

Faculty Evaluation System

Sona Singh

Shubhra Singh

Shreya Phade

Shraddha Yeole

Prof. Sarika Patil

Abstract:

Stronger teacher evaluation systems benefit teachers, students, and parents. It helps all teachers become good and good teachers become great. As any other professionals teachers want, need and deserve evaluation processes that accurately identify their strengths as well as areas for improvement. No matter how strong or weak a teacher's instruction may be, how much or how little a teacher's students learn, nearly every teacher is told they are doing a satisfactory job and given no advice on what to improve, how to improve. It does not have to be this way. We all know high-quality management suggests that professional growth requires strong evaluation systems that provide specific, timely and actionable feedback against clear standards of professional practice.

We have Evaluated the Sentiment Score of Each Feature at a scale of Three, i.e. good, Satisfactory and Unsatisfactory. To Perform more grained sentiment Analysis, We plan to use five scale Sentiment Score. i.e. Excellent, Good, Average, Below, Average, Unsatisfactory. The problem is identified when information reveals that some aspects of performance can be placed in the hands of decision-makers.

Keyword:

Melanoma; Data Mining, Machine Learning, Kth Nearest neighbor.

Introduction:

Automated teacher evaluation systems can rate their faculty based on questions provided by the administration and also the student can give their comment and feedback to that particular faculty.

In the admin side, admin can add or delete faculty and student. Admin can add the list of questions to decide the performance of faculty. Admin also gives a rating to the faculty according to the question list and performance. Faculty can view their results based on student, co-teachers and admin rating. Faculty can view any comment or feedback given by their students. Faculty can give a rating to the co-teachers based on questions provided by the administration. Teaching performance evaluation is a necessary step in ensuring good instructions. Traditionally teaching performance evaluation is used as a tool to apprise faculty on how they are doing their job. Performance is defined as a set of outcomes produce during a certain period and does not refer to the traits, personal characteristics or competencies of the performer. The faculty's evaluation is widely understood as the most effective tool to improve the quality of instruction in colleges. Timely and accurate information is useful in virtually every stage of the decision-making process. Problem is identified when information reveals that some aspect of performance can be placed in the hands of decision-makers.

Related work:

Based on survey and focus group responses from 266 STOYs, we offer the following recommendations for consideration by national, state, district, and school education leaders, focused on strengthening mechanisms for evaluating and supporting teachers: Focus more on targeted feedback for professional growth and improving instruction, with less emphasis on the evaluation “score.” Provide training for teachers to help them understand the evaluation tools, as well as training for all evaluators to promote accuracy and consistency in results, independent of who conducts the evaluation. Provide time and resources for informal peer observation and discussion. Provide opportunities for formative observations and feedback from exemplary educators or support specialists with recent classroom experience in the grade level or content area. Ensure that a formal, structured system is in place to provide support and opportunities for professional growth to all teachers not just novice or struggling teachers. Do away with one-size-fits-all professional development in favor of a system focused on differentiated and individualized professional development opportunities, taking advantage of online self-paced study opportunities, watching/discussion videos of excellent teaching with colleagues, and collaborating with teachers who have similar interests and needs for professional growth. Prioritize time for teachers to work together to improve their craft through professional learning communities, opportunities to observe/be observed, and time to discuss and reflect on

practice with teachers from the same content or grade level. Consider ways to measure teachers' contributions to student growth that more accurately reflect students' progress on important learning goals throughout the year, rather than focusing on results from a single standardized test. Use student assessment data as a trigger to identify areas in which further attention and support may be needed, rather than as a weighted percentage of the evaluation score. If standardized test scores are included in teacher evaluation, consider how to ensure fairness and accuracy as well as how much impact test scores should have in a teacher's overall evaluation score. Reconsider the fairness and accuracy of the current approach of using the school-wide average for tested subjects as the student-growth part of evaluation scores for teachers in not tested subjects. When student learning objectives or student growth objectives are used, ensure that evaluators are trained in the processes involved so they can provide guidance during the process and accurately assess outcomes.

Motivation:

This system can be used in schools, colleges, and institutes. Thus, school administrators and educators will be more aware of the sentiments and concerns of the students. The reports generated from the developed system could be utilized to enhance the performance of the concerned faculty. Also, the results from the students' evaluation of performance could be used as a basis for merit, awards, and/or promotion. Furthermore, the said proposal may encourage as well as improve fact-based decision making for university stakeholders.

System Architecture:

An automatic system to analyze the textual feedbacks of faculty members teaching in any institute is proposed. The proposed system extracts all the important aspects from the feedbacks and then the sentiment score of each aspect for each faculty is calculated using machine learning algorithms. The proposed system is flexible and versatile than the existing feedback evaluation system of teachers where students evaluate the teachers on predefined aspects decided by experienced and senior faculty and administrators. Our system, Faculty Evaluation System (FES) identifies the strengths and weaknesses of teachers on all those aspects which are important to students. This information may also be used by higher authorities of the institute to form appropriate teams of faculty members for different academic and administrative activities of the institute.

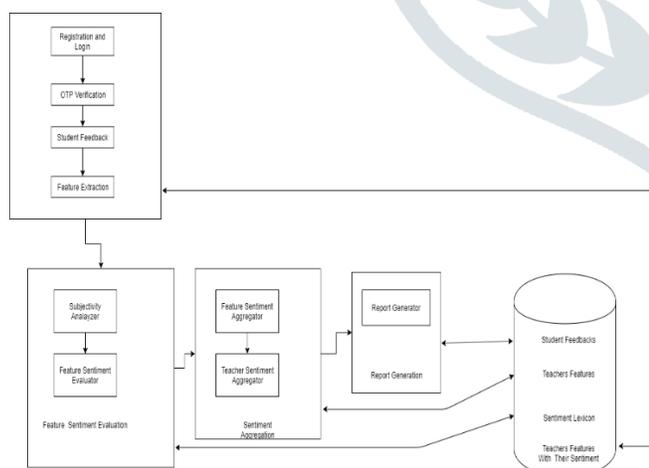


Fig. The Proposed System

1. Register class - User can register to the system with proper validation or input cannot accept duplicate email id.

2. Verify Email- User verifies email through OTP on email.

3. Login- Users can log in to the system by registered email and password.

4. Student and Teacher Evaluation - In this System, we can find student and Teacher Evaluation aspect Wise.

Conclusion:

We have Evaluated the Sentiment Score of Each Feature at a scale of Three. i.e. good, Satisfactory and Unsatisfactory. To Perform more grained sentiment Analysis, We plan to use five scale Sentiment Score. i.e. Excellent, Good, Average, Below Average, Unsatisfactory. The problem is identified when information reveals that some aspects of performance can be placed in the hands of decision-makers.

Reference:

- [1] Y. Ma, H. Peng, T. Khan, E. Cambria, and A. Hussain, "Sentic LSTM: a Hybrid Network for Targeted Aspect-Based Sentiment Analysis," *Cognitive Computation*, vol. 10, no. 4, pp. 639650, 2018.
- [2] T. Young, D. Hazarika, S. Poria, and E. Cambria, "Recent Trends in Deep Learning Based Natural Language Processing [Review Article]," *IEEE Computational Intelligence Magazine*, vol. 13, no. 3, pp. 55–75, 2018.

[3] J. Sultana, N. Sultana, K. Yadav, and F. Alfayez, "Prediction of Sentiment Analysis on Educational Data based on Deep Learning Approach," 2018 21st Saudi Computer Society National Computer Conference (NCC), pp. 1-5, 2018.

[4] A.Kumar and R.Jain, "Faculty Evaluation System", Procedia Computer Science, 125, pp.533-541, 2018.

[5] S. Jebbara and P. Cimiano, "Aspect-Based Sentiment Analysis Using a Two-Step Neural Network Architecture," Semantic Web Challenges Communications in Computer and Information Science, pp. 153-167, 2016.

