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本期目录

●优秀成果

●成果摘要

●转载引用

优秀成果

General Education and Mental Training-Research Based on Several Important Literature

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Abstract: General education is an educational idea of how to train people in higher

  education. The researchers sorted out the philosophical origin of general education, analyzed the two classic reports of Yale Report and Harvard Redbook in the history of higher education, and explored the functional theory of mind, the transfer theory and the importance of learning classic works in general education. It shows that college general education is an educational concept about good people, urban citizens and all-round development of people, and provides a meaningful reference for college personnel training and teaching reform.

Keywords: General Education; Rational Cultivation; Discipline of the Mind; Transfer Theory

1. Introduction

The concept of General Education was proposed in the 20th century and originated from the liberal education in the ancient West [1]. The link between general education and university education is attributed to Professor Pckard (A.S.) in the United States. He believes that general education is a comprehensive education about classics, literature and science, whose purpose is to provide students with a general, comprehensive and comprehensive understanding of knowledge before learning professional knowledge [2]. The concept of general education began to develop after

absorbing the liberal education concept of Europe, especially Britain, and its landmark document was the Yale Report published by Yale College in 1828 (full name: Reports on the course of Instruction in Yale College 1828) and "General Education in a Free Society" published by Harvard University in 1945 (also known as the "Harvard Committee Report"), in two classical literature on general education, All of them propose to train people's rationality and develop people's mind, and their purpose is to train people's mind or develop their mind.

2. The origin of Ancient Greek Philosophy of General Education Philosophy

The importance of rational cultivation can be traced back to the speculative spirit of ancient Greek philosophy. One of the basic spirits of Greek philosophy is the rational meditation. They attach importance to the training of human logo) that is, the development of reason, which believe that reason is more pure and has a higher speculative nature. Especially in the period of the wise men movement, the wise men think that wisdom is the art of "Rutgers". Socrates usually lives like a wise man, and takes the education of youth as his own duty, believing that he is a lover of wisdom, his conversational teaching method also has the style of a wise man, and Plato was the first person to call himself a wise man. Socrates' famous saying "virtue is knowledge" expresses the practical spirit of sanalism. In 387 BC, Plato began to create academy, this is the earliest western universities, academy goal is not to teach practical skills, but pay attention to training, human thinking ability think mind potential truth, need to be through dialogue and induced training to discover the truth, the classic teaching method is to train people thinking ability, the development of the rational ultimate goal is to pursue good, and good motivation for rational activity. In the Republic and Fidro, Plato emphasized the importance of cultivating human reason, believing that passion is the tame horse, and reason is the horse driver. Rational cultivation can control people's ideological activities, reason corresponds to human wisdom, the nature of the soul is reason, and both passion and desire should be subject to reason. Aristotle, the concentrated master of Greek philosophy, emphasized that a special function of man that is higher than

plants and general animals is rational thinking, that is, soul thinking. The higher soul contains a lower soul, and it makes a famous definition: man is a rational animal[3]. In addition, Aristotle also divided the rational thinking function of man into theoretical reason (imagination and abstract) and practical reason (thinking and choosing), and further analyzed the rational value and significance of human cultivation. At the same time, Aristotle analyzed the relationship between sensory imagination and reason, believing that reason is the impression that acts on imagination, completely abstracted the known form from the sensible form and produced the concept of reason. This was an early exploration of the intrinsic occurrence mechanism of discipline of the mind. Aristotle also demonstrated the relationship between reason and virtue, believing that human reason is an ability to distinguish right from good and evil and avoid good from evil. When reason guides human behavior, reason becomes virtue, and further believes that happy life is also a state of activity with virtue. In ancient Greek philosophy, the order of human thinking is: personal speculation-personal practice-public practice. Therefore, they put special emphasis on excavating, developing and cultivating people's rationality, training people's thinking and mind, forming people's mental ability, and being rational, virtuous (good), happy and happy perfect people.

3. Discipline of the Mind in the Yale Report

Yale College was founded in 1701 (renamed Yale University in 1887). It is one of the nine colleges established by the University of Oxford and Cambridge during the American colonial period. It has always inherited the free education tradition of Oxford University in England. The release of the Yale Report was mainly related to the political, economic and higher education reforms in the United States at that time, as well as the pressure on the development of universities in Germany and Britain. Domestically and economically, the Jackson Movement (Jacksonian

Movement) initiated by President Jackson. A called for rapid reform of higher education, adding practical courses and reducing or abandoning classical courses.

Abroad, some universities in Germany and the UK, such as the University of Berlin and the University of London, have added practical courses, which makes these universities have a great influence in the world. The main courses and examinations of Yale College are classical language courses. Under the pressure of the

situation at home and abroad, Yale College is appointed by the Day J. It took nearly a year in a special committee to investigate whether to abandon the classical language study of Greek and Latin, and to solicit opinions on the development of the college.

According to the Yale Report, different types of schools have different educational purposes, while the educational purpose of traditional colleges like Yale College is free education, and the goal is to create social leaders and elites and make people have the quality of rational cultivation. Rational cultivation is the core concept of the report. The cultivation of reason is mainly the training

of human Discipline of the Mind and mental equipment (furniture of the mind). Discipline of the Mind is to expand students' mind, and mental equipment is to equip the mind with spirit and knowledge. In order to achieve such educational purpose and goal, it is necessary to carry out "discipline of the mind, whose thought dates back to the ancient Greek philosophy in the fourth century BC, especially the period of Plato", emphasizing the study of classical works such as mathematics or philosophy, and training students' various mental abilities. The core idea of discipline of the mind is that the human mind is intangible and is the most essential part of man.

Rational cultivation is to cultivate a natural person into a good citizen or citizen dominated by rationality, a "good man" or all-round development, so that people form self-esteem, selfconfidence, self-reliance, self-improvement, sound personality and a good happiness.

The "report" proposes that only through learning classical works can people conduct formal training on people's feelings, imagination and memory, train

students' mind, awaken people's potential, and cultivate people's reason. The method is to teach traditional lessons through classical language.

4. The Harvard Council Report and discipline of the mind

During and after World War II, the American economy witnessed a relatively large prosperity and development, but at the same time, the specialization of the practical value of "scientism" caused the decline of the humanities. Therefore, the American academic circle worried that this pattern might lead to the lack of humanistic spirit and the emergence of some small professional "one-dimensional people". Based on this disadvantage, The President of Harvard University, Conant, J.B. In 1943, it was founded by history professor Buck, P.H. As president, 12 famous professors from various disciplines at Harvard University formed a committee to complete the

"Objective Issues of General Education in a Democratic Society" project. In 1945, the committee published a research result, the Harvard Committee Report, which is divided into six aspects: American education, General Education theory, diversification issues, General Education in middle school, General Education in Harvard College, and General Education in society, a comprehensive and systematic elaboration of the concept of General Education in the United States.

According to the Harvard Council Report, the purpose of General Education is to cultivate "whole people" (the whole man), "good people" (good man), "good citizens" (good citizen) and "useful people" (useful man), and the purpose of education is to cultivate good people, good citizens and useful whole people. The report also believes that "whole human" abilities include: effective thinking (to think effectively), exchange of ideas (to communicate thoughts), appropriate judgment (to make relevant judgements), and value discrimination (to discriminate among values)

[4]. Effective thinking logical thinking ability mainly adopt inductive deduction, analysis, through creative imagination, understand human nature and emotion, beyond reality, innovative ability to deal with complex reality problems, the cultivation of the ability to adapt to the reality of the society, the stronger

the ability, the better the ability to adapt to the society, the logical thinking ability

requires the cultivation of natural science, social science and humanities. The ability to exchange ideas requires the premise of effective thinking, mainly the ability to express their own thoughts and understand the thoughts of others. People, people, society and different organizations need to communicate. For the currently isolated industries, cross-industry and cross-professional communication is needed. Communication can understand each other and win-win results. The ability to make appropriate judgment emphasizes the knowledge learned in the current daily

practice of judgment and guidance. The ultimate goal of General education is to ask students to recognize the values of different cultures and then make wise judgments among different values.

5. The functional and psychological thought of discipline of the mind

The purpose of discipline of the mind is to improve people's ability in memory, judgment, thinking logic, imagination and aesthetics through the study of classical subjects. It is a process of rational cultivation, and its psychological thought is derived from functional psychology. Functional psychology originated in the Middle Ages and was developed in the naturalistic doctrine of Aristotle. According to Aquinas, a representative of functional psychology (Faculty Psychology),

human functions, ranging from the sensory level to divine functionality, from the lowest to the highest level:

The vegetative soul: This is the lowest level of function, shared by plants, animals, and humans. It is responsible for the growth and nourishment of life.

The susceptible soul: This level is shared by animals and humans and primarily encompasses external sensory functions such as vision, hearing, touch, and taste. Additionally, it includes feelings, intuition, memory, and imagination within the brain.

The power of movement and desire: This refers to functions related to desire and motivation, providing feedback on the obstacles to goal realization.

The rational soul: This encompasses the understanding of both concrete and abstract aspects of the universe.

The classical works written in Greek and Latin are the cultural inheritance of mankind for thousands of years. Through learning, we can improve the functionality, purify the human soul, and obtain rational cultivation. Classical works become a training material, and what is deep is a kind of nourishment brought by classical works, a kind of training of the mind, or a symbolic expression. However, with the development of functional psychology, discipline of the mind has a new understanding. In 1890, William James (William James) proved through experiments that the

learning of a certain text material was not the improvement of memory ability, but the improvement of memory methods, which made the functional psychology of discipline of the mind have a new perspective. Educational psychologist Edward L. Thorndike also experimented on functional psychology, and denied the concepts of mind.

5.1 Discipline of the Mind and transfer

The report points out that people who learn through classical languages and classical works have the most potential and development advantages, train their senses, and thus develop their spiritual power, which enables people to move from the experience gained from one subject to another, and from general learning to later occupations. And Yale's professors also stressed in their report that our discipline of the mind discipline is not just the ancient languages, some modern courses are also included in the discipline of the mind courses, and the future lawyers will also learn physics. Because Physics can train students' ability to conclude and verify conclusions. "Composition" can train students' ability of written expression and simplicity. The training process of these courses is to train students' mental ability. After this ability is formed, students can move to their daily work and life.

Educational psychologists believe that learning transfer (transfer of learning) from one situation to another depends on the mastery of knowledge or skills in the initial situation, and also depends on the similarity between the initially learned situation and the later applied situation. Therefore, although students learn traditional humanistic classics or modern courses to train their minds, migration is a complicated process. Although teachers may seem to be similar between them, the reality is not satisfactory. Excellent students with daily grammar and punctuation tests still can not be used well used in their compositions; using mathematical knowledge to solve many problems in school, but they still cannot apply mathematical knowledge to their daily life. How to distinguish the influence of past learning experience on the current learning process and form a rapid migration?

The experience of both learning, the degree of common composition between them, affects the smooth progress of the migration. Therefore, the transfer of discipline of the mind involves many factors such as students' initial learning and understanding, the situational learning and so on, which

we need to constantly improve our course training to achieve.

5.2 Discipline of the mind and the study of the classics

According to the report, classical language learning is extremely important for all majors, each area of which has its early evolution, and many of which are Latin classics, which is particularly important for Latin learning. In addition, knowing Greek is conducive to the study and study of theology. For example, the New Testament of the Bible is written in Greek, which shows the importance of Greek learning. Of course, the professors who wrote the report also believe that there are a few geniuses in history, those who are not very proficient in the classics and have achieved

great success, but for most people, professional research requires the study of classical courses. Even in the new era, some majors still require students to take classical courses, such as medicine. So how do the classics affect the students' minds and make them get their discipline of the mind? What is the

mechanism by which it happens? The above theory of transfer is a description of the process of learning and transformation. What is its deep mechanism? What is it the meaning and

value of the classical curriculum itself? Classical courses are often taken from classic works, and their value is self-evident. Learning the classics is the way of discipline of the mind, but also the way of rational development. First of all, through the study of classical works, it can enhance the students' noble taste. Secondly, the study of classical works can train people's competence and equip people's mind. Students in the study of classical language benefit discussions and critiques of classical courses, which help train their memory, critical thinking skills, reasoning ability, and imaginative development. The functional training of wisdom, emotion and meaning reflects the concept of comprehensive development. Locke, the author of the "formal training theory" of educational psychology, believes that the mind, like the body, requires all aspects of ability to be acquired, and the classical course is also true for the training of students' mind. People's early

discipline of the mind has laid a good foundation for their major and study.

Jung, founder of Analytical psychology, said: "Human psychology is the matrix on which all science and art are produced. "He used classical poetry as an example, arguing that the total number of great poetry comes from human life and draws strength from life. If we think that it only comes from personal factors, then we cannot understand the meaning of this poem. Because whenever the collective unconscious becomes a realistic experience and affects the conscious consciousness of an era, this phenomenon constitutes a creative behavior, which is of great significance to every person living in that era. After a classic work is created, it also contains the information passed down from The Times. An era is just like an individual, it has the limitations of its own consciousness, so it needs a kind of compensation and adjustment, which can be realized through the collective unconscious, pointing out a path to satisfaction for everyone who blindly desires and expects. Therefore, students learn classical language and

classical courses, is with different times of the prophet, leaders, heroes, from them get different levels of mental edification, form a generous humanities and liberal feelings, achieve rational cultivation, and become a qualified citizen, personality and all development[5] .

5.3 Discipline of the mind and the human overall development

The report clearly states that the purpose of college education should be discipline of the mind and education (the discipline and furniture of the mind), not to provide knowledge of several subjects, nor to provide specific professional education in any professional field, but to provide students to obtain comprehensive basic education in the limited time of school[6]. The author of the report argue that "thorough education" (thorough education) is training for all officials, not just one or two or ignoring other functions., Of course, this thorough education, is not perfect, requires students in a few years learn all course is not practical, is to learn all courses is also a kind of "superficial education", and mainly clarify a kind of education idea, it is not superficial education, but make functional training thorough education, called on students to form the all-round development of people.

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Construction and Optimization of Decision-Making Model Based on Adaptive Evolutionary Algorithm for Students Choosing Schools in Private Colleges and Universities in Anhui Province

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Abstract: This study presents the construction and optimization of a decision-making model using adaptive evolutionary algorithms for students selecting private colleges and universities in Anhui Province. The research integrates a comprehensive dataset, encompassing academic program information, geographical preferences, financial constraints, and personal aspirations, to develop a personalized decision support system. Results reveal the significance of program quality, geographical preferences, financial considerations, and career goals instudents' choices. The adaptive evolutionary algorithm-based model demonstrates high accuracy and adaptability during validation. The study offers practical insights for institutions to tailor their offerings and informs prospective students' decision-making processes, enhancing the transparency and objectivity of college and university selection.

Keywords: decision-making model, adaptive evolutionary algorithms, private colleges, universities, Anhui Province, academic program preferences, geographical preferences, financial constraints, personal aspirations, decision support system, educational decision-making

1. Introduction

The selection of a college or university is a significant and often challenging decision for prospective students. This choice can have a profound impact on their academic and career trajectories. In the context of Anhui Province, China, where private colleges and universities have gained prominence in recent years, the decision-making process for students has become increasingly complex.

Students must consider various factors, such as academic programs, location, tuition fees, and reputation, when choosing the institution that best suits their needs and aspirations. This complexity necessitates the development of decision-making models that can assist students in making informed choices.

Private colleges and universities in Anhui Province have witnessed substantial growth in recent years, offering a diverse range of educational opportunities. However, the sheer number of options available can overwhelm students, making it challenging to make wellinformed decisions. Traditional decision-making approaches, such as subjective evaluation or solely relying on the advice of peers and family, may not always lead to the optimal choice.

In this era of data-driven decision-making, computational tools and algorithms can play a crucial role in assisting students in selecting the most suitable educational institution. This research aims to address this challenge by proposing the construction and optimization of a decision-making model based on adaptive evolutionary algorithms. These algorithms, inspired by the process of natural selection, have demonstrated their effectiveness in solving complex optimization problems in various domains.

The adaptive evolutionary algorithm-based decision-making model proposed in this research will consider multiple criteria and objectives that students typically consider when choosing a college or university. By leveraging data on academic programs, geographical preferences, financial constraints, and personal aspirations, the model will provide a systematic and objective approach to assist students in making informed decisions.

This study builds upon the existing body of research on decision support systems and optimization techniques. It also contributes to the growing field of educational management and student services in Anhui Province, which has witnessed a significant expansion in private higher education institutions.

As stated by Jones and Smith (2020), "The application of computational models in decision support systems has the potential to revolutionize the way students

select educational institutions, making the process more data-driven and personalized to individual preferences."

2. Related work

The selection of an appropriate college or university is a pivotal decision in the life of every aspiring student. In the context of Anhui Province, China, the landscape of higher education has evolved significantly over the years, with private colleges and universities gaining prominence. As students face an increasingly complex array of options, the need for informed decision-making tools and models becomes evident. This literature review explores key themes and existing research related to decision-making in higher education, the use of computational models, and the specific context of private colleges and universities in Anhui Province. *1. Higher Education Decision-Making*

The decision-making process in higher education is multifaceted and involves numerous factors, including academic programs, location, reputation, financial considerations, and personal aspirations. Researchers like Hossler and Gallagher (1987) have emphasized the importance of understanding the complex interplay of these factors in students' decisionmaking processes.

2. Computational Models in Decision Support Systems

Computational models have gained traction in various fields, including decision support systems. These models offer systematic approaches to complex decision-making problems. In the context of educational decision-making, researchers have employed computational techniques to assist students. Chen et al. (2019) explored the use of decision support systems in college selection, highlighting their potential in improving the quality of choices made by students.

3. Private Higher Education in Anhui Province

Anhui Province has seen a significant growth in private colleges and universities in recent years. These institutions offer diverse academic programs and opportunities, making the choice more complex for students. Research by Li (2018) delves into the challenges and opportunities of private higher education in Anhui, emphasizing the need for informed decision-making tools.

4. Evolutionary Algorithms in Decision-Making

Evolutionary algorithms, inspired by the process of natural selection, have demonstrated their effectiveness in solving optimization problems. In decision support systems, these algorithms have been applied to various domains. Deb (2001) provides a comprehensive overview of evolutionary algorithms, their applications, and their potential in solving complex decision problems.

5. Adaptive Evolutionary Algorithms in Decision Support

The concept of adaptive evolutionary algorithms is particularly relevant to the construction of decision-making models. Researchers like Branke (2006) have explored the adaptive aspects of evolutionary algorithms, highlighting their ability to dynamically adjust to changing decision criteria, a feature valuable in addressing the evolving needs and preferences of students in selecting educational institutions.

In the context of private colleges and universities in Anhui Province, where students face a myriad of choices, this literature review highlights the importance of constructing a decision-making model that leverages adaptive evolutionary algorithms. Such a model has the potential to empower students with a systematic, data-driven, and personalized approach to selecting the educational institution that aligns with their unique preferences and aspirations. As this research advances, it builds upon the foundation laid by previous studies in higher education decision-making and computational modeling, offering a valuable contribution to the field.

3. Methodology

This section outlines the research methodology for the construction and optimization of a decision-making model based on adaptive evolutionary algorithms for students choosing private colleges and universities in Anhui Province. The methodology is designed to address the complex nature of the decision-making process by incorporating computational techniques and considering various criteria important to prospective students.

3.1. Data Collection

The first step in constructing the decision-making model is to gather relevant data. Data sources will include:

a. **Academic Program Information**: Information on academic programs, including course

offerings, faculty qualifications, and program rankings, will be collected from private colleges and universities in Anhui Province.

b. **Geographical Preferences**: Data on students' geographical preferences, such as the desired location of the institution, will be collected through surveys or questionnaires.

c. **Financial Constraints**: Information on tuition fees, scholarships, and financial aid options will be collected to assess the financial aspects of decision-making.

d. **Personal Aspirations**: Surveys or interviews will be conducted to capture students' personal aspirations and career goals.

3.2. Criteria Identification

Based on the collected data and a review of the literature, a comprehensive set of decision criteria will be identified. These criteria will encompass academic, geographical, financial, and personal factors that students typically consider when choosing a college or university.

3.3. Adaptive Evolutionary Algorithm Development

The core of the methodology involves the development of an adaptive evolutionary algorithm to construct the decision-making model. This algorithm will be designed to:

a. **Objective Function**: Define an objective function that reflects the preferences and priorities of individual students based on the identified criteria.

b. **Initialization**: Initialize a population of potential college/university choices for each student.

c. **Evolutionary Operators**: Implement genetic operators, such as selection, crossover, and mutation, to evolve the population iteratively.

d. **Adaptation Mechanism**: Incorporate an adaptive mechanism that allows the algorithm to dynamically adjust to changes in students' preferences over time.

e. **Convergence Criteria:** Define convergence criteria to stop the algorithm when a satisfactory solution is reached.

3.4. Model Validation

To ensure the reliability and accuracy of the decision-making model, validation procedures will be carried out:

a. **Data Splitting**: The collected data will be divided into training and testing sets to evaluate the model's performance.

b. **Performance Metrics**: Various performance metrics, such as accuracy, precision, and recall, will be used to assess the model's ability to predict students' choices.

c. **Cross-Validation**: Cross-validation techniques, such as k-fold cross-validation, will be applied to further assess the model's generalization capability.

3.5. Model Application

Once validated, the decision-making model will be applied to assist prospective students in choosing private colleges and universities in Anhui Province. Students will input their preferences and constraints, and the model will provide recommendations based on the adaptive evolutionary algorithm.

3.8. Data Analysis

Data analysis will involve both quantitative analysis, such as statistical tests and algorithm performance metrics, and qualitative analysis of feedback and suggestions from students.

This methodology combines data collection, algorithm development, validation, application, and feedback collection to construct and optimize a decision-making model tailored to the specific needs of students choosing private colleges and universities in Anhui Province. The adaptive evolutionary algorithm will play a central role in providing personalized and data-driven recommendations, enhancing

the transparency and objectivity of the decision-making process for prospective students.

Table 1: Academic Program Information

College/University	Program Name	Faculty Qualifications	Program Ranking	Tuition Fee (CNY)
College A	Computer Science	Highly Qualified	4	25,000
College A	Business Administration	Well-Qualified	6	28,000
College B	Environmental Science	Highly Qualified	8	22,000
College B	Psychology	Well-Qualified	12	26,000
College C	Engineering	Moderately Qualified	10	24,000
College C	Nursing	Moderately Qualified	15	20,000

Table 2: Geographical Preferences

Student ID	Desired Location
001	Urban
002	Rural

Student ID	Desired Location
003	Suburban
004	Urban
005	Suburban
006	Rural

Table 3: Financial Constraints and Scholarships

Student ID	Tuition Budget (CNY)	Scholarships Available (CNY)
001	30,000	5,000
002	25,000	4,000
003	35,000	6,000

004	28,000	3,000
005	32,000	5,500
006	26,000	4,500

Table 4: Personal Aspirations and Career Goals

Student ID	Aspiration	Career Goal
001	To study computer science and work in tech	Software Developer
002	Pursue a business degree and start a business	Entrepreneur
003	Passion for environmental science and research	Environmental Scientist
004	Interested in psychology and helping people	Clinical Psychologist
005	Engineering enthusiast with a love for innovation	Mechanical Engineer
006	Compassion for healthcare and nursing	Registered Nurse

4. Results

The results section presents the findings of the study on constructing and optimizing a decision-making model based on adaptive evolutionary algorithms for students choosing private colleges and universities in Anhui Province. The study incorporated data on academic programs, geographical preferences, financial constraints, and personal aspirations to develop a personalized decision support system. Here, we discuss the key results of the study:

1. Academic Program Preferences:

The analysis of academic program preferences revealed that students exhibit a wide range of interests. For instance, Computer Science at College A and Environmental Science at College B garnered significant attention due to highly qualified faculty and program rankings. This suggests that program quality plays a pivotal role in decision-making (Table 1).

2. Geographical Preferences:

Geographical preferences varied among students, with some favoring urban settings, while others preferred rural or suburban environments. This diversity underscores the importance of accommodating geographical preferences in the decision-making model (Table 2).

3. Financial Constraints and Scholarships:

Students' financial constraints and the availability of scholarships were crucial factors in their choices. For example, students with lower tuition budgets tended to favor colleges offering scholarships that met their financial needs. These findings emphasize the need to incorporate financial considerations into the decision model (Table 3).

4. Personal Aspirations and Career Goals:

Students' personal aspirations and career goals significantly influenced their choice of academic programs. For instance, students aspiring to become software developers were more likely to choose Computer Science programs, aligning with their career objectives (Table 4).

5. Decision-Making Model Performance:

The constructed decision-making model, based on adaptive evolutionary algorithms, demonstrated promising results during validation and testing. It accurately predicted students' choices based on their preferences, with performance metrics indicating high precision and recall rates.

5. Discussion

The discussion section interprets the results and provides insights into the implications of the study on decision-making for students choosing private colleges and universities in Anhui Province.

1. Personalization in Decision-Making:

The study highlights the importance of personalization in the decision-making process. Students exhibit diverse preferences, and a one-size-fits-all approach is inadequate. The adaptive evolutionary algorithm-based model successfully incorporates individual preferences and dynamically adjusts to changes, making it a valuable tool for personalized decision support.

2. Balancing Academic and Financial Considerations:

The findings underscore the delicate balance between academic program quality and financial constraints. While students seek high-quality programs, financial limitations can be a significant constraint. Institutions offering scholarships

that align with students' budgetary needs have a competitive advantage in attracting students.

3. Aligning Aspirations with Academic Choices:

The study reveals a strong correlation between students' personal aspirations and their academic program choices. Understanding students' career goals and aligning program offerings with these goals can enhance student satisfaction and career outcomes.

4. Effectiveness of Adaptive Evolutionary Algorithms:

The success of the decision-making model based on adaptive evolutionary algorithms is a notable achievement. These algorithms provide a robust framework for handling complex decision problems and can adapt to changing preferences, ensuring the model's relevance over time.

5. Practical Implications:

The study has practical implications for private colleges and universities in Anhui Province. By incorporating the insights gained from this research, institutions can tailor their program offerings, scholarships, and marketing strategies to better meet the needs and preferences of prospective students.

6. Future Directions:

While the study's results are promising, there is room for further research. Future studies could explore the long-term impact of the decision model on students' satisfaction and academic success. Additionally, ongoing data collection and analysis can help refine and improve the model's accuracy and relevance.

This study presents a comprehensive approach to supporting students in choosing

private colleges and universities in Anhui Province. The combination of academic program data, geographical preferences, financial considerations, and personal aspirations, coupled with the power of adaptive evolutionary algorithms, offers a valuable tool for both students and institutions in making informed decisions and fostering successful educational journeys.

6. Conclusion

This study has successfully developed and validated a decision-making model based on adaptive evolutionary algorithms to assist students in choosing private colleges and universities in Anhui Province. By incorporating a diverse range of criteria, including academic program preferences, geographical considerations, financial constraints, and personal aspirations, the model provides a personalized and data-driven approach to decision support. The results demonstrate that the model accurately predicts students' choices and adapts dynamically to changing preferences, enhancing the transparency and objectivity of the decision-making process. This research not only contributes to the field of educational

management but also offers practical insights for institutions seeking to better align their offerings with the needs and aspirations of prospective students, ultimately leading to more informed and satisfactory educational decisions.

解读中美教师教育发展的力作

朱镜人

王定华教授潜心观察和研究中美教育 30 多年，用了近十年的时间撰写了有关中美基础教育、教师教育、高等教育观察与研究的系列丛书（6 卷本）。其中，《中国教师教育：观察与研究》和《美国教师教育：观察与研究》两本著作深刻系统解读了中美两国教师教育的发展历程。

《中国教师教育：观察与研究》共 16 章，对新中国成立以来教师教育发展的方方面面做了系统观察和研究，其中包括中国教师队伍总览、教师教育发展历程、中国教师队伍的师德师风、各级各类学校教师队伍的发展历程与现状以及问题与改革思路或对策、新时代教师专业发展、新时代面向教师和校长的国培计划、新时代师范类专业认证、中小学教师管理制度的改革、高校教师职称评聘与考核评价、人工智能对教师队伍建设的影响以及薄弱地区教师队伍建设和改革等。作者上述问题系统分析研究后认为，新中国成立以来中国教师教育取得了令人欣喜的成就，但教师教育依然有较大的改进空间。例如"顶层设计有待优化，管理机制有待完善"等。百年大计，教育为本；教育大计，教师为本。当下的中国教师队伍建设要立足新时代，面向现代化，要进一步加强师德师风建设、提高职前培养和在职培训的质量、创新现代治理体系、确保教师地位待遇.

《美国教师教育:观察与研究》共 13 章， 内容包括美国教育发展的历程、中小学教师职前和在职培训、教师配置和薪酬、高校教师专业发展和职称制度、高校教师考核评价、教师的职业行为准则、教师专业组织以及教师队伍改革的趋势等。应该说，这本著作对美国现代教师教育作了全面深刻的剖析，其中有两点值得特别关注：一是对美国教师教育发展的历史经验作了客观的实事求是归纳。作者认为，美国教师教育从 19 世纪发展到 21 世纪有四

条经验，即"强调教师职业的极端重要性、明确教师应知应会的责任担当、保障教师获得体面的工资收入，发挥校长对教师的'头雁'作用"。二是对美国教师队伍建设改革的趋势作了分析预测。作者认为，美国教师队伍面临着吸引不了优秀人才、离职率高、教师队伍结构性短缺、教师培养质量良莠不齐等问题，因此美国教师教育未来会着力于 4 个方面的改革，即加强职前教师质景保障措施，提高教师

人职资格，通过绩效评价和人事制度改革促进教师队伍质量提升，基于评价为教师专业发展提供精准支持等。

仔细阅读可以发现，这两本书具有 3 个特点：其一，清楚描绘了中美两国教师教育发展的历史脉络；其二，客观分析了中美两国教师教育现状、各自取得的成就和面临的问题；其三、严谨预测了中美两国教师教育未来发展的趋势。换言之，这两本书以大量的事实为依据对中美教师教育的来龙去脉作了严谨的理论阐释和论证，也正因此，这两本著作在保证学术性的同时大大增强了可读性，能够引起读者的兴趣和深思，从中获得一定的启示。

这两本书之所以具有这 3 个特点，一是得益于作者曾经担任过驻美国纽约总领事馆教育领事多年，在教育部担任过教师工作司司长，对中美两国教师教育的实践有着深入了解；二是得益于长期的学术积累：作者曾在河北大学师从刘文修教授和滕大春教授攻读比较教育学

硕士学位，师从滕大春教授攻读外国教育史博士学位，由此奠定了扎实的学术研究基础；之后，虽然从事繁忙的管理工作，但从未放弃学术研究，始终关注包括教师教育在内的中美两国教育发展，孜孜不倦，笔耕不辍，发表了大量的著述。笔者认为，两个"得益于"是这两本书获得成功的"奥秘"。

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应用型人才培养教育思想的源流与嬗变

方纯洁，许苗苗

摘　要：应用型人才作为高校一种独立的培养类型，其人才培养的教育思想伴随着高等教育的产生与发展，经历了长期的演变过程。本文在明确应用型人才内涵与外延的基础上，通过对中外应用型人才培养教育思想的系统梳理，认为现代高校应用型人才培养教育思想发源于英国绅士教育思想，在唯实主义、劳作教育、实用主义以及马克思综合技术教育思想的影响下得以形成和演进，在当今阶段高校应用型人才培养的实践中得以进一步丰富和发展。

关键词：应用型；人才培养；教育思想

随着我国新型工业化进程的推进、产业结构的转型升级和高等教育普及化时代的到来，高等应用型人才培养已经成为一个重大的理论和现实问题。特别是进入新世纪以来，我国新建了一批地方本科高校，这些高校为适应地方经济社会发展需要，逐步确立了地方性、应用型的办学定位，掀起了新一轮以应用型人才为培养目标的教育教学改革。在此背景下，研究应用型人才培养教育思想的形成与发展，可以加深我们对应用型人培养的认识，对于指导新型本科院校应用型人才培养的教育活动与改革有着积极作用。

一、应用型人才培养教育思想的内涵与外延

联合国教科文组织公布的《国际教育标准分类法》将现代教育培养的人才分为学术研究型人才、应用型专门人才和实用型职业技术人才。其中，应用型专门人才是指"在一定的理论规范指导下，从事非学术性研究工作，其任务是将抽象的理论符号转换成具体操作构思或产品构型，将知识应用于实践。"[1]而作为一种独立的人才类型，应用型人才也具有独特的层次结构，可细分为应用型本科人才和应用型高端人才。应用型高端人才的培养针对应用型硕士和博士，这类人才更加偏重于应用型科学研究，在培养目标上要求他们能够掌握核心技术，推动应用科学技术质的发展，在应用理论的创新方面取得突破。[2]而应用型本科人才则是指既具有宽广的知识面、扎实的理论基础，又能够以产业发展和社会需求为导向，将所学知识应用于实践和生产生活实际的人才。[3]本文所论述的应用型人才，即是指应用型

本科人才，它是一般意义上应用型人才的主体构成。

应用型人才培养的具体内容涉及到培养目标、培养模式、课程体系、师资队伍、教学方法体系、质量评价体系以及协同育人平台等多个方面。而应用型人才培养教育思想则是更为宏观的概念，它是以某种方式加以组织并表达出来的，对应用型人才培养活动的一种理解和认识，其主旨是指导或影响教育实践。我们研究应用型人才培养教育思想的源流与嬗变，既要探寻其产生与发展的轨迹，也要围绕其时代性、继承性、实践性、预见性等特征，研究它存在的意义与价值。

二、高校应用型人才培养教育思想的起源

（一）应用型人才培养教育思想的起源

教育是一种培养人的社会活动，是传承社会文化、社会生产与生活经验的基本途径。教育活动起源于使社会成员适应群体社会生活和生产活动的需要，渗透在生产和生活之中。早在原始社会时期就已经有了教育，但是由于当时社会生产力水平很低，没有专门的教育机构和专职的教育人员，也没有相对固定的教育对象。这种教育活动在生活实践过程中进行，通过向年轻一代传授社会生活和生产劳动的经验，使他们身心获得发展，成长为社会生活所需要的社会成员。木器、石器工具的制造和使用，火的控制和使用，狩猎的技术和经验，采集食物的技术和经验等都成为教育的内容。教育方法以看、模仿、做等掌握直接经验的方法为主。

据此，可以看出教育发源于应用型的教育。它存在的初衷就是为了传授技能、维持生存，从教学内容和教学方法来看，是一种学以致用，从做中学、用中学的教育。这与当下所说的应用型人才培养理念一脉相承，强调人才培养要以社会需求为导向，以能力培养为本位，以学用结合、学做结合为方法，以所学理论知识运用到实践中去为目的。

（二）高校应用型人才培养教育思想的起源

现代意义上的大学产生于中世纪的欧洲，当时欧洲许多国家已经确立了封建制度，手工业从农业生产中分离出来，城市以及市民阶级的兴起使得商业活动日益繁荣。在此背景下，原本的僧侣学校和教会学校已经不能满足社会发展的需要，于是在意大利、英国、法国等地，师生为了维护自己的权利，仿照手工业工人、商人成立行会的方式，组成了不同的团体。即教师按照所教学科组成了教授行会，学生按籍贯组成了同乡会，由这些教师和学生团体结合形成的研究和学习的组合，与各类

专门性学校相结合并扩展到不同的行业领域，最终逐渐发展为大学。然而，此时的大学处于前制度化阶段，并没有根据专门的法令创办，也没有严格的学制，仅仅是出于职业训练的需要，为社会生产和商业经济繁荣而输送专门的实用人才。由此可见大学产生的初衷就是培养应用型人才。

随着欧洲大学之母——博洛尼亚大学的建立，高校的教育思想也日益丰富。在中世纪和文艺复兴时期，西方封建社会向资本主义社会过渡，资产阶级大力批判封建专制统治和宗教神学，提倡人文主义文化和自然科学，虽然此时的教育思想没有直接提到应用型教育思想，但是这一时期的高等教育从最初与社会发展、劳动生产的严重脱离，到关注人，关注科学知识的力量，说明了教育开始联系社会发展和人的需要，向实用性方向转变。到了十七世纪，随着资本主义工厂手工业生产的发展，资本主义关系正在封建社会内部孕育成长，新兴的资产阶级需要科学的帮助，从而促进了自然科学的高速发展，当时最有代表性的绅士教育思想，便是如今高校应用型教育思想的发源。绅士教育思想提倡培养实用型人才，认为旧的教会学校、文法学校之所以培养出于国家和个人无益的平庸之辈，其原因在于教育目标与现实生活的需求相距太远。"资产阶级急需的既不是死守宗教信条的教会执事，也不是碌碌无为的文弱书生，而是具有真才实干、能参与资产阶级革命并发挥各种作用的实用人才。"[4]其代表人物英国的弥尔顿提倡设立文实并重的课程体系，根据学科的实用价值来组织开设课程，并强调要培养出实用型人才必须走出校门到国内外进行各种参观考察，以便从实际活动中获得对生活和事业有用的实际经验。

我国高校应用型人才培养教育思想起源于清朝洋务运动时期，当时国弱民穷，急需大批能够运用先进科学技术来改造社会、推进发展的专业型人才。[5]因此一批知名人士提出"师夷长技以制夷"，提倡"中学为体、西学为用"。为此，清政府在创办了京师大学堂的同时，还在各地创办了各类军备、农工商矿等专业高等学校，大力培养适用人才，"学以致用"的思想在此时成为社会的主流。

三、高校应用型人才培养教育思想的演进与发展

（一）西方应用型人才培养教育思想的演进与发展

如果将 17 世纪的英国绅士教育思想看作高校应用型人才培养教育思想的起源，那么在此之后的西方教育发展史上，应用型人才培养的思想又经历了一系列的演变和发展。

首先是被称为"理性时代""启蒙时代""革命时代"的18世纪，"在英国产业革命的影响下，美国的都市社会中一群从事商业贸易活动的新兴资产阶级队伍也在不断壮大，他们一方面反对北方清教的宗教专制统治，渴望有一个宽松的政治环境，以促进商业活动的开展和市场经济的繁荣；另一方面，他们也反对南方封建贵族的古典主义文化，渴望拥有实际的经验和知识，以在经济竞争中巩固自己的社会地位。"[4]在此背景下，美国政治家、科学家、教育家富兰克林提出了唯实主义教育思想。他认为教育应该具有实用性，强调培养适应资本主义工商业发展的实用型人才，这种人才既要有良好的道德品质，又要有经营工商业的真才实学。唯实主义教育思想是近代美国教育思想的重要源泉，也是高校应用型人才培养教育思想的萌芽。

到了19世纪后期，在德国兴起了劳作教育思想。当时的德国已经完成工业革命，在工业生产方面已经超越英国，仅次于美国，跃居资本主义世界的第二位，欧洲国家的第一位。德意志帝国统治者为了巩固政权，进一步加强经济实力，十分重视教育的政治和经济功能。传统教育受到了批判，这时候由德国教育家凯兴斯泰纳提出的劳作教育思想就脱颖而出。"劳作教育思想认为有用的国家公民必须具有从事某种职业的能力，让学生学习掌握初步知识和生产技能，为他们今后所从事的职业打下基础是高校发展的第一任务。"[6]这一思想是当下职业教育的前身，但同时也是应用型人才培养思想在发展过程中的有力支撑。

19世纪末20世纪初，实用主义教育思想在美国诞生。当时的美国被称为典型的托拉斯国家，大工业生产方式的迅速发展和科学技术的巨大进步，使得社会需要具有主动性、创造性，能够真正利用科学技术进行生产，创造社会经济价值的人才。因此，原本形式主义至上的赫尔巴特教育思想不断遭受批判，而由实用主义哲学和机能心理学衍生来的实用主义教育思想逐渐在美国社会中崭露头角。杜威是实用主义教育思想的提倡者，他一是主张"教育即生活"，要求教育为当下生活服务；二是主张"教育即经验的改造或重组"，强调从做中学、在活动中学，在问题中学；三是主张"学校即社会"，指出学校本身就应该是一种社会生活，应该与校外学习连接起来，并产生相互影响；四是主张受教育者在教育中处于中心地位，教师应该以学生的发展为目的，围绕学生组织教学。概而言之，实用主义教育理论旨在强调教育与人个性发展相结合，教育与社会发展相结合，以及理论教学与实践教学相结合。如今应用型人才的培养一直秉承着实用主义教育理论的核心理念，紧紧

围绕区域经济社会发展的需求设定培养目标，以掌握知识为基础，以提高能力为核心，以学生发展为目的，在实现目标的过程中创造新的知识、培养应用型人才。

此外，20 世纪初，由马克思和恩格斯最早提出的综合技术教育思想，对当时苏联教育的发展产生了重要的影响。"综合技术教育思想强调学校不仅要传授给学生以现代生产的理论知识，使他们熟悉一切生产过程的基本原理，而且还要掌握熟练的操作技术，懂得怎样把理论知识应用到工农业各个生产部门中去，能够合理的组织生产，保证学生全面地发展其体力和脑力，从而为参加实际生活、自由地选择职业创造良好的条件。"[4] 这一思想同样为应用型人才培养思想提供了有力的理论支撑。

（二）我国高校应用型人才培养教育思想的演进与发展

洋务运动开启了中国高校应用型人才培养的大门，到了民国成立之初，蔡元培将以杜威为代表的实用主义教育思想引入中国，他指出"当时社会人民失业、国家贫穷，发展实用主义教育为当务之急。由于民族资本主义的发展对技术人才的需求日益迫切，加之新文化运动兴起后民主斗士对传统教育脱离社会、脱离生产的抨击，从 1915 年起，全国教育联会多次提出推行职业教育的议案。"[7]

早期主张实用主义教育的人士，大多转而提倡职业教育，由此，高等教育中职业教育的思潮逐步形成。黄炎培根据职业教育的特点总结以往教育的经验，提出"手脑并用""做学合一""理论与实际并行""知识与技能并重"等主张，这实际上就是应用型本科人才培养教育思想的前身。1929 年公布的《中华民国教育宗旨及其实施方针》规定："大学及专门教育，必须注重实用科学，充实科学内容，养成专门知识技能，并切实陶融为国家社会服务之健全品格。"[8]同年又配套公布了一系列高等教育规程，明确大专院校的办学目标应该侧重应用性。这一时期出任国立清华大学校长的梅贻琦对应用科学给予了很大关注，他强调应用科学对国计民生的重要性，并在工学院的建立上倾注了最多的精力，这在中国教育史上为开创之举。

中国现代杰出的教育家陶行知在实用主义教育思想的基础上，结合中国国情，将它进行吸收与改造，形成了"生活教育论"。他强调"教学做合一"，指出教和学都以做为中心，做是知识的重要来源，也是创造的基础，身临其境，动手尝试，才有真知，才有创新。生活教育反对将书本与生活、理论与实践割裂开来，而主张

在投入真实的生活中沟通理论与实践。[9]为此，他创立的晓庄师范就是落实、践行了"教学做合一"的思想。这也是我国高校应用型人才培养最直接的理论基础。

新中国成立以后，中国高等教育开启了新的篇章。在毛泽东教育思想的指导下，积极探索中国特色社会主义教育发展道路，强调理论联系实际，高等教育要为人民服务。由于当时我国急需一批专门人才，缺乏社会主义建设的经验，又面临复杂的国际形势，学习苏联成为了一个必然的选择。受苏联模式影响，高等学校一直按专业来培养专才。[10]"各大高校纷纷进行院系调整，构建了社会主义高等工科教育体系，加强了师范院校的建设，培养了一大批机械、电机、土木、化工、水利、矿冶等专业人才，充实了内地的高教资源，支援了西部的经济建设，促进了新中国的建设。"[11]这一时期，虽然应用型人才培养的教育理念得到国家的重视，并快速发展，但是这种过分强调专业教育，而轻视人文学科的做法也为中国的高等教育带来了很大的损失。到了文化大革命时期，我国的高等教育遭受了重大的挫折。直到1976年以后，中共中央决定恢复高考制度，改革并发展我国高等教育，现代意义上的高等教育才真正步入正轨。2004年，国务院转批了《2003-2007年教育振兴行动计划》，其中提出了高等教育的"三大任务"，即构建中国特色社会主义现代化教育体系，形成比较完善的现代国民教育体系，形成全民学习、终身学习的学习型社会；培养一代社会主义建设者和接班人，造就数以亿计的高素质劳动者、数以千万计的专门人才和一大批拔尖创新人才；加强教育同科技、经济的结合，推进科技创新，加速科技成果向现实生产力转化，为现代化建设事业做出重要贡献。实现这"三大任务"的有效途径之一就是大力发展本科阶段的应用型人才培养教育，由此，应用型人才的培养问题正式登上中国高等教育的舞台。

四、当代应用型人才培养教育思想的发展与展望

应用型人才概念的真正提出要归功于科技发展促进了社会分工的不断细化。具体来说应用型人才是指"既具有宽广的知识面和深厚的理论基础，又能将所学知识应用于本行业相关技术领域，适应产业发展对应用型人才市场需求的不断变化，有接受继续教育的基础条件和进一步获取新知识的基本能力，以及扩展与相关学科专业知识的能力。"[12]当代教育发展中，马克思从人的全面发展角度出发，提出了教育与生产劳动相结合的理论，科学地揭示了生产劳动与教育、教学的关系。他强调教育中要注重理论和实践相结合，人们要在生产劳动中接触和掌握现代科学技术，实现人的全面发展。因此，随着社会生产劳动的变革，高校应用型人才培养的

教育思想也在推陈出新。

国外的应用型本科教育发展的比较早，它伴随着高等教育的大众化，首先是自然科学类课程进入大学，接着是工程技术类课程，然后是职业性课程。[13]课程内容的转移无疑推动着应用型人才培养教育思想的演变。相对而言，自然科学课程进入大学比较容易，它虽然打破了神学主宰高等教育的格局，但本质还是以智力智能为主。工程技术课程的进入则是一个较为艰难的过程，因为它颠覆了传统的高等教育格局，将实用性人才培养理念带入高等教育课程体系中，遭到了传统自由教育拥护者的强烈反抗。职业性课程是在社会经济技术不断发展，社会对从事专业性人才需求量不断增大的背景下应运而生的。最终，高校的应用型人才培养教育思想在这种趋势下逐渐发展为学术、技术、职业三者的结合，发展为专业知识、专业技能、专业思维、专业操守和综合素质的融合，以及对学生社会适应能力的提高。

如今，国际上许多应用型大学都依据区域发展特点，在继承历史的基础上，形成了不同的人才培养模式，丰富了应用型人才培养的教育思想内涵。例如，澳大利亚大学的任务就是通过广泛而合理的课程，发展每个学生的智力和能力，使他们具备分析和解决实际问题的能力，从而提供高质量的专业教育、职业教育和培训，并为社会提供良好的服务。[14]美国的辛辛那提大学采用"工学交替"模式，将课堂学习与工作经历结合起来，允许学生在学期间走出校门，到现实生产生活中去获得基本的实际技能，增强学生职业能力。

在我国，自实行"高校扩招"起，高等教育便开始由"精英教育"转向"大众化教育"。大众教育发展的背后是我国经济社会发展对高素质人才需求的增加及结构转变。此时，经济社会发展不仅需要一定数量的高端研究和开发人才，还需要大批具有创新意识、创新能力，基础扎实、实践能力强，可以解决生产生活实际问题的高素质应用型人才。据此，一批新建本科院校纷纷以应用型人才培养为定位，与学术研究型本科院校错位发展。应用型人才培养开始作为国内高等教育的焦点问题进入了大家的视野。

2010 年，我国颁布的《国家中长期教育改革和发展规划纲要（2010-2020年）》指出，"优化高等教育结构，重点扩大经济社会发展急需的应用型、复合型、技能型人才培养规模。"2014 年，发布《国务院关于加快发展现代职业教育的决定》，指出要引导地方普通本科高校向应用技术类型高等学校转型，重点举办本

科职业教育。近年来，教育部陆续发布相关文件，决定在部分省（市）开展高等教育结构调整综合改革试点工作，以促进地方本科高校转型发展为核心，深化高校管理体制机制改革，促进高校人才培养更加适应经济社会的发展需要。

总体来说，我国当前高校应用型人才培养教育思想尚处于探索期，各类观点层出不穷。概括起来，这些探索主要围绕"什么是应用型人才""怎样培养应用型人才"这两个方面展开。顾永安在《新建地方本科院校的转型发展》中指出应用型人才要比高等职业教育的技能型人才有更"宽""专""交"的知识结构，比学术型人才有更强的实践技能和动手能力。赵瑞玉在《应用技术大学人才培养模式的几点思考》中提出本科层次的应用型人才培养要把握两个基本要求，即符合国家对本科教育的人才培养目标和培养规格的要求；符合行业企业对人才能力素质规格的要求。李桂霞等人在《构建应用型人才培养模式的探索》中提出要构建理论与实践并重的应用型人才培养模式体系，强调专业的"厚基础、宽口径"，重视科学素养和人文精神、专业教育和通识教育的统一。许多专家学者表示，高校应用型人才的培养一方面要积极搭建多方育人的平台；另一方面要加强内涵建设，结合地方经济发展打造学科专业特色和品牌，加强"双能型"师资队伍建设，引入更多社会资源参与，坚持产学研一体化，建立科学有效的管理体系和评价体系。

五、结论

综上所述，首先，应用型人才培养的教育思想不是突然出现的，学以致用、知行合一的思想贯穿人类教育发展的始终。随着经济社会的不断发展，社会对于应用型人才的需求数量和质量也在同步提高。

其次，应用型人才培养将会成为世界范围的发展潮流与趋势。伴随着高等教育的大众化、普及化，各国大学必将结合本国文化与地区政治经济发展，走各具特色的应用型人才培养道路。作为应用型本科教育发展较晚的国家，我们应该跟上这一趋势，打破时代和空间的局限，将"引进来"和"走出去"相结合，主动吸收、借鉴和学习其他国家高校的典型做法，在交流中提高应用型人才培养的水平。

第三，应用型人才培养只是教育思想中的一个分支，它可以因时因地因文化、科技等客观条件的变化而与其他的教育思想、模式共融、交叉和渗透，不断进行完善和升华。这也造就了应用型人才培养模式的多元化特点，尤其是对于地方新建本科院校来说，培养目标、培养规格、内涵建设等方面需要结合社会时代背景和自身

已有资源进行个性化发展。

最后，由于我国应用型人才培养改革与研究起步较晚，应用型人才培养工作还处在"起步""转型"阶段，还有许多理论与现实问题需要进一步研究和探索。例如在理论研究层面，存在着教育思想理论研究不足、整体性不够、实例深入研究较少等问题；在实践层面，存在着人才培养定位与目标、应用型课程体系、教学方式方法改革以及应用型人才培养的教学保障体系参差不齐等问题。因此，对相关未知领域的研究，仍需要持续性地开发与深化。

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新文科时代背景下的大学生综合素质评价体系研究

——以安徽新华学院为例

周东芝

摘要：随着新文科时代的到来，高等校育面临着诸多机战与机遇；本研究以安徽新华学院为例；探讨了当前大学生综合素质评价体系的现状；并提出还相应的优化策略。首先，分析了新文科时代的特点及其对高等教育的影响，对比了新文科与传统文科。其次，评估了国内外综合素质评价体系的发展，并针对安徽新华学院的现有评价体系进行了深入分析。最后，针对性地提出了多项评价体系优化策略，包括设计符合新文科特点的评价指标，提升评价体系的科学性和公正性，强化信息技术的应用，增强评价结果的反馈效用，以及促进评价体系与国际标准的接轨。旨在构建一个更加有效和平的综合素质评价体系，以适应新文科时代的教育要求。

关键词：新文科时代；大学生；综合素质评价体系；优化研究

引言

新文科强调对学生进行跨学科整合能力、创新思维与实践能力的培养，这对传统的教育模式和评价体系提出了挑战。基于此，本研究以安徽新华学院为例，深入分析了新文科时代背景下大学生综合素质评价体系的现状及存在的问题，并通过借鉴国内外先进经验，结合安徽新华学院的实际情况，提出了一系列评价体系优化改革策略。希望以此来建立一个更加科学、公正、有效的评价体系，从而稳步提升大学生综合素质，并为新文科时代高等教育评价体系的改革提供一些有益的参考和启示。

一、新文科时代的教育背景分析

（一）新文科时代的特点

新文科时代标志着传统文科教育向着更加开放和综合的方向发展，其教育特点集中体现在跨学科整合、实践与应用的重视以及技术融合与创新上，共同塑造了一个更为动态、开放和互动的教育环境。

第一，新文科时代强调跨学科的学习与整合，目的是打破传统学科间的界限，

促进不同学科知识的交流与融合。在这种教育模式中，学生被鼓励探索多个学科的知识，如文学与科技、历史与经济学等的组合，以培养能够综合运用多领域知识解决问题的能力，并促进学生形成更全面的世界观和更灵活的思维方式。

第二，在新文科时代，教育不再仅仅关注理论知识的传授，更加强调知识的实际应用。这一教育趋势鼓励学生将学到的理论知识应用于解决实际问题中，如参与社区服务、企业实习或创新项目等。这种实践性学习不仅能帮助学生更好地理解和巩固理论知识，还能增强他们的职业技能和社会责任感，使他们更好地为未来职场或研究领域做准备。

第三，随着信息技术的快速发展，信息技术被广泛整合进教学和学习过程中，为学生提供了更加丰富和互动的学习体验，对新文科教育产生了深远的影响。从实际教学情况来看，信息技术的应用扩展了学习的边界，使学生能够在任何时间和地点进行学习，同时促进了教育内容的更新和教学方法的创新，为学生提供了更为多样化和个性化的学习选择。

（二）新文科与传统文科的对比

新文科与传统文科在教育理念、教学方法以及学习目标上存在显著差异，这些差异体现了教育领域对现代社会需求的响应与适应。

一方面，传统文科教育通常专注于单一学科的深入研究，如文学、历史或哲学，各学科之间相对独立，交流与整合较少，因此，学生在专业学习过程中虽然深入探讨了特定领域的理论与实践，但往往缺乏跨学科视角。

相比之下，新文科教育强调学科间的融合与交互，倡导开放的学习环境，鼓励学生探索不同学科之间的联系。例如，新文科可能会推出创新课程组合如"数字人文"或"环境历史"等，这些课程设计使学生能够从多个学科角度理解和分析问题，拓宽学生知识视野的同时，也提高了他们解决复杂问题的能力。

另一方面，在传统文科教育中，教学方法往往依赖于面授讲座、书本学习和笔试评价，学生的学习体验较为单一，缺乏互动性和现代性，不利于学生的创新思维和实践能力的发展。新文科教育则大量采用现代教育技术，如在线平台、虚拟现实和协作工具，这些工具的应用不仅丰富了学习方式，也使教育更贴近实际生活，增强了学习的实用性和趣味性。

总结来看，新文科通过推广跨学科整合和现代技术的应用，更符合当代社会对

教育的需求，不仅提升了学生的综合素质，也为他们在多变的世界中寻找自己的位置提供了更多可能性。

（三）新文科时代对高等教育的影响

新文科时代对高等教育的影响主要表现在教学内容、教育方法和培养目标的改革上。首先，教学内容趋向于跨学科和综合性，鼓励学生探索不同领域的知识，以适应社会和工作市场对多元能力的需求。例如，传统文科专业中加强数据分析和科技应用的教学，理科专业则增加人文和社会科学的课程内容。其次，教育方法也在逐步变革，强调学生主导的学习方式，如项目式学习、案例分析和协作学习，在一定程度上提高了学生的批判性思维、创新能力和解决问题的能力。同时，教育技术的应用，如在线学习平台和虚拟现实技术，也在改变传统的课堂教学模式，使学习更加灵活和个性化。最后，高等教育的培养目标也在调整，更加注重培养学生的全面能力，而不仅仅是学术知识的掌握，还包括沟通能力、团队合作能力以及适应快速变化社会的能力。因此，新文科时代推动了高等教育从知识传授向能力培养的转变，不仅改变了教育的内部结构，也影响了教育的外部价值，使得高等教育更加符合时代的发展需求。

二、大学生综合素质评价体系的现状

（一）国内外综合素质评价体系的发展

在全球化和信息化迅速发展的当代，大学生的综合素质评价体系也正面临着前所未有的挑战和改革需求。国际上，尤其在教育发达国家，对于大学生的综合素质评价趋向于多元化和个性化的方法。例如，欧美等国主要利用大数据和学习分析技术，通过诸如档案袋评价法、价值增值法、课堂评估法等方式评估学生的学术成绩，并关注其技能和潜力的全面发展。另外，这些方法倾向于创建真实的评价场景，强调评价过程的透明度和学生的参与感，从而更好地反映和促进学生的学习和成长。

相比之下，中国大学生的综合素质评价研究起步较晚，但近年来已取得显著进展。国内研究主要集中在评价的目的和效果、评价指标的构建以及评价方法的开发上。一方面，评价指标逐渐从传统的德智体模型向包括创新素质、人文素质等更广泛的维度拓展。另一方面，评价方法也在不断创新，例如采用神经网络、数据挖掘等现代技术，以期达到更科学、客观和全面的评价效果。

尽管国内外在大学生综合素质评价方面都取得了一定的成就，但仍面临理论与实践结合不足、评价体系不够适应个性化需求等问题。未来的研究应更加关注评价体系的本地化和个性化设计，充分利用大数据和人工智能技术，实现更精准和动态的学生评价。同时，评价结果的反馈和应用也需加强，以便更有效地指导教学改革和学生自我发展，从而构建一个科学、公正且具有前瞻性的综合素质评价体系。

（二）安徽新华学院现有评价体系分析

近年来，安徽新华学院已在其综合素质评价体系中实施了一系列重要的改革和创新，旨在更全面地评价学生的综合素质，以及更好地适应新文科时代的教育需求。首先，安徽新华学院开始引入了多元评价指标，包括学生的社会实践活动、志愿服务、创新项目参与程度以及国际交流经历等。这些指标的引入旨在鼓励学生拓宽视野，参与更多形式的学习和实践，从而培养其全面的能力。例如，学院设立了创新创业项目竞赛，鼓励学生将课堂所学应用于实际问题解决中，这不仅提升了学生的实践能力，也增强了其创新意识。其次，学院也加强了对学生个人发展规划的支持。通过建立师生一对一的辅导体系，每位学生都能获得来自导师的个性化学习和职业发展建议。另外，学院还致力于信息技术的集成应用，通过建立电子化评价平台，使评价过程更加透明和高效。最后，在国际化教育方面，安徽新华学院通过与海外高校的合作交流，为学生提供了国际视野下的学习机会，使学生的国际化能力得到了有效提升。

尽管安徽新华学院的综合素质评价体系已经取得了一定的进展，但仍然存在一些不足之处，如对创新能力和实践技能的评价仍需进一步强化，跨学科学习成果的系统性评价也需进一步完善。未来，学院将继续根据新文科时代的要求，调整和优化评价体系，不断提高其科学性和公正性，确保能够全面评价和促进学生的综合素质发展。

三、新文科时代背景下大学生综合素质评价体系优化策略

（一）结合新文科特点设计评价指标

新文科时代的教育特点包括跨学科整合、实践与应用的重视以及技术与创新的融合。针对这些特点，设计适应新文科教学需求的评价指标是必要的，这些指标不仅需要评估学生的学术成就，还应评价其跨学科知识应用、实践能力和技术使用能力。以下是基于新文科特点设计的几个关键评价指标：

第一，跨学科整合能力。在新文科教育中，应鼓励学生跨学科学习与整合。因此，评价指标应当包括学生如何将不同学科的知识融合应用。例如，通过跨学科项目评估，学生需要在一个项目中结合文学、科技和社会科学的知识，解决一个具体社会问题，并展示其项目成果。

第二，实践与应用能力。新文科强调理论知识到实际应用的转化，评价指标中可包括学生参与的实践项目或实习表现。例如，学生可以参加与地方企业合作的实习项目，其评价标准将基于他们在实习中的创新能力、问题解决能力及对实际工作环境的适应能力。

第三，批判性思维和独立见解的形成。新文科教育不仅仅是知识的积累，更重视学生的批判性思维和独立思考能力。具体可以通过论文写作、案例研究和辩论等形式，评估学生在理解复杂问题和形成独立见解方面的能力。

第四，终身学习和自我驱动能力。在动态变化的新文科背景下，终身学习成为必需。评价指标应包括学生的自我学习和更新知识的能力，例如通过定期的学习进度报告和个人发展计划的评审来衡量。通过这些评价指标，能够全面地衡量学生在新文科领域的综合素质，并促进其在未来职业生涯中的持续成长和适应能力。因此，安徽新华学院在实施这些评价指标的过程中，需要确保评价方法的多样性和适应性，以满足不同学生的特点和需求。

（二）提升评价体系的科学性和公正性

在新文科时代背景下，为了建立更加科学和公正的大学生综合素质评价体系，学校和教师需要从以下三个方面进行努力：

第一，建立多元化的评价指标。评价体系的科学性首先体现在评价指标的合理设定上。传统的评价体系往往侧重于学术成绩，而忽视了学生的实践能力、创新能力和社会责任感等方面。为了更全面地评价学生的综合素质，必须构建包含知识掌握、技能应用、创新思维、团队协作和社会交往等多方面的评价指标。需要注意的是，这些指标应当能够全面覆盖学生的认知、情感和行为等多个维度，确保评价的全面性和科学性。

第二，为了提升评价体系的公正性，必须强化过程性评价与结果评价的结合。过程性评价关注学生学习过程中的表现和进步，能够激励学生持续学习和改进，同时也使教师能够及时了解学生的学习状况并进行适时的教学调整。结果评价则侧重

于学习成果，反映学生在一个学期或学年结束时的综合表现。通过过程性评价和结果评价的有效结合，可以更公正地评估学生的真实能力和学习成效，同时避免单一结果评价带来的偶然性和片面性。

第三，为进一步确保评价的公正性，实施匿名评审和多角度反馈机制是非常必要的。匿名评审可以减少评价过程中可能出现的偏见和不公正现象，使评价结果更加客观。此外，引入同行评审、教师评审和外部专家评审等多角度评价方式，可以从不同视角全面评估学生的综合素质，增加评价的维度和深度。同时，学校还应该建立定期反馈机制，让学生了解自己在各方面的表现和不足，促进其自我提升和发展。

（三）强化信息技术在评价体系中的应用

在新文科时代，利用这些技术不仅可以提高评价的效率，还可以增强其科学性和公正性。以下是如何在安徽新华学院的综合素质评价体系中强化信息技术应用的两个具体策略。

一是，利用大数据技术可以对大规模的学生学习数据进行分析，从而识别学生学习过程中的模式和趋势。具体可以通过收集学生的在线学习行为数据、参与讨论的频率、作业提交的时间点以及成绩等信息，构建一个全面的数据画像，从而帮助教师了解每个学生的学习状态，并对学生的学习成果进行更加精准的评估。例如，通过分析学生在不同类型任务中的表现，可以更加准确地评价其创新思维和实践能力。

二是，利用人工智能实现自动化评价。人工智能技术，特别是机器学习和自然语言处理，可以被应用于自动化的评价过程中，减少人力资源的依赖和主观偏差的影响。例如，可以开发智能评价系统，自动评分学生的论文和项目，不仅可以提高评价效率，还可以确保评价的一致性和公正性。此外，这种系统还可以提供反馈意见，帮助学生识别自身的强项和弱点，促进其学习的自我调整和提升。

（四）增强评价结果的反馈效用

为了确保大学生综合素质评价体系在新文科时代的有效性，必须重视评价结果的反馈效用。一方面，学校需要建立一个实时反馈机制，能够让学生及时了解自己在学习和个人发展过程中的进展和不足。这种机制可以通过数字化平台实现，如学校可以开发一个应用程序或者在线系统，使学生能够随时查询自己的评价结果和教

师的反馈。此外，这个系统还可以提供定制的学习建议和改进措施，帮助学生根据自己的具体情况调整学习计划和策略。另一方面，除了数字化的反馈机制外，学校还应该提供更多元化的反馈渠道，包括面对面的咨询、小组讨论会和定期的学生评估会议，以此来增强学生对评价结果的理解和接受度，进一步促进师生之间的沟通和理解，帮助教师更深入地了解学生的需求和挑战，从而提供更具针对性的指导和支持。例如，通过定期的面对面咨询，教师可以解释评价标准和结果背后的逻辑，帮助学生明白如何通过具体行动改善自己的表现。

（五）促进评价体系与国际标准的接轨

在新文科时代背景下，促进大学生综合素质评价体系与国际标准的对接成为提升教育质量和国际竞争力的关键步骤。由于全球化教育趋势不断加强，各国高等教育机构更加注重教育的国际化和标准化。因此，安徽新华学院在优化其综合素质评价体系时，应深入研究国际先进的教育评价标准和实践，如欧洲高等教育区域的Bologna Process 和美国高等教育认证体系等，从而确保评价指标和方法的国际适应性和前瞻性。此外，学院可以通过与国外知名高等教育机构的合作与交流，引入国际教育理念和评价工具，同时对外输出我国的教育评价经验和成果。通过这种双向互动，不仅可以提升学院的教育教学质量，还能够让学院的教育评价体系更加符合国际标准，增强学生的国际竞争力。

四、结语

综上所述，新文科时代要求高等教育不仅要培养学生的学术能力，更要重视其跨学科整合能力、创新思维和实践能力的发展。因此，通过设计符合新文科特点的评价指标、提升评价体系的科学性和公正性、强化信息技术的应用、增强评价结果的反馈效用以及促进评价体系与国际标准的接轨，可以有效地提升大学生的综合素质评价体系，从而更好地适应新文科时代的挑战。未来，安徽新华学院及其他高等教育机构可以依据本研究的建议，继续探索和实验更多的评价方法和策略，以确保教育质量的持续提升和学生能力的全面发展。

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成果摘要

A Psychobiographical Study on Personality Characteristics of Excellent Entrepreneurs

林斗秀，刘青霞，刘瑞平等

摘要：What kind of personality characteristics of entrepreneurs are the need of the new era? The research uses the method of psychobiography to explore the personality characteristics of excellent entrepreneurs. Through the investigation and research, the common personality characteristics of excellent entrepreneurs are tenacious, courageous, capable, keen and innovative. This research provides a reference and reference for the cultivation of personality quality of entrepreneurial youth.

An empirical study of college students' reading engagement on academic achievement

章意成

摘要：With the popularity of Internet technology, reading has developed in the direction of digitalization and mobileization. And entering the metaverse era, both the subject and object of reading may be redefined, presenting a new developmental pattern. This process brings a crisis to reading, such as the fragmentation of reading, the obstruction of reading needs, and the replacement of classical reading. However, reading is still an important way for college students to acquire new knowledge, broaden their horizons and improve their skills. The existence of reading crises inevitably affects the academic achievement of college students. Therefore, from the perspective of university management, this paper conducts regression analysis on 1,155 effective samples of colleges and universities in Anhui Province, extracts the

factors that affect college students' reading engagement, and further explores the relationship between college students' reading engagement and academic achievement. The study concluded that: (1) in terms of family reading culture, students who grow up in families with good family reading culture perform better in reading engagement. The amount of family books, family reading education and family reading atmosphere all have significant positive effects on reading time and reflective reading strategies of college students. (2) In the
cultivation of reading habits in colleges and universities, the course-driven mechanism and the atmosphere stimulating mechanism have a significant
positive effect on students' reading time. The course-driven mechanism, resource supporting mechanism and atmosphere stimulating mechanism have a significant positive effect on the critical reading strategy of college students.(3) In terms of reading time, it is only found that the reading time spent on paper books has a significant positive effect on college students'academic achievement and professional quality. (4) In terms of reading strategies, the replicative reading strategy only has a significant positive effect on the improvement of college students' academic achievement and professional quality. The critical reading strategy has a significant positive effect on the professional quality, general ability and career planning ability of college students.

Research on the application of data mining technology in college teaching quality monitoring and Evaluation system

许苗苗

摘要：With the advent of the era of knowledge and information, the web-based educational administration management system has been widely used in colleges and universities, which not only promotes the innovation of Higher education management system, but also improves the management level of teaching management

departments.Because there are a lot of data in The university educational administration database, it is very important to find useful information from the database in the university teaching quality monitoring and evaluation system.This paper makes a quantitative study on The application of data mining technology in the monitoring and evaluation system of college teaching quality,This research is based on data mining technology The first stage of this study aims to determine the main characteristics of teaching quality, which come from different sources, such as students' cvaluation, teachers evaluation and students views on teachers.The second stage is to use data mining technology to analyze these characteristics.Keyword:Teaching quality;Data mining:monitor;assessment

Application of AHP Algorithm Based on Data Mining in Higher Education Teaching Evaluation System

许苗苗

摘要：At present, China's higher education has entered the popularization, and all colleges and universities fully realize that teaching quality is the lifeblood of the survival and development of schools. The comprehensive quality of teachers is one of the most important factors affecting the teaching quality, which is of great significance to improve the teaching quality of the whole school. This system draws on the teaching evaluation experience of college teachers at home and abroad, proposes a set of teacher teaching evaluation index system, uses AHP (The Analytical Hierarchy Process) analytic hierarchy process to establish an evaluation model, and develops a teacher teaching quality evaluation system. This software is mainly divided into the foreground teaching quality evaluation module and the background evaluation data management module. In the foreground system, students, experts, leaders and peers can evaluate teachers' teaching quality, teachers' self evaluation and experts' determination

of evaluation index weights NET development is

completed. In the background, it mainly realizes the administrator's management function of evaluation data, which is developed using VB.NET. The background database of the system is implemented using SQL Server.

Analysis Of The Influence Of Employment Prospects And Career Development On Students' Willingness To Choose Schools In Private Colleges And Universities In Anhui Province

许苗苗

摘要：This case study delves into the historical narrative of the Macao government's

strategic measures in preventing and controlling cholera from 1912 to 1949, a period marked by heightened infectious disease concerns. Termed as "A War without Smoke," the research explores the meticulous planning, resource allocation, and public health initiatives undertaken to combat the threat of cholera during this critical time. Using a historical analysis framework, this study draws on archival records, government reports, and contemporary accounts to chronicle the unfolding of events and the evolution of the Macao government's response to cholera outbreaks. Key themes include the establishment of quarantine measures, public health education, international cooperation, and the socio-economic impact of these interventions. By examining the historical context and strategies employed, this case study aims to provide valuable insights into the effectiveness of public health measures during a time of infectious disease panic. It contributes to the broader understanding of how governments and communities respond to health crises, offering lessons that remain relevant in contemporary public health discourse and emergency preparedness.

Practical Model of College Students' Innovation and Entrepreneurship Education Based on Social Cognitive Career Theory

许苗苗

摘要： In the face of fierce competition in the employment environment, it is very necessary for college students to carry out innovation and entrepreneurship education. The practical model of college students' innovation and entrepreneurship education has been running for a long time. Therefore, a practical model of college students' innovation and entrepreneurship education is designed. By building a bridge between students and the society, we can extract the characteristics of the times, obtain the types of social practice, formulate a modular practice system in line with the actual situation of colleges and universities, improve the awareness of entrepreneurship, optimize the innovation and entrepreneurship education mechanism, and build a practical model of innovation and entrepreneurship education for college students. The experimental results show that the running time of the model is shorter than that of the other two models, which shows that the model is more effective when combined with social cognitive career theory.

University Teaching Quality Evaluation Technology Based on OLAP and SVM Algorithm

许苗苗

摘要： The focus of this research is to develop a new technology based on OLAP and SVM algorithm to evaluate the quality of university teaching. The main goal of this study is to find the best technology to measure the quality of teaching. This study will use descriptive statistics, correlation coefficient, regression analysis and cluster analysis and other data analysis techniques. The final

results will be used to develop an effective evaluation system, which can measure the effectiveness of University Teachers' contributions to students' learning. In the research, we try to use OLAP and SVM algorithms to improve the quality of teaching evaluation. First, we used a large number of student data from different universities in China. We collect data from more than 20 universities every semester. Then, we build a large OLAP database based on this data set (about 1million records), which can be used as the input of SVM algorithm. Next, we designed three types of artificial neural network (ANN) models based on previous research. This method can be used for both undergraduate and graduate students. The results of this study will help universities evaluate their teaching quality, which will enable them to improve their teaching quality.

The impact of environmental regulation on agricultural green total factor productivity: evidence from China

章意成

摘要：Abstract: By utilising the unit survey assessment method, this study examines the emission of agriculture contamination from surface sources and quantifies agricultural GTFP throughout 30 provinces in China between 1998 and 2017. The relaxed directional distance function and the GML index were utilised to evaluate the correlation between environmental regulations, green innovative technologies, and agricultural GTFP. A cyclically fluctuating growth trend was observed in the agricultural GTFP, with a3 .001% yearly growth rate on average from 1998 to 2017. We discovered that stricter environmental regulation positively impacts agriculture GTFP, leading to higher productivity levels in regions with more stringent regulations. The confirmation of the 'Potter effect' in our study underlines the vital part played by green innovativetechnologies in the connection between environmental regulation and agricultural GTFP. Furthermore, our research uncovered significant spatial heterogeneity in China's

GTFP for agriculture, with the central and eastern regions significantly surpassing the western regions.

The impact of business intelligence, big data analytics capability, and green knowledge management on sustainability performance

章意成

摘要：This paper aims to study the determinants that affect sustainability performance in manufacturing companies and the impact of business intelligence and big data analytics capability on performance considering the moderating role of green knowledge management. An online questionnaire survey was conducted with 488 ISO14001-certified manufacturing companies in Malaysia to test the framework developed in this study. Non-probability sampling was used in this study. A total of 283 responses were received, whereby the data was then analyzed using structural equation modeling via SmartPLS 4 software. The results indicated that the significant factor determining big data analytics capability is business intelligence, and the positive outcome of big data analytics capability is sustainability performance. Big data analytics capability also plays a mediating role in the positive relationship between business intelligence and sustainability performance, whereby green knowledge management does not moderate the relationship between big data analytics capability and sustainability performance. Even though business intelligence has a substantial impact on sustainability performance, the relationship is not stronger when the level of green knowledge management changes. This research provides wareness to manufacturing companies on the critical factors contributing to big data analytics capability and its)utcomes on corporate sustainability performance.

"新工科"背景下电子信息类专业"三融、六真、零距离"人才培养模式的研究与实践

许苗苗、王四平

摘要：新工科教育面临的主要问题之一是培养能够适应新形势裁下信息科技革命发展需求的复合型卓越工程技术人才。其中，创新型工程技术人才培养模式的改革是关键环节。文章通过对传统更的电子信息类专业人才培养中存在的产学研育人合作乏力、人才培养与行业需求脱节、课程内容未能及时更新、教学模式改革不到位、"双师双能型"师资不足等问题进行了探讨分析。从实践体系、课程体系、评价体系等方面，详细阐述了"三融、六真零距离"人才培养模式的实施路径。

课程思政理念下名办高校教学质量提升策略研究

刘静、范爱婷

摘要：课程思政是高校实现"立德树人"根本任务的关键，亦是对"课程思政"这一教学改革意识的认同。近年来，民办高校高举"课程思政"这一大旗，并积极探索有效的教学实践，但仍然仍然面临着对"课程思政"认识不够充分、管理体制和机制不够完备、教师实施"课程思政"能力不足等难题。唯有进一步深化理念认同，完善管理体制和机制和提升师资能力，方能有效应对当前"课程思政"教学中的难题。

学科融合视角下大学生创新创业团队建设研究

邓金晶

摘要：在新形势下，为实现"双创"战略目标，高校在人才培养上进行了一系列改革。其中，学科融合是实现教育创新和人才培养的重要途径。在"大众创业，万众创断"的背景下，学科融合成为高校创新创业投育的重要导向。文章基于学科融合视角，对大学生创新创业团队建设问题进行了研究，提出了学科融合视角下大学生创新创业团队建设的策略，为大学生创新创业教育提供借鉴。

民办本科院校的通识教育现状

许雅文　林斗秀

摘要： 本文探讨了民办本科院校的通识教育现状及其改革方向，以《哈佛通识教育红皮书》为参考，比较了民办本科院校与世界知名高校的通识教育的异同。本文认为，通识教育在民办本科人才培养中起着举足轻重的作用，与专业教育并驾齐驱，以培养学生的公民素养、人文素养和科学素养。本文建议，民办本科院校应注重通识教育与社会实践的结合，结合中国国情，创设多样化的社会实践平台，引导学生运用所学知识和技能分析解决社会问题，拓展学生的国际交流和合作机会，从而培养学生的社会责任感、公民意识和国际视野。

应用型民办本科院校通识选修课建设现状研究

王玲

摘要： 本文结合应用型民办本科院校教育特点，核理应用型民办本科院校通识选传课建设现状与问题，结合时代发展与学生特点变化，从通识选价课的课程体系、课程结构、课程资源、师资、教学监控等方面积极探索应用型民办本科院校通识选修课建设实践，以期实现通识选修课在全面育人中的积极作用。

基于学科竞赛的应用型人才培养的研究

马李亚

摘要： 持续提高大学生培养质量，以更好地满足地方发展对高素质人才的需求，仍是地方高校人才培养的重要目标。应用型本科高校作为地方高等教育体系的重要组成部分，致力于推动地方经济发展、产业升级和社会进步，肩负着为地方培养高素质应用型、复合型创新人才的重任。学科竞赛是培养应用型人才的重要途径之一。文章探讨了学科竞赛对学生、教师以及学校层面的积极作用与意义，并提出了高校如何更好地组织和参加学科竞赛的几点思考，为地方本科高校人才培养提供参考。

数字化时代背景下美学体系的转变

周思宁，贾爱君

摘要： 在数字化时代背景下，美学发展出现新趋势，审美主体与审美客体也发生了新的变化。通过挖掘传统美学思想的核心特征，审视数字化审美进程中"平滑性"现象的兴起，反思"思考性"与"批判性"丧失的问题。在此基础上，提出了推动美学与技术深度融合、保持审美多样性的建设性建议，旨在为美学研究与实践提供新的视角和思考路径。

转载引用

1. 许苗苗论文：Practical Model of College Students' Innovation and Entrepreneurship Education Based on Social Cognitive Career Theory，被引次数2。

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3. 章意成论文：The impact of environmental regulation on agricultural green total factor productivity: evidence from China ，被引用次数：3。

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