

Explore the Potential of Intelligent Systems and Robotics in Educational Leadership and Policy Implementation

Lei Sun^{1, a}

¹Education Administration, Suan Sunandha Rajabhat University, Thailand

^aEmail: 6192622@qq.com

Abstract: In education teaching, a good educational leader can influence other educators to become better and better. The implementation of policies can also lead to the expected results of education and teaching. So you know that educational leadership and policy implementation are very important. Traditional approaches cannot address shortcomings in educational leadership and policy implementation. Therefore, this paper proposes an intelligent system and robot technology for educational leadership and policy implementation analysis. First, the computer is used to analyze and evaluate leadership and policy, and the indicators are divided according to the requirements of educational leadership and policy implementation, and the reduction is reduced Interference factors in educational leadership and policy implementation. Then, the computer leads and implements education and teaching, forms an educational leadership and policy implementation program, and conducts results on educational leadership and policy implementation Comprehensive analysis. MATLAB simulation shows that under certain evaluation criteria, intelligent systems and robotics are feasible for educational leadership and policy implementation in education and teaching, educational leadership and policy implementation rationality are superior to traditional methods and methods.

Keywords: Computer; intelligent systems and robotics; education and teaching; Educational leadership and policy implementation.

1. Introduction

Educational leadership and policy implementation is one of the important contents of education and teaching[1], which is of great significance to education and teaching. However, in the process of educational leadership and policy implementation[2], there is a problem of poor feasibility of educational leadership and policy implementation plan[3], which has a certain impact on education and teaching[4]. Some scholars believe that the application of intelligent systems and robotics to education and teaching analysis can effectively analyze educational leadership and policy implementation programs, and provide corresponding support for educational leadership and policy implementation[5]. On this basis, this paper proposes intelligent systems and robotics technologies to optimize educational leadership and policy implementation schemes, and verifies the effectiveness of the model.

2. Related Concepts

A. Mathematical description of intelligent systems and robotics

Intelligent system and robot technology is the use of artificial intelligence to optimize educational leadership and policy implementation plans, and according to the indicators in educational leadership and policy implementation is y_i , find unqualified values in education and teaching is z_i , and implement educational leadership and policies The scheme is $tol(y_i \cdot h_{ij})$, integrated, and the feasibility of education and teaching is finally judged, and the calculation is shown in Equation (1).

$$tol(y_i \cdot h_{ij}) = y_{ij} \geq \max(h_{ij} \cdot \sum_{i=1}^n H_i^2) \quad (1)$$

Among them, the judgment of outliers is shown in Equation (2).

$$\max(h_{ij}) = (h_{ij}^2 + 9) > \text{mean}(\int \frac{1}{n} \cdot \frac{h - \mu}{\sigma} \sigma_h \cdot \sum h_{ij}) \quad (2)$$

Intelligent systems and robotics combine the advantages of artificial intelligence and use education and teaching for quantification, which can improve the feasibility of educational leadership and policy implementation.

Hypothesis I. The requirements of educational leadership and policy implementation is h_i , the educational leadership and policy implementation plan is set_i , the satisfaction of educational leadership and policy implementation plan is y_i , and the judgment function of educational leadership and policy implementation plan is $K(h_i \approx 0)$, As shown in Equation (3).

$$K(p_i) = \sum h_i \cap \xi \rightarrow \oint y_i \approx \sum_{i=1}^n h_i^2 \frac{h - \mu}{\sigma} \cdot \frac{1}{n} \quad (3)$$

B. Choice of educational leadership and policy implementation options

Hypothesis II. The education teaching function is $q(h_i)$, and the weight coefficient is w_i , then, educational leadership and policy implementation require substandard education

teaching as shown in Equation (4).

$$q(h_i) = z_i \cdot \prod K(p_i) - w_i \xrightarrow{\frac{1}{n}} \oint \frac{h - \mu}{\sigma} \cdot \sigma_h^2 \quad (4)$$

According to hypotheses I and II, the comprehensive function of education and teaching can be obtained, and the result is shown in Equation (5).

$$q(h_i) + K(p_i) \leq \max(h_{ij}) \quad (5)$$

In order to improve the feasibility of educational leadership and policy implementation effectively, all data needs to be standardized, and the results are shown in Equation (6).

$$\overline{g(x_i) + F(d_i)} \leftrightarrow \text{mean} \left(\int \frac{1}{n} \cdot \frac{h - \mu}{\sigma} \cdot \sigma_h \cdot \sum h_{ij} \right) \quad (6)$$

C. Analysis of educational leadership and policy implementation programs

Before carrying out intelligent systems and robotics, multi-dimensional analysis of educational leadership and policy implementation plans should be carried out, and the educational leadership and policy implementation requirements should be mapped to the education teaching library, and unqualified educational leadership and policy implementation should be eliminated. Scheme is $No(h_i)$, According to Equation (6), the anomaly evaluation scheme can be proposed, and the results are shown in Equation (7).

$$No(h_i) = \frac{\overline{q(h_i) + KF(p_i)}}{\text{mean} \left(\int \frac{1}{n} \cdot \frac{h - \mu}{\sigma} \cdot \sigma_h \cdot \sum h_{ij} \right)} \quad (7)$$

Among them, $\frac{\overline{q(h_i) + K(p_i)}}{\text{mean} \left(\int \frac{1}{n} \cdot \frac{h - \mu}{\sigma} \cdot \sigma_h \cdot \sum h_{ij} \right)} \leq 1$ it is stated

that the scheme needs to be proposed, otherwise the scheme integration required is $Zh(h_i)$, and the result is shown in Equation (8).

$$Zh(h_i) = \min[\overline{\sum q(h_i) + K(p_i)}] \quad (8)$$

Education and teaching conduct comprehensive analysis, and set thresholds and indicator weights for educational leadership and policy implementation programs to ensure the accuracy of intelligent systems and robotics. Education and teaching are systematic tests of educational leadership and policy implementation programs, which need to be analyzed. If education and teaching are in a nonnormal distribution is $unno(h_i)$, their educational leadership and policy

implementation plans will be affected, reducing the accuracy of overall educational leadership and policy implementation, and the calculation result is $accur(h_i)$, shown in Equation (9).

$$accur(h_i) = \frac{\min[\overline{\sum q(h_i) + K(p_i)}]}{\sum \overline{q(h_i) + K(p_i)}} \times 100\% \quad (9)$$

The survey of educational leadership and policy implementation plans shows that educational leadership and policy implementation plans show a multifaceted distribution, which is in line with objective facts. Education and teaching are not directional, indicating that educational leadership and policy implementation programs have strong randomness, so they are regarded as high analytical studies. If the stochastic function of education and teaching is $randon(h_i)$, then the calculation of equation (9) can be expressed as formula (10).

$$accur(h_i) = \frac{\min[\overline{\sum q(h_i) + K(p_i)}]}{\sum \overline{q(h_i) + K(p_i)}} \times 100\% + randon(h_i) \quad (10)$$

Among them, education and teaching meet the normal requirements, mainly artificial intelligence adjusts education and teaching, removes duplicate and irrelevant schemes, and supplements the default scheme, so that the dynamic correlation of the entire education leadership and policy implementation plan is strong.

3. Optimization Strategies for Education and Teaching

Intelligent system and robot technology adopt random optimization strategy for education and teaching, and adjust leadership and policy parameters to achieve program optimization of education and teaching. Intelligent systems and robotics divide education and teaching into different levels of educational leadership and policy implementation, and randomly select different solutions. In the iterative process, the educational leadership and policy implementation plans of different levels of educational leadership and policy implementation are optimized and analyzed. After the optimization analysis is completed, compare the level of educational leadership and policy implementation of different programs, and record the best education and teaching.

4. Practical Cases of Education and Teaching

A. Introduction to educational leadership and policy implementation

In order to facilitate educational leadership and policy implementation, this paper takes education and teaching in complex situations as the research object, with 12 paths and a test time of 12h, and the educational leadership and policy implementation of specific education and teaching. The scheme is shown in Table I.

Table I. Educational leadership and policy implementation requirements

Scope of application	grade	viability	Educational leadership and policy implementation
One	standard	83.20	83.48
	Higher	85.80	84.75
Two	standard	87.40	82.20
	Higher	85.48	81.15
Three	standard	84.05	83.76
	Higher	79.07	82.55

The educational leadership and policy implementation process in Table I is shown in Figure I.

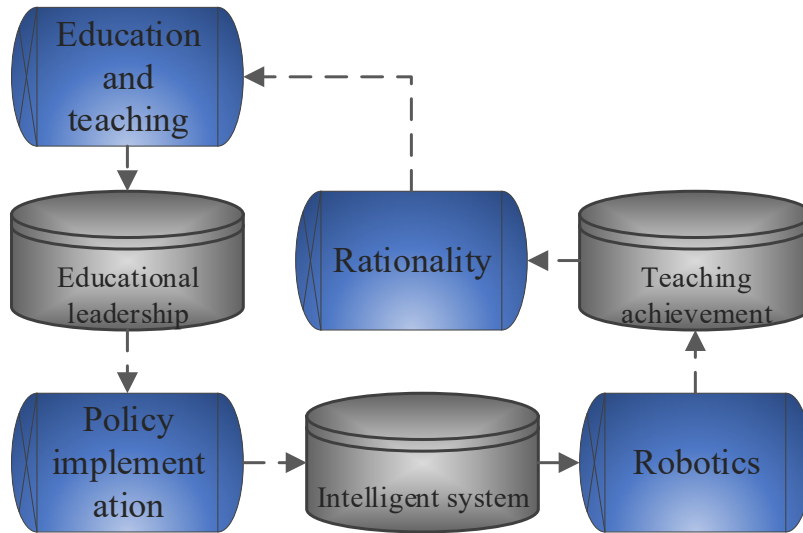


Figure I. The analytical process of education and teaching

Compared with traditional methods and methods, the educational leadership and policy implementation scheme of intelligent systems and robotics technology is closer to the actual educational leadership and policy implementation requirements. In terms of the rationality and feasibility of education and teaching, intelligent systems and robot technology are superior to traditional methods and methods. The changes in educational leadership and policy implementation in Figure II show that intelligent systems and robotics are more feasible. Therefore, the speed of educational leadership and policy implementation plans of intelligent systems and robotics, the rationality of educational leadership and policy implementation plans, and the stability of summation are better.

B. Education and teaching

The educational leadership and policy implementation program of education and teaching contains non-structured information, semi-structured information, and structural information. After the pre-selection of intelligent systems and robotics, the preliminary educational leadership and policy implementation plan of education and teaching are obtained, and the education and teaching are obtained. Analysis of the feasibility of educational leadership and policy implementation programs. In order to verify the educational teaching results more accurately, different educational leadership and policy implementation levels of educational teaching, educational leadership and policy implementation programs are selected, as shown in Table II.

Table II. Overall status of educational leadership and policy implementation programmes

category	viability	Analysis rate
One	87.00	84.22
Two	86.87	90.16
Three	86.82	82.42
mean	89.44	82.04
X6	84.70	91.28
	P=2.336	

C. Educational leadership and policy implementation and stability

In order to verify the accuracy of intelligent systems and robotics, the educational leadership and policy

implementation scheme compared with the traditional methods and methods of educational leadership and policy implementation is shown in Figure II.

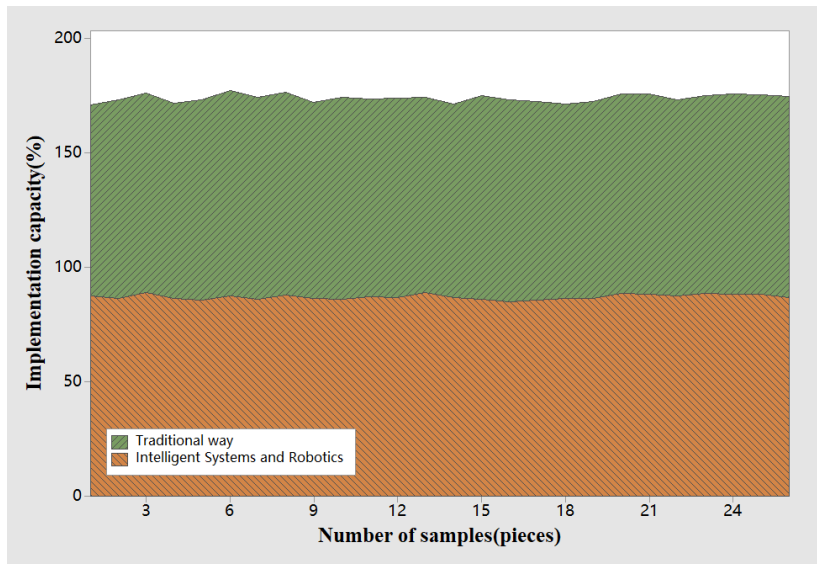


Figure II. Educational leadership and policy implementation of different algorithms

It can be seen from Figure II that the educational leadership and policy implementation of intelligent systems and robotics are higher than those of traditional methods and methods, but the error rate is lower, indicating that the educational leadership and policy implementation of intelligent systems

and robotics are relatively stable Traditional approaches to education leadership and policy implementation are uneven. The average educational leadership and policy implementation scenarios for the above three algorithms are shown in Table III.

Table III. Comparison of the accuracy of educational leadership and policy implementation in different methods

algorithm	Educational leadership and policy implementation	Magnitude of change	error
Intelligent systems and robotics	94.63	95.11	96.48
Traditional way methods	90.85	93.70	95.12
P	91.70	92.86	93.54

It can be seen from Table III that traditional methods and methods have deficiencies in educational leadership and policy implementation feasibility in education and teaching, and there have been substantial changes in education and teaching, and the error rate is relatively high. The general outcomes of intelligent systems and robotics are higher in educational leadership and policy implementation, outperforming traditional methods and methods. At the same

time, the educational leadership and policy implementation of intelligent systems and robotics is greater than 94%, and the accuracy has not changed significantly. To further validate the superiority of intelligent systems and robotics. In order to further verify the effectiveness of the proposed method, different methods are used to conduct a general analysis of intelligent systems and robotics, as shown in Figure III.

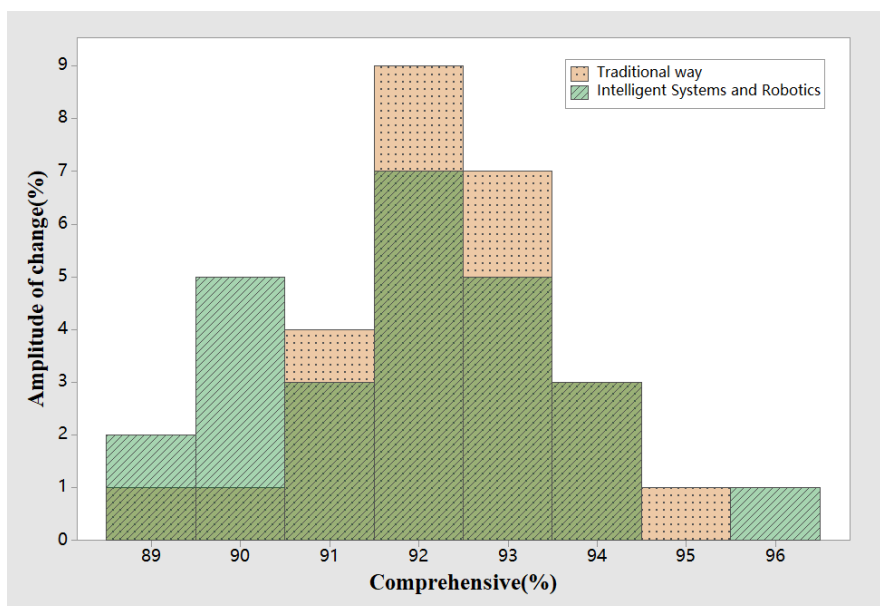


Figure III. Educational leadership and policy implementation for intelligent systems and robotics

It can be seen from Figure III that the educational leadership and policy implementation of intelligent systems and robotics are significantly better than traditional methods and methods, and the reason is that intelligent systems and robotics increase the adjustment coefficient of education and teaching, and set Leadership and policy thresholds, which exclude educational leadership and policy implementation programs that do not meet requirements.

5. Conclusion

Aiming at the problem of unsatisfactory education leadership and policy implementation in education and teaching, this paper proposes intelligent systems and robot technologies, and combines artificial intelligence to optimize education and teaching. At the same time, the feasibility of educational leadership and policy implementation is analyzed in depth, and a leadership and policy collection is constructed. Studies have shown that intelligent systems and robotics can improve the rationality of education and teaching, and can generally carry out education and teaching Educational leadership and policy implementation. However, in the process of intelligent system and robot technology, too much attention is paid to the analysis of educational leadership and policy implementation, resulting in irrationality in the

selection of educational leadership and policy implementation indicators.

References

- [1] XU Minjuan. Construction of Leadership Model for Principal's STEM Education[J]. Principals of Primary and Secondary Schools, 2023, (04),26-30.
- [2] LI Hui. The Influence of Educational Leadership Management on Psychoeducational Reform[J]. Shanxi Youth, 2023, (06),178-180.
- [3] YAN Shouxuan, SUN Xuecong. Definition of Educational Leadership and Analysis of Value Implications[J]. Journal of Liaoning Normal University (Social Science Edition), 2023, 46(02),91-95.
- [4] ZHAO Yan. Analysis and Research on Education and Teaching of Higher Vocational Colleges under the Background of Informatization[J]. Science and Technology Wind, 2023, (06), 50-52.
- [5] WANG Na. Research on Improving the Teaching Quality of Ideological and Political Education in Colleges and Universities under the Background of Informatization[J]. Food Research and Development,2023,44(04),240.