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# Research on Evaluation Strategy of Curriculum Ideology and Politics Education Based on Digital Badge

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#### **Abstract**

The establishment and improvement of a multi-dimensional evaluation system and a supervision and inspection mechanism for the effectiveness of ideological and political construction of courses is an important starting point for deepening the reform of education and teaching in colleges and universities. This research proposes a feasible ideological and political evaluation mechanism based on digital badges and develops an evaluation system, so that ideological and political evaluation can be implemented and has a good application effect in the curriculum.

#### **Keywords**

DIGITal badge; Ideological and political education; Evaluate.

#### 1. Introduction

Since the 18th National Congress of the Communist Party of China (CPC), emphasis has been placed on strengthening ideological and political education in colleges and universities. These important speeches have pointed out the direction of progress and provided fundamental guidance for promoting ideological and political construction in colleges and universities.

In May 2020, the Guiding Outline for Ideological and Political Construction of Courses in Colleges and Universities issued by the Ministry of Education clearly pointed out that the effect of talent training is the primary standard for evaluation of ideological and political construction of courses. It is necessary to establish and improve a multi-dimensional evaluation system and supervision and inspection mechanism for the effectiveness of ideological and political construction of courses. It is necessary to carefully implement all kinds of evaluation and evaluation work and deepen the reform of college education and teaching.

At the school level, it is necessary to vigorously promote the ideological and political education of the school curriculum, guide the "curriculum teaching" to deepen the "curriculum education", realize that there is ideological and political education in all courses, and all teachers teach and educate people. It is urgent to improve the ideological and political education evaluation mechanism of the curriculum and timely feedback the implementation effect of the curriculum. At the teacher level, there is an urgent need for practical evaluation means of ideological and political education to assess the development of students and improve classroom teaching.

This study proposes a feasible ideological and political evaluation mechanism based on digital badges.

## 2. The Connotation of Digital Badges

The application of digital badge technology in teaching evaluation has gradually been widely accepted in the field of education, and can provide some technical and conceptual support for the construction of a new teaching evaluation system in the future.

Horizon Report of the New Media Alliance: 2015 Basic Education Edition first used "digital badges" as a new technology in the field of education in the next 3-5 years. "Digital Badge" is a

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kind of authentication method to grant digital "micro certificates" to formal and informal learning. It is different from the traditional learning evaluation, but it is based on students' learning achievements and skills. The significance of each "badge" is reflected in the recognition of the skills and achievements acquired by individuals. Learners with digital badges can show the public their learning content and the process of acquiring skills, which to a certain extent encourages and promotes students to carry out in-depth learning. "Digital badges" are usually used in teaching in a "game" way to track, capture and display the learning process of learners and stimulate students to maintain the motivation of continuous learning.

As the "digital badges" have a remarkable incentive effect on learners, many online learning environments actively introduce "digital badges", such as the well-known Khan Academy. Khan Academy is a non-profit online education website for primary and secondary school learners. By logging on the official website of Khan Academy, learners can learn all courses for free at any time and anywhere. In order to encourage learners to maintain the continuity of learning, Khan Academy introduced the "badge system". When learners' academic performance reaches a certain standard, they can obtain a badge and store it in their personal files. The badge can clearly describe the content and path of learners' learning.

#### 3. Design of Ideological and Political Evaluation System

# 3.1. Establish a correct evaluation concept and highlight the main position of students in the evaluation

The evaluation of ideological and political teaching of the curriculum should follow the "student-centered" teaching evaluation, pay attention to the personal feelings of students participating in learning activities, and use value-added evaluation to focus on the growth of students, including the "range" of progress, development, growth and transformation of students in learning ability, life, emotion, social development and other aspects after receiving a certain stage of education at their own starting point or foundation, and finally change from quantitative to qualitative. The evaluation system should also reflect this gradual process.

#### 3.2. Evaluation index design

The Guiding Outline for Ideological and Political Construction of University Curriculum points out that the content of ideological and political construction of the curriculum should closely focus on strengthening students' ideals and beliefs, take loving the party, patriotism, socialism, the people, and the collective as the main line, and optimize the supply of ideological and political content of the curriculum around political identity, family and country feelings, cultural literacy, constitutional and rule of law awareness, moral cultivation, and systematically carry out the education of socialism with Chinese characteristics and the Chinese Dream Education in socialist core values, rule of law, labor, mental health, and excellent traditional Chinese culture. Promote the ideological and political construction of the curriculum according to the classification of professional characteristics.

This study refers to the existing research results, takes the relevant policies and regulations as the guidance, takes the theory of all-round development of people as the theoretical basis, and combines the characteristics of vocational education to construct the top-level index system of ideological and political teaching evaluation of vocational school courses as four dimensions.

And corresponding to "social responsibility", "sense of national responsibility", "global consciousness", "learning attitude", "honesty and trustworthiness", "law-abiding", "diligence and frugality", "ready to help others", "critical ability", "cultural heritage", "craftsman spirit", "innovation" 12 secondary indicators.

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#### 3.3. Digital badge system design

Corresponding to the above index system, a three-level badge layer is set up, among which the first-class badge pool is designed for the top-level index at the school level, and the second-level badge pool is established for the talent training objectives at the professional level. The curriculum level requires smaller granularity badges to be extended according to the characteristics of the course to support the acquisition of badges at the higher level.



Figure 1. Three-level badge

After completing the relevant teaching activities, learners submit the materials to prove that they have the corresponding ability. After passing the teacher's review, they can get the corresponding points. These points can be exchanged for the digital badge of the corresponding level.

Each time a learner earns a badge, he or she can put it in his or her "badge filter" and see his or her achievements at any time. Small particle badges can be aggregated to form high level badges. The process of collecting badges is educational, interesting and playable. The learning results and ideological and political literacy level represented by each badge obtained by learners can be displayed on the platform.

#### 3.4. Digital badge system design

Using professional advantages and the innovation and entrepreneurship platform of teachers and students, the ideological and political evaluation platform of the curriculum is designed based on the principle of "traceable results, convenient operation, and friendly interaction". The teacher side realizes the functions of badge release, task release, results review, performance statistics, and the student side realizes the functions of results upload, results view, growth trajectory, and so on. Primarily using open source front-end and back-end technologies.

### 4. Examples of Badge Classroom Applications

Algorithm Design is a required course for information technology software technology majors. The course is taught in modules. Take Module 1.2 "Classic Sorting of Epidemic Real time Big Data Analysis" as an example.

The goal of ideological and political education in this class:

- ① By comparing the data of various countries in the real-time big data report of Baidu epidemic situation, students can feel the power of China, strengthen the sense of social responsibility, and integrate life health education and patriotism education.
- 2 Through the comparison and optimization of typical algorithms, cultivate the craftsman spirit of students' excellence.

Through the design of activities in the three links before, during and after the class, they are imperceptibly integrated into each ideological and political point, and scored according to

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students' materials. When the points reach a certain level, students can exchange corresponding badges.

Table 1. Exchange of badges

link	Activity design	Ideological and political objectives	Integral value	Corresponding badge
before class	Preview pre- class knowledge and complete pre- class tasks	Self discipline	1	Abide by discipline and law
In class	Submit data comparison results: real-time big data of Baidu epidemic	Life health education	2	social responsibility
	Algorithm implementation: submit the epidemic control ranking list of countries	Patriotism	2	Feelings of family and country
	Comparison and optimization of typical algorithms	refine on	2	Craftsmanship
	Class summary: ideological and political perception	Point scoring		
after class	Submit homework on time	Self discipline	1	Abide by discipline and law

#### 5. Conclusion

Based on "student development", this project innovatively integrates digital badge into the ideological and political evaluation system of the curriculum, points out a new evaluation idea of ideological and political education effect of the curriculum, and dynamically forms a relatively complete curriculum medal system and evaluation index. Innovative evaluation methods, through the development of information platform, the curriculum ideological and political evaluation is implemented, to achieve traceability.

The digital badge ideological and political education evaluation system was first tried out in the software technology major "Algorithm Design" course, and then extended to different courses and majors. The platform developed can be used by teachers and students in the school for free. While benefiting all teachers and students, it also provides a new approach and model for education authorities to evaluate.

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