of experiences, from those who initially experienced difficulties but overcame them to those who found the gadget simple to use and valuable. Moving into different areas shows a clear improvement from a negative usability rating to an "Excellent" level of acceptance: "Horrible" by 47.14% is considered a severely unsatisfactory experience. In comparison, "Poor" by 58.875% shows early improvements but with significant difficulties. "Good" (75.9%) indicates comfort in areas that have been improved, "Excellent" (84.62%) indicates an extraordinary encounter, and "OK" (67.5%) indicates sufficient participation.

Based on the study of Muhammad Akram(2019), subject matter knowledge was the most significant contributor, explaining 17.12% of the variance in the teacher evaluation structure. This was followed by instructional planning and techniques at 13.78%, assessment at 10.00%, environment at 9.19%, and effective communication at 9.15%. The overall reliability of all items was high. This indicates a strong internal consistency within the evaluation system.

The statement of problem number 3 was based on the Technology Acceptance Model (TAM) by Fred D. Davis (1989). This standard theory study describes how users accept and use technology. It helps predict and accept how individuals will adopt and use the new technologies or information systems. According to the framework, users intend to utilize a system defined by its perceived usefulness (PU) and ease of use (PEOU).

The Technology Acceptance Model is related to Online Grade Management because it focuses on developing an adaptable and easy-to-use system that will help teachers and students manage, access grades, and evaluate the teacher's performance more efficiently.

**The problems encountered using the Online Grade Management and teacher evaluation.**

Based on T.Permpool (2019), they say that the tool has a limitation. The tool cannot score the column's default value because of MySQL's characteristics. If the column's default value is not set, then the My Structured Query Language (MySQL)may automatically configure it. The problem was related to the MySQL automated configuration feature. When the value of a column is not specified while constructing the database, MySQL can give a default value based on specific criteria. MySQL's independent behavior creates a barrier for the software because it requires a detailed method for scoring and treating default column values. Furthermore, this limitation resonates throughout the program's functionality, potentially limiting its ability to assess and control database structures fully. Without a reliable system for identifying and evaluating default column values, the program may operate poorly or produce incorrect results when default values are essential.

Quiang Jian(2019) says that according to the respondents, the user subsystem in the college teaching quality evaluation system has not been further developed or improved. The inaction affects the system's effectiveness and usefulness. An old design may also be complex for staff and students, resulting in disappointment and decreased interaction. Also, it will become behind current technological advancements and learning standards if not updated. This lack of progress could ultimately impact the accuracy and reliability of the evaluations in evaluation systems to foster continuous improvement among teachers.

According to a study by Angela Laflen Mikenna Sims(2021), it can be difficult for users to implement effectively because of the complexity of introducing students to a new online grading method. Previous research on student perceptions of grading contracts has found that some students resist using contract grading in face-to-face (F2F) contexts. For example, reports that students in their study acknowledged that the grading contract allowed them to focus on improving their writing and encouraged risk-taking.

Hodges et al. (2020) state that technological inequalities between educators and students have become more evident. Some faculty members lacked reliable internet access, appropriate remote instruction, and evaluation devices. The digital gap influenced how instructors were evaluated fairly and consistently. Not everyone can be evaluated in similar situations. It puts some teachers at a disadvantage. Schools had to discover ways to close the gap. Improving access to technology has been a priority.

Shahid Rafiq, Farrukh Kamran(2020) according to a study, public sector universities have more issues with their teacher evaluation process than private sector universities, including outdated tools used for evaluation, no consequences for receiving subpar evaluation results, the lack of evaluation methods, and late delivery of evaluation results. The challenges and problems with the new teacher evaluation system in Punjab's public and private institutions went wide. On the other hand, private institutions have a strong online teacher evaluation system with few errors**.**

The statement of problem number 4 was based on the Assessment and Feedback Theories, according to Paul Black in his work in 1998. These theories focus on effectiveness and the importance of timely, specific, and actionable feedback for the study. Furthermore, through assessment and feedback, online grading systems can be developed to be more functional and effective in driving meaningful learning experiences for students, making them more engaging, and fostering continuous development. The researchers agree that evaluations should be used to help students learn. By implementing formative assessment practices and providing high-quality feedback, teachers can help.

The Assessment and Feedback Theory is related to Online Grade Management and Teacher Evaluation because it will help the researchers improve the system teachers and students will adopt. By assessing, the researchers will know the features that need some improvement.

**Theoretical Framework**

The theoretical framework is considered the foundation of the research study, offering a possible path to follow throughout the research. The researcher's theory serves as the framework of the investigation. The study adopts three theories: centered design (UCD) by Donald A. Norman, the technology acceptance model (TAM) by Fred D. Davis, and assessment and feedback theories by Paul Black.

**User-Centered Design (UCD)**

User-centered design (UCD), developed by Donald A. Norman in 1986, shall be significant in their development and improvement to ensure the systems meet their users' requirements, preferences, and expectations, like teachers, students, and administrators. In the context of UCD, Norman's work shows the importance of developing systems that are consistent with users' perceptions and expectations. This includes iterative design, in which designs are tested with users early and frequently to collect feedback and develop the design according to their wants.

According to Olujimi Daniel Alao (2022), User-Centered Design (UCD) is a design point of view and iterative methodology that includes users throughout the process. It is defined as both a process and a philosophy. As a design process, it serves as a technique for preparing a project and a collection of processes for each step. This theory is related to the Online grade management system and how the user connects to the system. The design of the system is focused on the users' needs.

Lintang Matahari Hasani (2020) states that the user-centered design is the best option for getting the desired results according to the users' perspective. The framework deals with developing usable software products based on user wants and desires. This framework will ensure the software is more user-friendly and effective since it focuses on user needs. Considering users' preferences provides valuable feedback for improving the online grade management system. Consequently, the system becomes more efficient and satisfactory for its users.

Ovie Nur Faizah, 2023, aims to create an intuitive interface and a comfortable user experience. The approach adopted in this study is user-centered design. The main steps of the UCD approach are needs analysis, design and prototyping, and evaluation. Evaluation is done through usability testing using the System Usability Scale. Test results indicate that UCD is effective in designing a system responsive to user needs with a high level of usability.

Based on Ann Shivers-McNair (2018), The authors, an instructor, and students discuss the application of user-centered design (UCD) on three levels: the design and organization of an advanced college course in which we all took part, student projects created during the course, and our views on the course provided here. Researchers suggest that user-centered design principles can and should be more than just course topics and tasks; they can be course-wide practices that make students and teachers accountable for the consequences of their logical decisions. We provide a model for other teacher-scholars seeking to engage students in course design and collaborative writing on their work.

In 2021, AA Holland will focus on connecting and fixing the users' needs. It works on developing items and services that are simple to use for individuals in all walks of existence. This strategy needs quick and continuous user feedback and adaptive design development. Designers apply compassion to understand other people's feelings and concerns. Also, user-centered design needs adaptability, friendliness, and easy access to ensure that the proposed solution benefits all people, regardless of their abilities or backgrounds.

**Technology Acceptance Model (TAM)**

The Technology Acceptance Model (TAM) by Fred D. Davis (1989) is a standard theory that describes how users accept and use technology. It helps predict and accept how individuals adopt and use new technologies or information systems. According to the framework, users intend to utilize a system defined by its perceived usefulness (PU) and ease of use (PEOU).

As Andrina Granić (2019) stated, this literature review aims to provide an overview of current research on using TAMs in learning and teaching across various domains, technologies, and user types. The main findings suggest that TAM and its numerous modifications are a reliable paradigm for facilitating the evaluation of diverse learning resources. TAM's fundamental criteria, perceived ease of use and perceived utility, have influenced the acceptance of technology-based learning.

In his study, Eddie W. L. Cheng investigated technology adoption using the Technology Acceptance Model and the Theory of Planned Behavior. The study aims to create the space by comparing these ideas in a specific context: observing students' goals and behaviors while implementing a web-based tool for group work. In the study, students were involved and taken into consideration to find out which theory was more effective in the prediction of technology acceptance in such a situation. By testing both TAM and TPB, the research would shed valuable light on the factors influencing students' intentions to use the web-based tool and their actual behaviors in group work activities.

Xiumin H., Mingzhu Z., Qianqian L. (2021) This study examines preschool teachers' technology acceptance with the adapted TAM and their determinant factors. Results of the study indicate that preschool teachers' behavioral intention was moderate to high level. Perceived usefulness and perceived ease of use significantly predict preschool teachers' behavioral intention. Perceived usefulness is affected by perceived ease of use and job relevance. Computer self-efficacy and perceptions of external control are the positive factors toward perceived ease of use.

The study of M Al-Rahmi (2021), The research has a conceptual foundation on the technology acceptance model (TAM) and assessment information system success models (ISSM). In theory, five different variables were found to influence the intention to use social media, and the influence of actual social media use on student happiness and performance was studied. A questionnaire survey based on the technology acceptance model (TAM) and information system success model (ISSM) was used as the primary data collection method, and it was sent to 1200 students from four Malaysian public institutions selected at random.

**Assessment and Feedback Theories**

Paul Black's Assessment and Feedback Theories, published in 1998, addressed, among many others, the concept of needing fast, detailed, and actionable feedback on studies. Teachers can design an environment that encourages meaningful learning experiences for the students, motivates them, and advances development by incorporating these assessment and feedback theories into the design and performance of online grading systems. The researchers' work focused on the importance of using evaluation to improve student learning and achievement. Teachers can assist students improve their academic performance by applying practical evaluation methods and providing quality feedback.

Based on Sana Butti Al Maktoum(2024), data was collected through interviews and document analysis, and the same assessment procedure was used. Seventeen teachers participated in semi-structured interviews, 15 females and two males, some online and some in person. This current study explores the quality of the assessment period in general, the role of the administrators, how the early assessment process may contribute to professional development, and the challenges and repercussions of the conclusion review.

Winstone and Boud's (2020) study, in The Need to Distinguish Assessment and Feedback in Higher Education, found that the current higher education institutions' assessment and feedback methods are often seen as functioning activities. This study clarifies the distinction between evaluation and feedback, emphasizing the significance of maintaining their respective purposes. The evolving conceptual framework of feedback increasingly engages students in feedback processes rather than just acting as a conduit for teachers to provide information. The significance of balancing these two elements is thus stressed across the research.

Adarkwah, assessment is an essential tool for education; however, the results are bound to differ through some criteria, such as participants, categories, providers, and barriers. The findings from the experiments disclosed the integration of both sides' feedback in improving approaches to education. The feedback should be encouraging, constructive, timely, correct, and consistent. Negative feedback has the potential to have an impact on development and decrease the experience of the receiver.

In the study by B Csapó (2019), the researchers used the assessment and feedback theory. First, researchers outline the theoretical basics of the eDia system, including the role of diagnostic assessment, the content of the assessment, and the ways to use feedback. Then, the eDia system is introduced by researchers, its structure is described, and the way technology serves its functions is underlined. Finally, they reviewed the surveys that were conducted using their study.

Jihyun Kim (2024) In this study, we examined how teachers evaluate the quality of feedback and how they can improve how they teach. We used student reports, a useful but overused measure, to assess teaching effectiveness. We used teacher reports to assess five aspects of feedback. We discovered that feedback that focused on strengths was connected with higher-quality instructional practices, but feedback that focused on methods to enhance teaching was only associated with the growth of critical thinking. When feedback was instant or face-to-face, it did not indicate greater quality instructional practices.

From these theories stated above, they were able to originate their theory, the Researcher's Theory, which states that by combining these theoretical views, researchers may create a broad system model that explains how user acceptability, system design, assessment techniques, and feedback mechanisms interact in online grading systems. These models help develop, implement, and evaluate online grading systems that will most effectively support teaching and learning processes for educational purposes.

**Conceptual Framework**

This conceptual framework provides an organized approach to understanding the complicated connections between user characteristics, system design, feedback mechanisms, user acceptance, and learning results in an online grading system. This paradigm can help researchers perform research studies,

Assessment and Feedback Theory

Paul Black (1998)

Assessment and Feedback Theory emphasizes the importance of formative assessment in the learning process. It helps the student to realize what is expected from him and his failures. This states that to be highly effective in supporting students on learning and academic success when delivered on a regular and constructive basis.

Technology Acceptance Model (TAM)

Fred D. Davis (1998)

The Technology Acceptance Model (TAM is a framework that explains how users come to accept and use technology. According to TAM, perceived usefulness and perceived ease of use are the two main factors that influence an individual's decision to adopt a new technology.

User Centered Design (UCD)

Donald A. Norman(1986)

User-Centered Design (UCD) emphasizes designing products with a deep understanding of the users' needs, preferences, and limitations. User Centered Design advocates for an iterative design process involving user research, prototyping, and testing to create intuitive and effective products.

SOP # 4,5

SOP #3

SOP # 1,2

The Development of Online Grade Management and Teacher’s Evaluation for Dr. Ruby Lanting Casaul Educational Foundation, Inc.

**Figure 1. Theoretical Paradigm**

hypothesis testing, and create interventions to improve the design and effectiveness of online grading systems.

The input includes the design and needs requirements, the system features, the level of usability of each feature, and the problems that may be resolved using the system. This is the planning and requirement-gathering phase, during which the researcher prepares the design, collects the requirements, and investigates what features will be employed in the proposed system. The researcher also wants to know what the suggested system's usability level would be and what challenges will be faced when using it.

The process contains system development and system testing. The system was developed during this phase, including program coding and website building. Following development, the researcher will present the system to respondents and perform a survey to assess the system's usability and difficulties. The output includes the results of the inputs and processes. This phase shows the built system's features, such as grade entry, Viewing of grades, and more.

The arrows from input to process and process to output represent the connection and improvement from data collection to development, with the outcomes functioning as output. Lastly, the rectangle connected to the output is the developed system "Online Grade Monitoring System for Teachers and Students of Dr. Ruby Lanting Casaul Educational Foundation, Inc. The Researchers also want to know what the suggested system's usability level would be and what challenges will be faced when using it.

* It increase the ability of the school to monitor students grades.
* It will help the teachers to improve their teaching performance.

System Development

* Program coding
* System Design

System Testing

* System test
* Survey
* Refining Implementation

System Requirements

* Hardware and Software Requirements

Features of the System

* Administrator
* Teacher’s Evaluation
* Teacher’s Account

Online Grade Management and Teacher’s Evaluation for Dr. Ruby Lanting Casaul Educational Foundation, Inc.

**Figure 2. Conceptual Paradigm**

**Scope and Delimitation**

This study focuses on developing an online grade monitoring system by using PHP. The proposed system has a login where the administrator inputs their username and password to access the system. Inside the administrator page, you will find the teachers' accounts. The teachers also have a login where they can input their username and password to post their students' grades.

This study aims to show the effectiveness of an online grading system. The system is exclusively for Dr. Ruby Lanting Casaul Educational Foundation Inc faculty members.

The researcher created a system that has its limitations. The system depends on the design and implementation, and the system may have limitations in terms of accessibility for students, teachers, and parents. There might be a limit to the features available in the system. For example, some systems may perform only grade management without attendance tracking or grade computation. The 20 respondents include teachers and the registrar from Dr. Ruby Lanting Casaul Educational Foundation, Inc. Not mentioned is beyond the scope of the study.

**Significance of the Study**

The study will be beneficial to the following.

**Registrar.** It will be easier for the registrar to manage students' records and maintain accurate academic records. It will be easy for them to send a notification if the deadline for submission of grades is near.

**Teachers.** The teachers can quickly post the grades of their students using the system. They will put their username and password and can easily put their students' grades.

**School.** Online grade monitoring systems contribute to educational institutions' overall efficiency and effectiveness by streamlining grading processes, reducing paperwork, and promoting data-driven decision-making to enhance teaching and learning outcomes.

**Researchers.** The outcome of this study will give them a deeper understanding of the Online grade monitoring system and inspire them to make other projects as an output of their technical learning.

**Future researchers.** This research will give future researchers the base to improve the system to be fully automated.

**Definition of Terms**

Here are some key terms relevant to research about online grading systems:

**Online grade monitoring system** is a web-based or application-based system that enables one to track, manage, and analyze the student's academic performance and grades online or digitally.

**Teacher evaluation** is a continuous review of teacher performance and handling in classes, and it is sometimes assisted by technology or platforms that use software.

**RESEARCH DESIGN AND METHODOLOGY**

This chapter describes the research method, data source, instrument used, data gathering procedure, and statistical data treatment.

**Research Design**

Action research is a problem-solving strategy in which the researcher and other participants organize, perform, and evaluate research. It comprises evaluating products or services to optimize and, if necessary, develop them further. Action research comprises four primary phases: planning, acting, observing, and reflecting (Aransiola, 2023).

The action research provides a structured and systematic way to improve the online grading system, tackle problems, implement effective solutions, and improve the teaching, learning, and assessment system.

**Sources of Data**

Analyzing and creating suitable information for a report. This study will give reliable outcomes that will be helpful for both research and school management. Major information is collected from responses to the questionnaire given out by the researcher.

**Respondents of the Student**

We used Solvin's formula to estimate sample size during random sample collection during the present study. Slovin's formula uses statistics to calculate sample size using population size and margin of error.

The researcher chose 60 responses from the Dr. Ruby Lanting Educational Foundation Incorporated's Bachelor of Science Computer Science/Associate in Computer Technology students in the first to fourth years. The questions are provided to help researchers choose a sampling method. It reviews probability and non-probability sampling methods, lists and defines specific sampling techniques, and provides pros and cons. In addition, issues related to sampling methods are described to highlight potential problems ( Berndt 2020 ).

Formula:

Where *n =* sample size

*e =* desired margin of error

*N =* Population size

**Research Instrument**

In this study, the researcher created a survey questionnaire and used it as a research tool to obtain data from the respondents, consisting of three parts. Part one of the questionnaire will determine the level of usability of each feature of the online grading system. Part two will determine the problems encountered by the respondents when using the system. Part three is the recommendation of the respondents.

**Data Gathering Procedures**

To begin with data collection, the researcher developed a questionnaire comprising all the variables stated in their problem descriptions. Before generating enough surveys, the researchers presented it to their adviser and asked for her consent. The researcher then wrote a letter to the school dean requesting permission to collect data. The letter details when and where the system will be tested.

Once the school dean has approved the letter, the researcher will present their system's prototype to the responders on the day specified in the letter. The respondents will test all the system functions. After that, the questionnaires will be issued to the responders. Then, the filled-in survey questionnaire will be collected to prove the correctness of the respondents and a high retrieval rate. Research will study and process the results of this study.

**Statistical Tools**

The statistical tools used in this study are Likert Scale and Ranking.

**Likert scale** is one of the essential rating scales used as a measurement tool in social sciences research, especially in the qualitative approach ( Tanujaya, 2020)

The first part of the research instrument will evaluate usability using a Likert scale. This scale allows respondents to rate the usability of each system function.

|  |  |  |
| --- | --- | --- |
| **Ratio** | **Scale** | **Interpretation** |
| 1.00 – 1.49 | 1 | Not Effective |
| 1.50 – 2.49 | 2 | Less Effective |
| 2.50 – 3.49 | 3 | Effective |
| 3.50 – 4.00 | 4 | Very Effective |

A **ranking scale**, often used in research and surveys, requires participants to order items based on specific criteria, such as preference, importance, or performance. This scale is used to understand the relative positioning or hierarchy of the ranked items. Respondents are often presented with a list of items and asked to rank them from most important to least important, or vice versa, by comparing them and selecting the ones they like best (Creswell (2020).

The last part of the research instrument will use a ranking scale to identify the issues found when using the system. Respondents are asked to list the problems they experienced from most to least.

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**SURVEY QUESTIONNAIRE**

Dear Respondents:

This instrument gathers data and information to aid a research study on the "**Online Grade Management and Teacher's Evaluation System of Dr. Ruby Lanting Casaul Educational Foundation, Inc**." This study aims to provide security with a cost-effective, user-friendly monitoring process.

Please feel free to answer this questionnaire. We assure you that all information herewith will be treated with the highest confidentiality. Thank you very much.

**Name:**  (OPTIONAL) **Block/Year:**

**Part I. The level of usability of each feature in the proposed system:**

**Directions:** Please take the time to read and comprehend the question. Put a check (✓) in the space provided and rate each given statement using the following scales.

**4 – Very Effective 3 - Effective 2 - Less Effective 1 - Not Effective**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Indicators | 1 | 2 | 3 | 4 |
| 1. Using the Online Grade Management and Teacher's Evaluation system was straightforward and uncomplicated. |  |  |  |  |
| 1. I found the Online Grade Management and Teacher's Evaluation system interface intuitive and user-friendly. |  |  |  |  |
| 1. Locating the necessary features and functions within the Online Grade Management and Teacher's Evaluation system was easy. |  |  |  |  |
| 1. I felt comfortable using the Online Grade Management and Teacher's Evaluation system without much prior training or instruction. |  |  |  |  |
| 1. The layout and design of the Online Grade Management and Teacher's Evaluation system contributed to its ease of use. |  |  |  |  |
| 1. I found the Online Grade Management and Teacher's Evaluation system efficient and time-saving in managing grades. |  |  |  |  |
| 1. The system provided clear and helpful feedback on actions, such as submitting grades or accessing student records. |  |  |  |  |
| 1. Overall, I enjoyed using the Online Grade Management and Teacher's Evaluation system for its simplicity and effectiveness. |  |  |  |  |
| 1. I would recommend the online grade management system to others based on my positive experience. |  |  |  |  |
| 1. I felt productive and empowered when using the Online Grade Management and Teacher's Evaluation system to complete Grading and student assessment tasks. |  |  |  |  |

**Part II. The problems encountered using the system:**

**Direction:** Rank the following problems encountered from 1-5, when 1 is the highest and 5 is the lowest. Put a check (✓) in the space provided.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Indicators | 1 | 2 | 3 | 4 |
| 1. Using the online grade management system was confusing and difficult. |  |  |  |  |
| 1. I found the Online Grade Management and Teacher's Evaluation system interface cluttered and overwhelming. |  |  |  |  |
| 1. Locating the necessary features and functions within the Online Grade Management and Teacher's Evaluation system was challenging. |  |  |  |  |
| 1. I felt lost and frustrated when performing basic tasks in the Online Grade Management and Teacher's Evaluation system. |  |  |  |  |
| 1. The layout and design of the Online Grade Management and Teacher's Evaluation system hindered its usability and made navigation difficult. |  |  |  |  |
| 1. I encountered frequent errors or glitches using the Online Grade Management and Teacher's Evaluation system. |  |  |  |  |
| 1. The Online Grade Management and Teacher's Evaluation system provided inadequate or unclear feedback on actions taken, leading to confusion and uncertainty. |  |  |  |  |
| 1. Overall, I was dissatisfied with the usability of the Online Grade Management and Teacher's Evaluation system and found it inefficient. |  |  |  |  |
| 1. I would not recommend the Online Grade Management and Teacher's Evaluation system to others based on my negative experience. |  |  |  |  |
| 1. I felt hindered and demotivated by the Online Grade Management and Teacher's Evaluation system when attempting to complete grading tasks and assessments. |  |  |  |  |

**Part III. The recommendation of the user to improve the Online Grade Management and Teacher's Evaluation System**

Do you have any additional comments or suggestions for improving the Online Grade Management and Teacher's Evaluation System?