

Exploration of multidimensional and high-quality training

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ABSTRACT: The role of MQPT (multi-dimensional, high quality, practical, talent-oriented approach) in independent college teaching was explored. This reflects the diversification of social demand for talent and the diversity of student development. Using the mantra: *to grow up and to behave well, to demonstrate talent and to work well*, as a starting point, the authors have put forward the training concept named 1-2-3-4-5. The meaning is one core, two systems, three platforms, four stages, five kinds of ability. This was used to construct a training mode, including features and content, which is presented and discussed in this article.

INTRODUCTION

The independent college is a special model for schools in China that appeared in the transition from elite to mass education. As a new force in higher education, there has been a rapid rise in the number of independent colleges and they have made a great contribution to the growth of Chinese higher education since their emergence in the late 1990s. Independent colleges are affiliated to a degree-awarding university: the *mother* university; and have the advantage of the mother university's educational resources. The independent college is an important vehicle for change in higher education, which aims *...to increase not only the amount of undergraduate enrolment but also its quality* [1].

As a new mode of higher education, the operation of independent colleges is still under exploration and development. Further research is required on many important issues. Among these, for example, is the development of innovative teaching so as to produce quality graduates.

One such approach to innovative teaching is MQPT (or multi-dimensional, high quality, practical, talent-oriented). The main content of MQPT includes student-centred pedagogy, with competency-based and employment-oriented training. The training route is basic-level knowledge, bedding-in (tamping) the foundation, forging practical ability and strengthening quality. The innovative curriculum system is aimed at optimising training and producing high-quality talent.

TRAINING GOALS OF INDEPENDENT COLLEGES

Operational Constraints

Independent colleges charge full fees and almost all their income is from tuition fees. But, the level of tuition fees is restricted and the funds are not always sufficient after transfers to the mother university. The teaching team of an independent college is generally heavily dependent on the mother university. The full-time teaching team is often inadequate and restricted by national policy.

Students' Characteristics

Independent colleges rely on ordinary university recruitment for students. The college entrance examination is layered. The first-level students can choose key national colleges and universities, referred to in China as 985/211 institutions. The second level can choose general subordinate or provincial key universities; the third level can choose the general provincial and local normal colleges and universities (including outstanding independent institutes); and the fourth level is for independent colleges.

The fourth-level students have distinctive qualities in terms of learning objectives, motivation, habits and interest. For example, although weak in basic knowledge, they are independent with strong imagination. They are good communicators and are open-minded, with a sense of social responsibility.

Therefore, teachers should pay attention not only to the students' academic abilities, but also to their other qualities. As a result, the training objectives of independent college will differ from ordinary colleges and universities.

Competitive Advantage Strategy

Porter argues that as part of competition theory, the competitive advantage of an enterprise is the excess value created over the cost to the customer [2]. Value is the price the customer is willing to pay, and the excess value comes from the lower cost, as compared with other enterprises.

There are two basic forms of competitive advantage: cost advantage and product differentiation. An enterprise may have an advantage or disadvantage. This, ultimately, depends on the extent to which enterprises differentiate their costs and products. Any enterprise with excellent performance will likely have one or more advantages. Good profitability comes from having low costs and/or product differentiation, but being able to charge high prices [2].

Porter's competition theory can be applied to competition among universities. Since independent colleges charge full fees, they cannot compete on price with public universities. Therefore, they should gain a competitive advantage by differentiating their product, i.e. the teaching [2]. Competitive advantage of independent colleges can be gained thus: first, satisfy the candidates' professional needs through a set of specialised professional courses updated in a timely manner; second, focus on the application of the training; and third, training should be diverse to adapt to students' individuality [3]. In an attempt to achieve these goals, the authors have explored the independent college MQPT training mode.

THE CHARACTERISTICS, CONTENT AND FRAMEWORK OF MQPT TRAINING

Characteristics of MQPT Training

Multidimension

In this research the authors applied a *multidimensional* approach to training diverse talent by means of classification, hierarchical teaching, distributed implementation of teaching, combined electives with compulsory courses and combined theory with practical teaching.

High Quality

In 2010, the Chinese Government promulgated the *National long-term education reform and development plan (2010–2020)*. Under the plan, the focus of the training is on cultivating perseverance, good moral character, knowledge, skills and expertise, as well as innovation. First is the emphasis on the basic quality of the individual, which usually is called *personhood*. This includes four qualities: moral, cultural, psychological and occupational.

Practical Application

Technological and theoretical knowledge is applied to actual production, life or culture. Or it can be said, *...work with the heart, see with your eyes, do with your hands*. Or, to rephrase it: there should be *work routines, observation routines, thinking routines*. This includes the ability to learn, to gain information, to communicate and to create.

Content of MQPT

To repeat from the introduction: the main content of MQPT is student-centred pedagogy, with competency-based and employment-oriented training. The training route is through basic-level knowledge, bedding-in (tamping) the foundation, forging practical ability and strengthening quality. The innovative curriculum system aims to optimise training and produce high-quality talent.

Student-centred means students are the masters of learning. Each student is a unique individual, with a unique personality. The authors' view of the student can be summed up as *Everyone can be talented. No child should be left behind*.

Competency-based means that the basic point of the teaching is the ability of the student rather than academic knowledge.

Employment-oriented means to optimise the curriculum system according to employment requirements for knowledge, ability, attitude and quality. Although the depth of theoretical knowledge required is relatively low, required competence and practical ability is high.

Forging ability refers to the ability to use professional theory or knowledge by which to solve practical problems. It is the key to applied talent. This ability cannot depend solely on classroom theory. It requires student self-learning, exploration, experiment and practice. Therefore, it is necessary to strengthen practical teaching to enhance students' self-learning which is, of course, informed by the taught theory.

Curriculum system refers to the interrelated curriculum components that reflect the specific learning requirements and objectives. This outlines the content of the students' learning required to achieve the training objectives. The curriculum of independent colleges should be optimised to take account of the nature of the students at independent colleges and the occupation orientation of the colleges. Occupation ability includes cognitive and expressive ability. The goal is to enhance the application of professional and practical ability.

The structure of the curriculum normally should consist of groupings of four- to-six interrelated courses allowing for the optimal allocation of teaching resources. A course group should focus on training targets to optimise teaching content to combine specialised and general knowledge.

Innovation of the curriculum involves the establishment of student self-study or partial self-study courses and practical application courses, in conjunction with industry. Professional courses can be introduced, such as Introduction to the Economic Development of Wenzhou (a city in China), and Introduction to the Culture of Ouyue (a non-Chinese ethnic group in China).

Optimise class hours: in one case of a branch college the total hours of theoretical courses were reduced and the hours of experimental and practical courses were increased to more than 30 per cent of total hours. The total hours of elective courses should be increased, so that the proportion of elective courses is more than 20 per cent of total hours. Total class hours should be reduced and extracurricular training hours should be increased.

Framework of MQPT Training

Components of MQPT training. The MQPT training system was divided into three components or platforms: quality, professional teaching and ability development. Among them, *quality* is the foundation that influences the rest. *Core teaching* is the key to obtaining professional knowledge and ability.

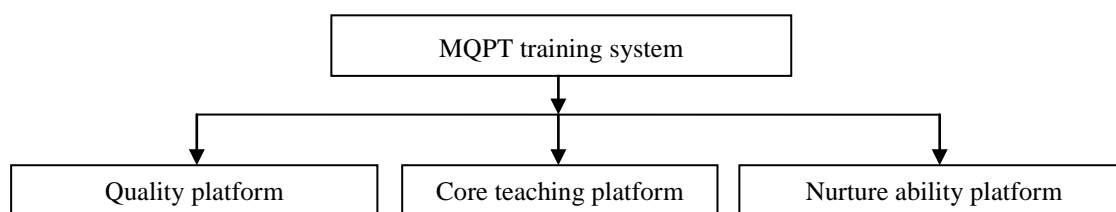


Figure 1: Basic framework of MQPT training.

High-quality practical graduates. Social and economic development not only requires academics, but also large numbers of people who are engaged in high-quality and skilled practical work.

Training objectives should be tailored for independent college students. Although *third- and forth-level* students are less interested in theory and lack academic research ability, they still have broad interests and strong, practical ability. Therefore, students should be taught in accordance with their aptitude for problem-solving and social communication, rather than theoretical knowledge.

Training objectives appropriate for independent colleges. In recent years, many undergraduate colleges have moved closer to being research universities. However, independent colleges should decide to continue emphasising practical training.

IMPLEMENTATION OF THE MQPT TRAINING PROGRAMME

The authors focused on the characteristics of colleges and professional disciplines, and analysed the demand for skills in society. As a result, they have proposed a *1-2-3-4-5 talent development concept*. In this, one is the core, two are the systems, three are the components or platforms, four the stages, and five the abilities. The structure of the MQPT training mode is presented in Figure 2. To elaborate:

- Adhere to one core - the core of education and teaching is to cultivate high-quality talent.
- Construct two systems - knowledge training system and a system to develop the capacity of the students.
- Build three platforms - platforms that enhance the quality of basic education, teaching and abilities.
- Teaching has four stages - the basic theory, bed-in the foundation, develop practical abilities and strengthen quality.
- To train five capacities - self-learning, practical application, employability, innovation capacity and ongoing development.

Such ideas promote training that is high quality, broadly based, practical and innovative. The quality platform is divided into six components to develop and implement: a) education targets; b) the learning objectives; c) behavioural targets; d) professional objectives; e) employment targets; and f) quality development.

The core teaching platform is divided into five components to: a) revise/develop the training; b) optimise the curriculum; c) teaching facilities; d) education reform; and e) teacher resources.

The nurture ability platform is divided into five components; these are: a) professional education modules; b) entrepreneurship modules; c) competition modules; d) school-enterprise co-operation modules; and e) professional postgraduate modules.

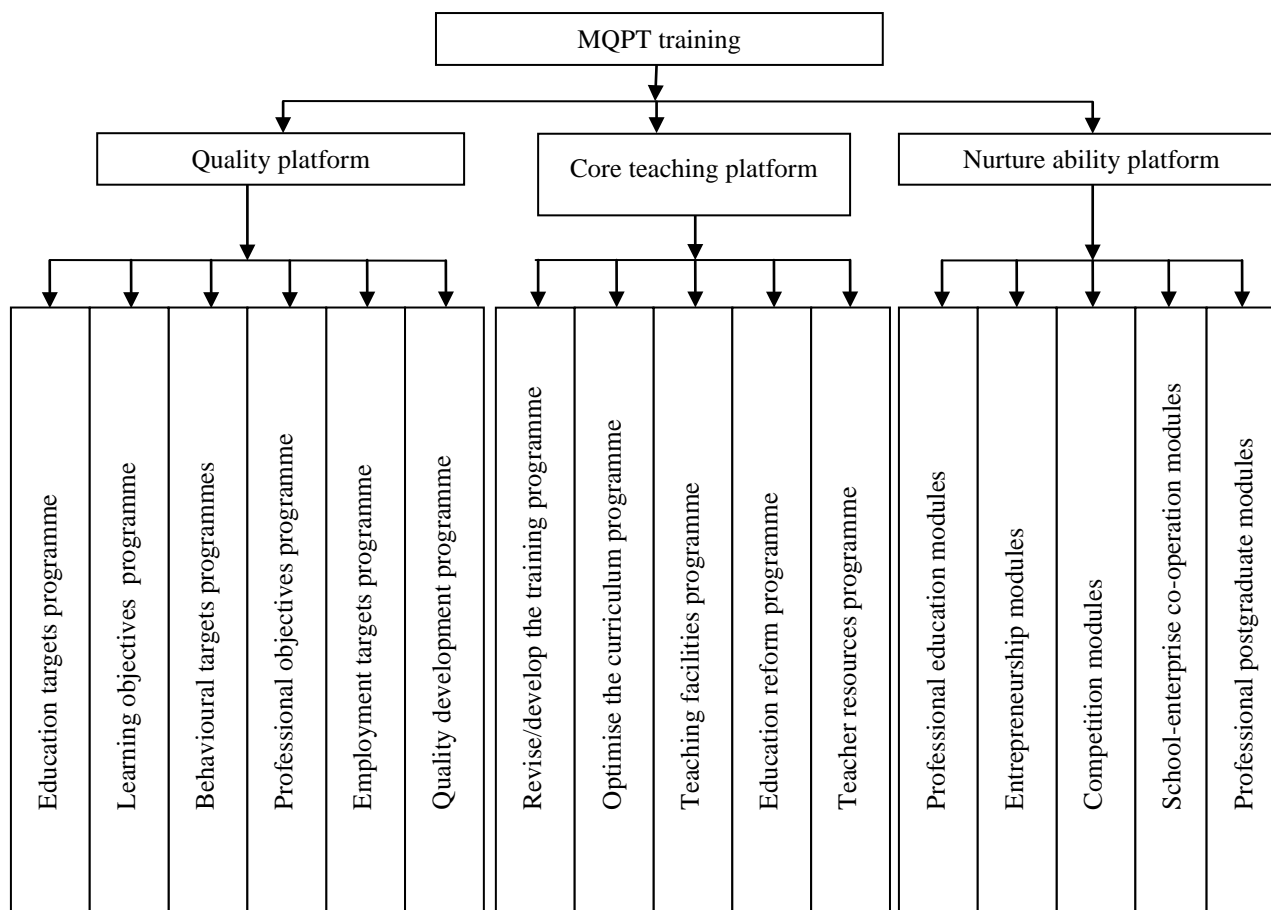


Figure 2: Structure of the MQPT training mode.

CONCLUSIONS

In summary, training of independent college undergraduates can produce graduates who adapt quickly to a professional post and who can solve practical problems in front-line positions. They are appreciated by the employer, who will see the potential for further development. Researchers possess good theoretical knowledge; technicians operate with skills in a limited domain; and the independent college graduate has a *composite talent* of theory and practice.

First: the graduate has a breadth of knowledge, not only with a solid theoretical foundation but also with excellent applied knowledge and ability. Second: the theoretical knowledge training objectives should be *adequate* and *practical*, and should target the training goal of a *solid foundation and enhance potential*, so as to build the sustainable development of students' professional knowledge.

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