

Academic Curriculum System

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Abstract

An educational department's standard has a determining influence on student academic experience as well as institutional growth. Academic Monitoring System Formulation and Planning is meant to develop and practice an Academic Monitoring System for an educational institution and evaluate and prioritize academic departments regarding two primary subjects: teaching personnel qualification and professional experience, as well as support facilities available in the institution.

The system is going to act as an interfaced credential measurement tool, having educational background certificates, professional skill certificates, scholarship and research aptitude, experience in teaching-related activities, at its core along with an academic resource assessment area covering laboratories, libraries, the availability and potency of information technology and communication utilities, and provision of student-friendly services, with all of the above contributing crucially towards organizing an effective institutional learning system.

The system is programmed to apply a data-driven approach, utilizing pre-established criteria and weightings for every measure with the purpose of evaluating a department's performance score. Through the aggregation of this data, the system will generate detailed reports that provide insight into the strengths and weaknesses of each department. These reports will be provided to department heads, faculty, and institutional administrators, thus enabling them to make informed decisions with the purpose of enhancing academic quality.

In addition, the system will allow for continuous monitoring and adjustment of departmental information, ensuring evaluation is aligned with existing conditions. Through accountability and openness, the system promotes a culture of excellence, pushing departments to uphold high standards in terms of both faculty and resource utilization. The general goal is to improve the learning environment for students to equip them with the best education and assistance to enable them to achieve their academic and professional goals.

Key Words: Academic setting, Faculty comments, Infrastructure evaluation, Institutional amenities, Online questionnaire, Decision-making

1. INTRODUCTION

Tertiary institutions also keep evolving in response to the rising demands of learning and research. Academic staff, being the backbone of learning institutions, rely on various facilities such as classrooms, libraries, laboratories, and information and communication technology facilities in order to provide quality

education. How efficiently these facilities are used, nevertheless, largely relies on their availability, accessibility, and upkeep.

This research is interested in evaluating faculty sentiments towards institutional facilities and their impact on creating an effective learning environment. A structured and systematic process of feedback is required in rectifying issues, identifying strengths, and enhancing where necessary. Traditional feedback systems are normally unstructured, leading to lengthy response and decision-making times. Transitioning towards a digitized, data-based feedback system allows institutions to efficiently analyze faculty concerns and enhance resource allocation.

2.1 Existing System

In many educational institutions, faculty feedback is collected using outdated andIn the majority of educational institutions, faculty feedback collection is done using antiquated and inefficient methods such as paper questionnaires, impromptu questionnaires, or informal discussions. This is cumbersome, imprecise, and likely to produce late returns. In addition, the absence of an overarching database for feedback makes it difficult to monitor recurring issues and measure progress over time.

2.2 Proposed System

To overcome these gaps, this research suggests an automated system of faculty feedback that facilitates real-time data collection and efficient reporting. The system features a user-friendly interface in which faculty members can securely log in and provide feedback on multiple aspects of the institution, such as::

- Infrastructure and classroom conditions
- Availability and quality of library resources
- Technical support and IT infrastructure
- Laboratory equipment and maintenance
- Administrative responsiveness and efficiency

The system proposed employs artificial intelligence in interpreting the feedback patterns and giving implementable recommendations for institution administration.

2.3 Need of This Project

The rapid nature of technological and educational progress has made it a requirement to possess a structured and effective system of faculty feedback. The need for this step is necessitated by:

1. The inefficiency of the conventional feedback collection mechanisms.
2. The necessity for quick response mechanisms addressing faculty issues.
3. The need for an open, evidence-based style of decision-making.
4. The increasing significance of AI-based predictive analysis solutions.

2.4 Advantages of the Suggested System

1. The proposed system offers several benefits, including:
2. Real-time Data Collection: Professors can give real-time feedback, without any delays.
3. Increased Transparency: Staff are able to monitor the status of their feedback and resolutions.
4. Automated Insights: AI analysis assists in establishing trends and patterns in comments.
5. Better Decision-Making: Informed decisions result in optimal utilization of resources.

6. Higher Faculty Satisfaction: Prompt resolution of issues improves the work climate.

.The system allows for the gathering of feedback using structured analysis and visualization tools, thereby making it more effective. The teachers will have a user-friendly dashboard that will allow them to track responses, examine past trends, and receive real-time information on actions taken based on their feedback. Transparency fosters trust and promotes continuous participation in the feedback process.

Also, the system that will be proposed will incorporate machine learning algorithms that will detect patterns and predict possible issues before they turn into major problems. Through data analysis, institutions can predict issues and correct them in advance, thereby optimizing effectiveness and efficiency in academic operations.

Feature	Existing System	Proposed System
Data Collection	Manual, paper-based	Digital, real-time
Accessibility	Limited to physical presence	Accessible online 24/7
Response Time	Delayed	Instant feedback analysis
Actionable Insights	Minimal	AI-driven recommendations

Table 1: Comparative Analysis of Feedback Systems



Fig 1: Workflow of the Digital Feedback System

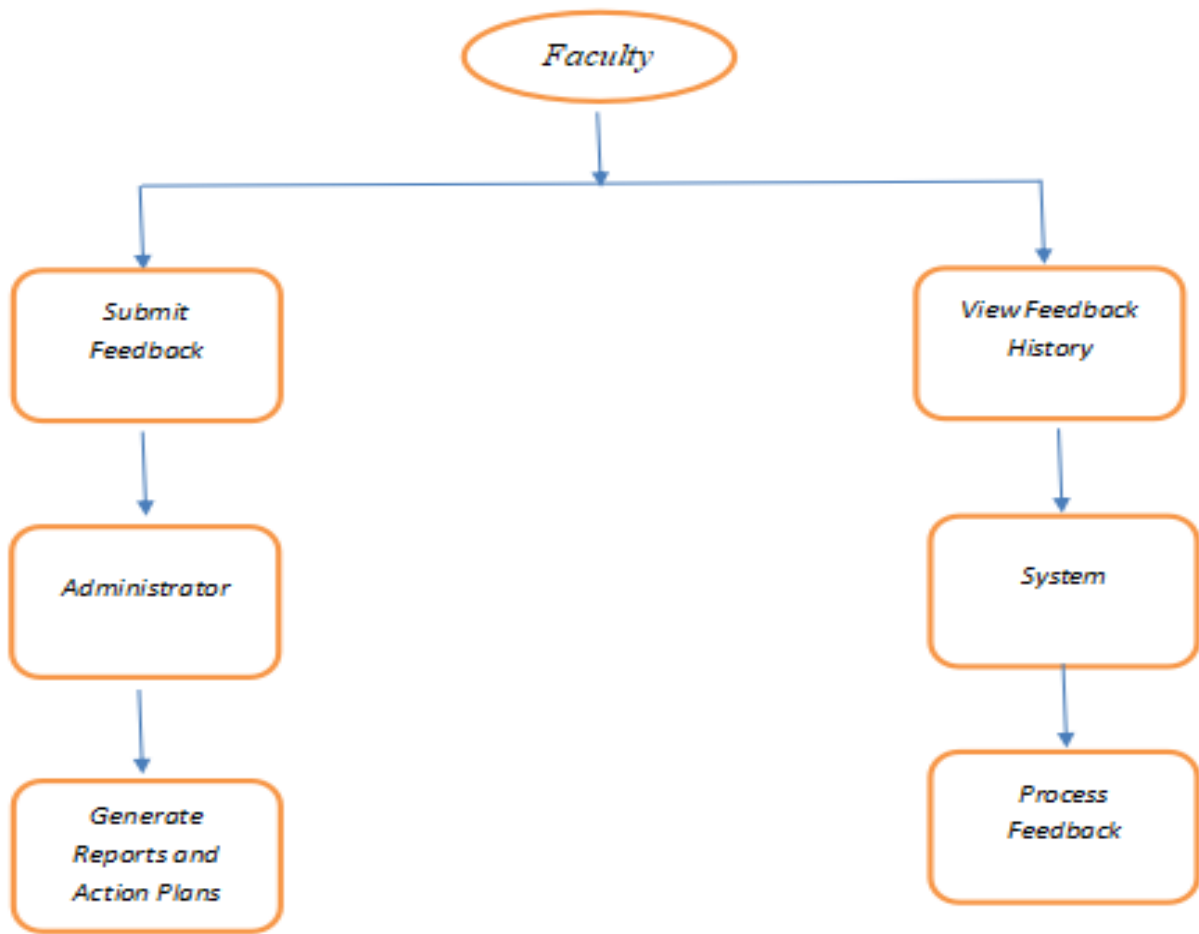


Fig 1: Unified Modeling Language (UML) Diagram

3. CONCLUSIONS

The procedures for providing effective faculty feedback are central to ongoing institutional resource improvement. Conventional methods of feedback tend to be inefficient in the ways of delay, poor documentation, and restricted accessibility. These constraints prevent institutions from making well-informed decisions and acting on faculty issues meaningfully.

This study identifies the inefficiencies observed and offers a modern, technology-driven solution that streamlines the process for feedback. With the implementation of an automated feedback system, learning institutions can optimize operational effectiveness, offer timely response, and enhance data-driven decision-making. This not only enhances the satisfaction of instructors but also ensures effective use of resources, leading to an effective and well-organized learning environment..

ACKNOWLEDGEMENT

The authors would also like to take this opportunity to express their genuine appreciation to devoted instructors who participated in the survey of feedback and shared precious thoughts that contributed to this study extensively. Their contribution of their opinions and experiences was instrumental in pinpointing major areas of improvement and in the formulation of the proposed solutions.

Further, the authors want to express their sincere gratitude to the institution leadership for the consistent support, guidance, and motivation for carrying out this study. Their supervision, collaboration, and commitment towards maintaining a spirit of continuous enhancement have contributed in an essential way to the smooth accomplishment of this study. Help of faculty members along with the institutional leadership has contributed to ensuring the efficiency and suitability of the proposed feedback mechanism.

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