

# Quantitative Framework of Political Education Micro-communication Mode Based on Reachable Information Matrix Algorithm

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**Abstract:** Based on the generalized decision reduction and reachable information matrix algorithm of the set-valued decision information system, this paper establishes a quantitative framework for the micro-communication model of political education. First, this paper draws on the comparison between communication and psychology using matrix to extract all decision rules based on Marxist theory and ideological and political education theory. Then, taking the dissemination effect of ideological and political education of college students as the research object, by analyzing the factors affecting the effect of dissemination of ideological and political education of college students, the factors and characteristics of political education dissemination are extracted. The construction of educational discourse system.

**Keywords:** Quantitative Framework, Political Education, Micro-communication Mode, Reachable Information Matrix Algorithm

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## 1. INTRODUCTION

With the advent of the information age, the way people obtain information and knowledge has undergone tremendous changes [1]. Under the guidance of policy documents such as "Ten-Year Development Plan for Education Informatization (2011-2020)" and "Opinions on Accelerating the Development of Vocational [2] Education Informatization", the modern media featuring "micro-communication" is widely used, Is sparking a new revolution in education. Learning to master modern media [3] technology and continuously enhancing timeliness and appeal is the goal and direction of Zhu Lai's reform of ideological and political theory courses in colleges and universities [4].

Establishing a comprehensive and open view of big data thinking and cultivating good data collection, screening, analysis and application capabilities can effectively narrow the information "gap" [5]. Using micro-communication technology in the era of big data to control data and master its use skills can shorten the distance between educators and classmates and build a bridge of communication [6]. From a practical point of view, this research helps to integrate the fundamental task of building morality and cultivating people into the initial [7], relay and follow-up stages of micro-communication. The organic integration of moral education in and strategy design [8].

In classical systems, the characteristics of a system can be obtained from the system matrix of the research system. People naturally [9] ask the question: whether the characteristics of the rough system generated by the rough set can also be obtained from the rough matrix of the system that studies the rough system [10]. In practical problems, due to the complexity of the problem, it is necessary to ensure that all the integrity of attribute values is often very difficult. For databases with missing data, or information systems with incomplete data, set-valued information systems can often be used to deal with [11], because missing or incomplete attribute values can be It is represented by all possible values

of this attribute, and the traffic flow of the road section is determined as a stable number [12]. In the actual investigation, the data obtained from the investigation are uncertain due to the influence of the investigation time, the quality of the investigator [13], and the surrounding environment and other factors. Moreover, in the process of data statistics and processing [14], there will be deviations within a certain range. The second is the research on the impact of micro-media on college students.

Weibo, WeChat and other application software derived from the micro-media era have attracted a large number of young college students, especially college students, by virtue of their convenient operation and unique charm. They are the groups that use Weibo [15], WeChat and other software the most. Definition of the media and the media environment. Mass media refers to social organizations with a certain scale that can operate large-scale media system activities [16]. According to the different development periods of mass media, as well as the differences in communication objects, communication channels, and operation methods, it is generally divided into traditional mass media and modern mass media.

All this information is presented on the platform established by itself, and then displayed to users through some high-end smart displays. In such an emerging communication process, information can be disseminated and received by people in the fastest way, and at the same time, interactivity is strengthened, which can be said to be the continuation and innovation of the new media era [17]. In recent years, domestic scholars have conducted a comprehensive and systematic analysis and research on the micro-level, especially the aspects that are most closely related to the hotspots and focal issues of current social concern. Among them, the research and elaboration of the right to speak in the field of ideology in our country is the majority. Hegel pointed out: "true thought and scientific insight can only be obtained through the labor of concepts.

Academic research work based on clarifying the connotation and extension of concepts and identifying and analyzing the conceptual category system is the basic prerequisite and fundamental guarantee for the development of scientific research. To establish a unified management platform for the integration and interoperability of smart campuses, integrate educational administration management systems and teaching resources [18]. The wide application of micro-communication provides an important opportunity for the construction of a new teaching mode of ideological and political theory courses.

## 2. THE PROPOSED METHODOLOGY

### 2.1 The Reachable Information Matrix

#### Algorithm

This paper proposes and studies the coarse information matrix for the first time. It can be seen from the discussion that each element in the rough information matrix is an ordered pair, which is a rough set that satisfies the binary property. The form is re-described, and the corresponding matrix reduction algorithm is proposed. Reference discussed the matrix algorithm for allocation reduction and rule extraction of incomplete decision tables based on compatibility relation) matrix reduction and rule extraction methods.

The reachable information matrix changes the subject relationship in the traditional teaching mode. Contrary to the "centralized" dominant teaching model where teachers teach and students accept. In recent years, science and technology and network technology have developed rapidly and are widely used. Improve the learning environment, enhance students' interest in learning, improve teaching quality, and ensure teaching effectiveness.

### 2.2 The Political Education Communication Model

The power of faith is limitless, especially in young students. In colleges and universities, by accepting correct ideological and political education and establishing one's correct life beliefs, it will have a positive impact on future life development. In the micro-communication activities of ideological and political education in colleges and universities that have been carried out, college students have changed from a single audience role-playing to a collection of dual identities, that is, continue to play an educated role.

People gradually become a new type of communication force while receiving ideological and political education micro-information. It mainly has the following characteristics: First, innovation. Innovation is an important magic weapon to improve the efficiency of information dissemination.

Dominance refers to the performance and play of leading and leading roles in the micro-communication activities. In the process of micro-communication, the huge quantification of micro-information, the diversification of micro-subjects, and the diversification of micro-media have raised issues worthy of consideration and solution to the selection of information, subjects, and media. in micro communication activities. Faith is a major issue fostered by mainstream values in the human world.

### 2.3 The Quantitative Framework for Political Education Micro-communication Models

Quantitative framework provides convenience for the popularization and grassroots of micro-communication. The educational platform built by micro-communication and the equal expression opportunities of social individuals provide the possibility to build a new platform for the teaching of ideological and political theory courses.

A series of programmatic development and utilization processes such as analysis, classification, storage, and integration. Only by realizing the scientific processing of information resources of ideological and political education in colleges and universities, can the cohesion of resources and the improvement of attraction and appeal can be formed, and then the reasonable conversion of resources to information and the effective play of resource value can be realized. New social in the era of big data. The mobile social behavior under the guidance of ideological and political education science in the era of big data should be integrated into new media technology means, and the integration of social behavior should follow the pace of the times. The scope of the micro-media era is not limited to one subject or field.

## 3. CONCLUSION

This paper takes the micro-era produced by micro-media as the background, discusses the origin and related concepts of micro-media, and combines the "survey on the use of micro-blog and WeChat by college students". This paper explores the innovation of the discourse system of ideological and political education in colleges and universities.

The current challenges and opportunities for the innovation of the discourse system of ideological and political education in colleges and universities are systematically analyzed, and it starts from four aspects: the principle of innovation, the content of innovation, the way of innovation, and the path of innovation. There are misunderstandings in the choice of micro-communication methods; The communication audience lacks the coping ability; the decision-making behavior of the micro-communication.

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