



NECN FEEDBACK HUB

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Abstract: The aim of this project is to create a web application to improve the collection of feedback in educational institutions. The system provides a central platform that allows students, teachers and administrators among others to provide feedback with ease and manage such feedback sessions. Traditional methods of gathering feedback especially using papers has been found to be time wasting as they are characterized by inaccuracies coupled with fragmented data which leads to increased administrative burden. NECN Feedback Hub solves these issues through digitization of the process resulting in improved accuracy and efficiency. NECN Feedback Hub is an online platform which can be accessed via any web browser doing away with paper forms, manual entries, etc. Some key features include customizable survey templates, instant data capture and reporting options that are broad-based in scope. This ensures ease and availability of information for strategic planning and decision-making purposes from the viewpoint of feedback received. In addition, system administrators can export such information into excel spreadsheets for further analysis or reports, hence ensuring organized utilization.

IndexTerms- Feedback, Educational Institutions, Stakeholders, Questionnaires.

1. INTRODUCTION

The NECN Feedback Hub is an elaborate internet app that has been created to facilitate faster and easier feedback in schools. It serves as a one-stop platform for all key stakeholders including learners, teachers and administrators, to efficiently provide feedback and its management. The importance of having a well-organized and effective feedback system cannot be emphasized enough because this greatly aids in improving quality assurance and continuous learning which the NECN Feedback Hub has. Traditional methods of feedback collection usually employ manual techniques such as paper surveys that are slow and prone to errors. Inadequate data sets, untimely response duration and increased workloads on administration may result from such practices. Through changing this process into an electronic data capture using its intelligent interface; the NECN Feedback Hub ensures high level of accuracy in collected data at the least possible time loss.

NECN Feedback Hub is an easy-to-use web application accessed via any web browser, which eliminates written records and manual entries, giving a seamless user experience. Among these are adaptable feedback forms, dynamic data capture & extensive reporting capabilities. These make it easier to access and effectively use feedback for strategic planning.

Also, the system has an export feature that enables administrators to transfer feedback information into Excel files for further examination or report making reasons. This ensures that all the responses can be easily used to make improvements in other areas of the institution. The NECN Feedback Hub brings about adaptability and reasoning in its interaction with educational institutions towards fostering continuous improvement.

In short, NECN Feedback Hub provides a novel approach of handling feedback in schools as it incorporates contemporary web technologies to ensure its accessibility as well as reliability while simplifying experiences connected with offering or receiving customer feedback by ultimate consumers on market scale.

2. LITERATURE STUDY

The NECN Feedback Hub's development has been underpinned by extensive research into traditional and digital feedback systems in educational settings. However, paper-based feedback methods have historically been common, however they were often inefficient and mistake-ridden which led to fragmented data and slowed-down reactions (Balamuralithara & Woods, 2009). On the other hand, there have been numerous improvements as seen in Young and Donovan's (2020) shift to digital feedback solutions such as increased accuracy of the data, easier access to information, and better efficiency. Web applications on their part have changed how feedback management is done. For example, Liu and Tuck (2019) show that web-based systems eliminate administration workloads as well as improving quality of collected information through customizable forms or instant data retrieval. Consequently, the hub takes full advantage of these benefits by providing a centralized platform for gathering feedback using the internet. Customization of feedback forms is essential for catering to various stakeholders' needs. Meanwhile this flexibility in feedback systems allows administrators to adjust questions according to specific situations thus capturing more valuable data that can serve purposes. This way it becomes evident that customization makes sure that collected feedback is focused and useful for decision-making based on facts. A modernized feedback system will find it imperative to have real-time data collection and reporting capabilities. In their article, Smith and Brown (2017) discuss this functionality that enables institutions continuously monitor feedback and respond immediately to emerging issues. The latter is equipped with robust real-time reporting tools that help visualize data trends and facilitate proactive decision-making. Additionally, exporting feedback data for analysis in other systems as indicated by Johnson and Ramirez (2016), allows the schools to blend it with other data sources for holistic analysis. Because of what Norman and Nielsen (2018) recommended, which includes a focus on user experience as well as accessibility, the NECN Feedback Hub has been designed to be an intuitive platform that ensures high engagement from all users due to its easiness in navigation.

2.1. Overview of current system

In many educational institutions, manual processes, for example the use of paper-based surveys and forms, form the backbone of the current feedback system. It is an old method where students and faculty members are given paper questionnaires to fill out which they submit back to the administration. The staff collects, arranges and manages this feedback and creates reports to be used for further analysis and decision-making.

The creation of feedback forms is the first step in this process; these forms are printed out during certain periods like the end of semester or after a specific event. Students together with their lecturers must complete them giving insights on various aspects such as course content, quality of teaching as well as campus facilities.

Afterwards, administrative staff manually review these feedback documents. In doing so, they count responses, summarize comments generated by respondents and produce a report showing trends that need attention. These reports are then sent to people who might benefit from them, including lecturers, heads of departments as well as administrators who rely on it when making decisions about improvements that need to be made in their respective areas.

2.2. Limitations of current system

Time-Consuming: The distribution, collection and processing of paper-based feedback is manual and takes much time. This can lead to significant delays between the issuance of feedback and its actual review and actions.

Prone to Errors: Manual entry of data, as well as processing it, are exposed to human errors. Miscounts on responses or misunderstanding of handwritten comments could make the reports unreliable.

Inefficient Data Management: A lot of administrative work goes into organizing and keeping physical feedback forms. However, this may be challenging for analysis or comparison with historical feedback.

Limited Accessibility: Not all stakeholders can access paper-based feedback easily. Additionally, distributing hardcopy reports is difficult especially in large institutions with many faculties and departments.

Lack of Real-Time Feedback: This system does not allow for collecting or analyzing real-time feedback. Lateness in processing means immediate attention could bypass some matters.

Environmental Impact: An issue arises about environmental waste when using paper. But "It only takes the production of thousands of papers each year to make it unsustainable, thus increasing that organization's ecological footprint".

3. PROPOSED WORK

NECN's Feedback Hub is creating a web-based coherent application for managing feedback in colleges. It will enable collection, organization and analysis of students and faculty responses concerning the courses, instructors and facilities found within campus.

Key Features:

Feedback Collection and Management: The software allows users to collect feedback through an easy-to-use interface that can only be accessed online thus allowing all stakeholders to use it.

Feedback Types: The system will have various kinds of feedback options i.e., Feedback on TLP, Student Satisfactory Survey, Faculty Feedback on Curriculum, etc., thus each having their own customizable set of questions aimed at ensuring that the forms are specific to the needs and requirement of the administration.

Administrative Control: Admins have broad control over feedback processes. They shall be allowed to make, change and group different types of questionnaires related to feedback which are appealing and complete in nature.

Secure Data Storage: All responses made concerning comments will be securely warehoused inside the database with strong protective measures given to guarantee confidentiality so that no data leakages occur.

Dynamic Analysis and Reporting: The system will have in-built tools capable of real-time data analysis and reporting, thus giving instant insight to the feedback received. Upon which, the College's management can make decisions based on current information and more promptly initiate actions for improvement.

Functionality of Exporting: Feedback data can be transferred to Excel sheets for further analysis and keeping records hence making collected information more flexible and useful.

4. EXPERIMENTAL RESULT:

The NECN Feedback Hub has been a success as it has improved the way feedback is collected, evaluated and reported in the institution. Structured forms have simplified feedback processing by making it easy for students and teachers to respond resulting in higher response rates. To make sure that data is complete and accurate, the system includes validation and quality checks. Better data analysis capabilities enable administrators to produce summaries which provide insights into levels of user satisfaction and patterns identification. To promote openness, this organization can rely on its customizable reports as well as dashboards for real-time monitoring. The NECN Feedback Hub stresses cooperation among all education stakeholders with student-centricity adopted. Moreover, long term performance follow-up becomes possible through this system's historical feedback tracking facilitating continuous improvement process. This type of thinking about things ensures a dynamic school that can adapt itself to meet the needs of its community through feedback.

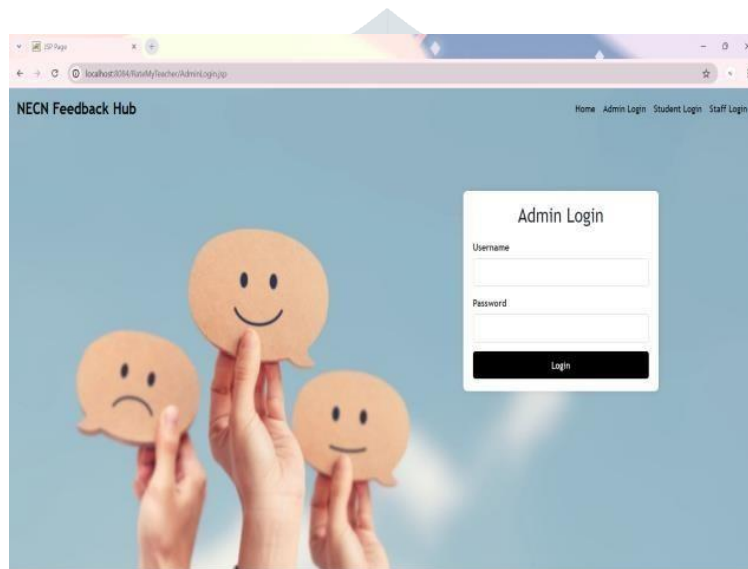


Fig 1: Home page

To reach the NECN Feedback Hub, there is a login page for administrators that permits them to operate when they key in the correct details. The same goes for students and staff who have their own separate login pages where they can securely log in and access different functions within the system.

Admin Module:

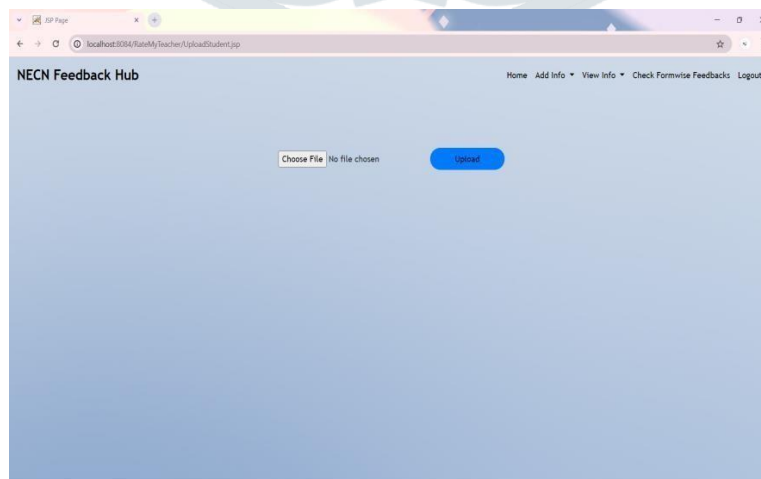


Fig 2: Upload students

The admin may add students by importing an Excel file with student roll numbers as usernames and a common password for initial entry. This way, information about students is input promptly and accurately into the system.

The screenshot shows a web browser window with the URL localhost:3034/RunAsMyTeacher/AddStaff.jsp. The page title is 'NECN Feedback Hub'. The main content area displays a 'Welcome, Admin' message and a modal form titled 'Add Staff'. The form contains the following fields: 'Staff ID' with a text input containing 'FID', 'Staff Name' with a text input, 'Dept. Name' with a dropdown menu showing '--Select Department--', 'Designation' with a dropdown menu showing '--Select Designation--', and 'Password' with a text input containing '12345'. A black 'Create' button is positioned at the bottom of the form.

Fig 3: Add Staff

The administrator has authority to add people working in his or her organization who are given unique identifiers serving as usernames. However, each member of staff gets a single common code which can be changed at any time so that one does not disclose it or anything else through using other people's names.

The screenshot shows a web browser window with the URL localhost:3034/RunAsMyTeacher/AddFeedbackForm.jsp. The page title is 'NECN Feedback Hub'. The main content area displays a 'Welcome, Admin' message and a modal form titled 'Add Feedback Form Queries'. The form contains the following fields: 'Feedback Name' with a dropdown menu showing '--Select Feedback--' and 'Query' with a text area. A black 'Create' button is positioned at the bottom of the form.

Fig 4: Add Feedback Form Queries

The admin selects a feedback form (TLP, Employee feedback etc.) required and adds many questions. This allows users of the application to customize their feedback collection depending on a particular area of interest or concern thus ensuring comprehensive and valid data collection respectively.

The screenshot shows a web browser window with the URL localhost:3034/RunAsMyTeacher/AddForm.jsp. The page title is 'NECN Feedback Hub'. The main content area displays a 'Welcome, Admin' message and a modal form titled 'Create Feedback Forms'. The form contains the following fields: 'Form ID' with a text input, 'Form Name' with a text input, and 'Authorized For' with a dropdown menu showing '--Select Authorization--'. A black 'Create' button is positioned at the bottom of the form.

Fig 5: Create new Feedback Forms

The admin can create new feedback forms and designate whether students or staff are authorized to provide feedback for each newly created form. This ensures that the appropriate stakeholders are targeted for feedback collection, allowing for relevant and useful insights.

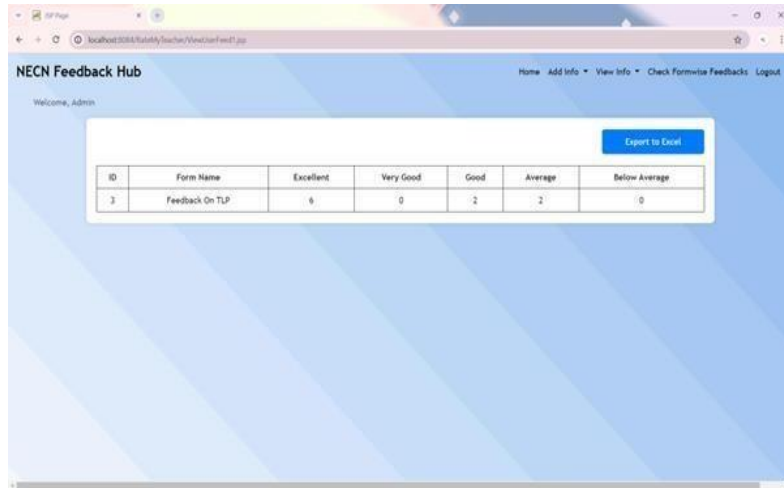


Fig 6: View Feedback Reports

The admin can generate reports on the feedback provided by students and staff for each feedback form individually. Additionally, the collected data can be exported to an Excel sheet for further analysis and record-keeping.

Student and Staff Module:

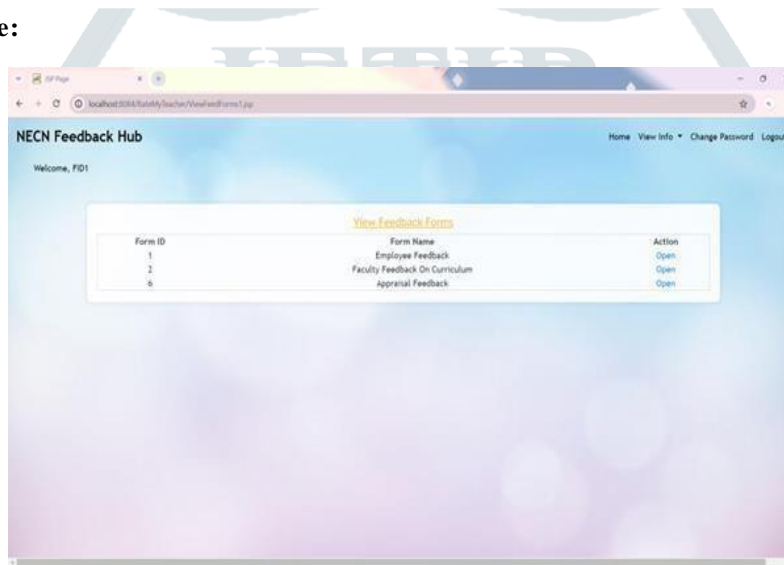


Fig 7: Feedback Forms assigned for Students/Staff

Students and staff can view the feedback forms that have been specifically assigned to them. This ensures that each user only accesses the relevant forms, facilitating a more organized and efficient feedback process.

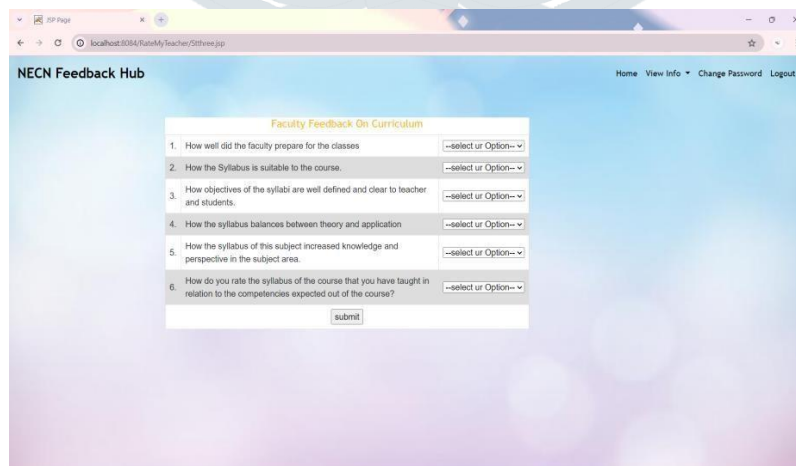


Fig 8: Questions format of various types of Feedback Forms

Students and staff can provide feedback by answering each question on the form and then clicking the submit button.

5. CONCLUSION

The NECN Feedback Hub has greatly improved feedback collection, analysis and reporting within our institution. This creates for simpler means of gathering insights from the students as well as faculty members through its intuitive user interface. Accordingly, it is instrumental in supporting informed decision making and better educational outcomes. Improved participation rates have been achieved due to a simplified process of collecting feedback which was now more comprehensive. The utilization of customizable forms guarantees that the feedback that is obtained is relevant and actionable thereby allowing the institution to acquire meaningful information about how to enhance different aspects of the learning experience. These reporting tools in the system are useful in providing detailed reports or summaries which can be used for trend analysis required to identify strength and weaknesses. The capacity of exporting data into excel and generating feedback distribution reports also enhances analytical capabilities. Through this feature, therefore, administrators using NECN Feedback Hub receive comprehensive feedback reports that can help them make decisions based on facts concerning educational quality enhancement along with student experiences. In addition, responsiveness to stakeholder requirements and expectations between interdependent stakeholders will ensure continuous improvement since transparency remains a key characteristic of this platform.

Moreover, the feedback hub encourages people to interact more with it and enhance the sense of appreciation for their contribution that they offer. It is flexible in use and available widely which increases feedback rates making the educational environment dynamic and responsive. In short, NECN Feedback Hub is an all-inclusive tool that aligns to the institutions mission of delivering quality education. It shows our commitment in utilizing technology to make better choices leading to enhanced learning outcomes hence continuous improvement and excellence in education. In general, NECN Feedback Hub has proven itself as a valuable tool for enhancing communications and collaboration within the institution. Therefore, by organizing a systematic process whereby information can be collected, analyzed, then acted upon we have created a platform for all voices to be heard before decisions are taken. This enhances not only on quality of knowledge but also promotes inclusivity as well as engagement across campus communities. The NECN Feedback Hub demonstrates our dedication towards continuous improvement and pursuit of excellence in education.

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