

# Emotional Behavior Analysis of Music Course Evaluation Based on Online Comment Mining

Nan Li, Anyang Vocational and Technical College, China\*

## ABSTRACT

This study investigates the method of analyzing emotional tendencies in music courses and its application in lesson plan evaluation. Using a weighted method to analyze emotional tendencies in music curriculum, the study compares the results with existing literature, demonstrating the superior accuracy of the proposed method. To evaluate lesson plan quality, a combination of self-assessment, mutual evaluation, group evaluation, and the middle school music lesson plan evaluation form is recommended for comprehensive assessment. The study's method for comment polarity achieves an accuracy rate of 69.19%, significantly outperforming other methods. Additionally, improvements in lexical feature extraction reduce computation complexity and interference factors in sentiment polarity analysis. In conclusion, this study offers valuable insights for enhancing teaching effectiveness, lesson plan quality, and understanding course feedback.

## KEYWORDS

Emotional Behavior, Emotional Dictionary, Music Course Evaluation, Online Comment Mining

## INTRODUCTION

An emotional dictionary is a collection of different emotional words marked with emotional tendencies. Generally speaking, an emotional dictionary marks the positive and negative degree of emotional words. The emotional words in the emotional dictionary can be used to judge the emotional tendency of the text, so constructing the emotional dictionary is an indispensable part of the analysis of the emotional tendency of the text. Through machine learning or natural language processing technology, an emotional dictionary can separate people's opinions, feelings, evaluations, attitudes and emotions about entities or attributes from texts (Chen et al., 2020). At present, the sentiment dictionary is widely used in consumer product analysis, social public opinion monitoring, stock market forecasting and customer feedback tracking, and its main analysis methods are semantic-based and machine learning-based methods. Semantic-based method mainly calculates the emotional value of the text through the emotional dictionary and then determines the emotional tendency of the text. Music

DOI: 10.4018/IJITWE.336287

\*Corresponding Author

This article published as an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

teaching evaluation plays a guiding and quality monitoring role in music curriculum reform, which is the crucial factor in the success or failure of the music curriculum reform and an indispensable link in the whole music teaching work (Zhou et al., 2021). The goal of the music curriculum is achieved through teaching and various music practice activities. The “practical activity” here is a process, a longitudinal comparison of self-development for individual students. Due to the influence of social and family education and other environmental factors, many students lack the perception of music. The evaluation of music courses not only has the functions of guiding, identifying, inspiring, improving, and regulating music teaching, but also plays an important role in the development of students’ music quality, the improvement of music teachers’ teaching level, and the improvement of school music education and teaching management. Evaluation of students is the transformation of subject and object, which makes students become the main body in the process of appreciation. In the past appreciation classes, teachers’ evaluations often replaced students’ evaluation, mainly because teachers ignored students’ potential to appreciate music and dance.

With the popularity of the Internet in life, people’s lifestyles have changed a lot. Listening to music in leisure time is one of most people’s choices. Music is an expression carrier of emotion, and many songwriters express their emotions through music. It can be said that emotion is music’s essential feature and connotation. Nowadays, the Internet has many texts containing much emotional information, such as commodity evaluation information and comments on important events (Gui et al., 2019).

This paper analyzes the evaluation of music courses and emotional behaviors based on an emotional dictionary under online review mining. Online review is an important part of users’ original content, which refers to the comments of ordinary users on something on the Internet. With the continuous enrichment of network forms, online comments have become various, which can be divided into two forms: well-structured online comments and unstructured online comments. The purpose of online comment mining is to mine helpful information based on the massive comment information in the network, which can be described from three aspects: comment feature mining, comment text sentiment analysis, and comment text topic recognition (Bedoya et al., 2021). Attitudes and values, as the primary goal of the music curriculum, highlight the essence of music education as aesthetics. The music course’s education mode is to educate people by emotion and aesthetic education. Its educational effect lies not in acquiring knowledge and skills, but in enriching students’ emotional experience and cultivating students’ interest in music and emotional reflection. As an essential part of text mining, text topic extraction is a process of selecting some keywords in the text to represent the content of the text topic to extract the topic of the document (Gupta & Lehal, 2009). Its essence is a probability model, and the distribution of the document topic can be obtained by using an efficient probability inference algorithm, which is suitable for processing large-scale text sets and corpora (Cores-Bilbao et al., 2019).

The polarity judgment of words is the basis of text emotion analysis. However, as the polarity of emotional words is related to their specific fields, so far, there is no dictionary that can satisfy all fields of text emotion analysis. According to the specific needs in the research process, a specific domain emotion dictionary is constructed (Nian & Wang, 2017). Mood, as a specific type of emotion, is the proof. According to the above definition, the characteristics of an individual’s mood response to music are perceived by cognition and are often described by specific words. Because mood can be described, the research on music mood response is often carried out by obtaining verbal descriptions of subjects’ mood state under the action of specific music stimulus variables. The evaluation of music courses usually shows strong personal feelings. However, due to the freedom and openness of the network, this feedback without guidance often lacks organization, which leads to a comment that may involve products, services, environment, and other aspects. When users evaluate products and services, they usually focus on the related themes or features of products or services (Zhang et al., 2020). Daily formative evaluation should always run through the whole teaching process. It is a long,

18 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/article/emotional-behavior-analysis-of-music-course-evaluation-based-on-online-comment-mining/336287](http://www.igi-global.com/article/emotional-behavior-analysis-of-music-course-evaluation-based-on-online-comment-mining/336287)

## Related Content

---

### Heuristic Based Coverage Aware Load Balanced Clustering in WSNs and Enablement of IoT

Surjit Singhand Rajeev Mohan Sharma (2018). *International Journal of Information Technology and Web Engineering* (pp. 1-10).

[www.irma-international.org/article/heuristic-based-coverage-aware-load-balanced-clustering-in-wsns-and-enablement-of-iot/198354](http://www.irma-international.org/article/heuristic-based-coverage-aware-load-balanced-clustering-in-wsns-and-enablement-of-iot/198354)

### Demand-Driven Algorithm for Sharing and Distribution of Photovoltaic Power in a Small Local Area Grid

Mohammad Abu-Arqoub, Ghassan F. Issa, Ahmad F. Shubitaand Abed Alkarim Banna (2014). *International Journal of Information Technology and Web Engineering* (pp. 45-58).

[www.irma-international.org/article/demand-driven-algorithm-for-sharing-and-distribution-of-photovoltaic-power-in-a-small-local-area-grid/113320](http://www.irma-international.org/article/demand-driven-algorithm-for-sharing-and-distribution-of-photovoltaic-power-in-a-small-local-area-grid/113320)

### Whose Questionnaire is it, Anyway?

Andrew Saxon, Shane Walkerand David Prytherch (2010). *Integrating Usability Engineering for Designing the Web Experience: Methodologies and Principles* (pp. 289-308).

[www.irma-international.org/chapter/whose-questionnaire-anyway/40504](http://www.irma-international.org/chapter/whose-questionnaire-anyway/40504)

### The Influence of E-Commerce Website Colors on Usability

Jean-Eric Pelet (2010). *Integrating Usability Engineering for Designing the Web Experience: Methodologies and Principles* (pp. 264-288).

[www.irma-international.org/chapter/influence-commerce-website-colors-usability/40503](http://www.irma-international.org/chapter/influence-commerce-website-colors-usability/40503)

### A Multiagent Approach for Configuring and Explaining Workflow of Semantic Web Services

Vasco Furtado, Leonardo Ayresand Gustavo Fernandes (2009). *Agent Technologies and Web Engineering: Applications and Systems* (pp. 77-94).

[www.irma-international.org/chapter/multiagent-approach-configuring-explaining-workflow/5028](http://www.irma-international.org/chapter/multiagent-approach-configuring-explaining-workflow/5028)