

Research on Training System of Marketing Research Talents Based on CDIO Concept

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Keywords: CDIO education mode; Marketing research ; Talent cultivation mode

Abstract. On the basis of summarizing the teaching experience, this paper proposes an integrated marketing research talent cultivation model based on CDIO engineering education concept. This model emphasizes that focusing on capacity development, relying on corporate projects, driving by task objectives, taking skills learning as the main body and taking project results as an assessment is essential. It is expected that this paper will guide the theoretical research and practical application of related fields.

Introduction

Modern enterprises are in a fiercely competitive environment, and marketing decisions play a pivotal role in business operations. Marketing research is the basis of corporate marketing decisions and an effective tool to reduce the risk of marketing decisions. Marketing research ability is the core professional ability that marketing students must master [1]. Through the marketing research series courses to develop students' ability to use marketing research tools skillfully to solve practical problems of enterprises [2].

At present, domestic colleges and universities generally offer marketing research courses for economic management majors. Judging from the actual teaching effects over the years, students generally have a deep impression of the knowledge they have learned, reflecting that marketing research teaching has not effectively achieved the training objectives. Based on the CDIO education concept, this paper carries out reforms and practices on the marketing research talent training model, with a view to providing reference for similar courses.

Overview of Cdio Engineering Education Model

CDIO engineering education model is the latest achievement of the international engineering education reform in recent years. It is a new concept of engineering education developed by four famous universities, including MIT and Royal Swedish Institute of Technology [3]. CDIO is the abbreviation of English words Conceive, Design, Implement and Operate [4].

It is based on the life cycle from product development to product operation, and allow students to know how to conceive, design, implement and run a complex engineering systems.

The main feature of CDIO engineering education mode is to 'learning by doing', so that students can learn knowledge and develop their abilities in the actual engineering environment. CDIO model includes four phases as conceiving the ability index system of talent cultivation, designing the integrated curriculum plan, implementing project-oriented integrated learning and running the integrated talent cultivation process [5].

Marketing Research Talents Training Model Based on Cdio Concept

Based on the CDIO concept of engineering education, this paper introduces various standard business process management of enterprises into the teaching process, organizes teaching with project orientation, and drives teaching through task [6]. According to the stakeholder research results and teaching implementation experience, as shown in Fig. 1, this paper proposed an

integrated marketing research talent cultivation model based on CDIO engineering education concept.

This model emphasizes that focusing on capacity development, relying on corporate projects, driving by task objectives, taking skills learning as the main body and taking project results as an assessment is essential.

In the process of teaching implementation, we should pay attention to the development needs of the industry and summarize the experience of teaching reform. School-enterprise cooperation projects are introduced to help students better understand the theoretical knowledge of marketing research and improve their vocational practice ability.

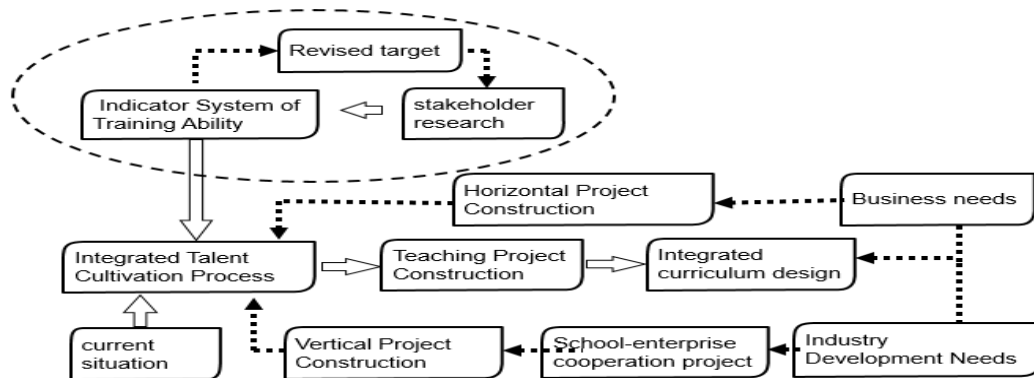


Figure. 1 Marketing Research Talents Training Model Based on CDIO Concept

Table 1 the ability training indicators system of marketing research talent

Level I Capability Indicators	Level II Capability Indicators	Curriculum Development Ability Indicators
1. Technical knowledge and reasoning	1.1 Related scientific knowledge	Master the management statistical analysis method of survey data and the basic theory of marketing
	1.2 Core knowledge	Master the basic theory, structure and method of marketing research and forecasting
	1.3 Advanced Knowledge	Master the planning, organization and control of marketing research
2. Open minded and innovation	2.1 Systematic thinking	Define and fully understand the knowledge system and process of marketing research, Discriminate related factors, Plan and implement marketing research activities
	2.2 Critical thinking	Identify and determine the objectives and content of marketing research, design research data collection and processing methods, and manage the research process
	2.3 Creative thinking	Abstract measurable concepts based on actual business problems
	2.4 Innovation ability	Identify business issues, Learn new methods, Design and implement marketing research
3. Personal and professional skills	3.1 Ability of Engineering reasoning and problem solving	Analyze and solve problems
	3.3 Information Processing Ability	Master first-hand data and second-hand data processing methods
4. Communication and teamwork	4.1 Communication skills	Display marketing research results in both oral and written form
	4.3 teamwork	Form an effective team and complete marketing research
8. Social contribution by application practice (CDIO)	8.3 Industry application environment	Understand the specifications and common technologies of the marketing research industry
	8.5 design	Design and implement marketing research activities based on business needs

Conceiving the Ability Index System of Talents Training

The first step of CDIO engineering education model is to identify and fully define the capabilities of contemporary marketing research talents [7]. Marketing research ability is one of the main

professional skills for students majoring in marketing. Students are required to have solid marketing research professional knowledge, skills and systematic marketing research practice ability.

Marketing research personnel should be able to conceive research objectives, design research programs, implement research process with scientific computer means, summarize research conclusions and operate marketing research work in the light of relevant problems in marketing and related fields.

On the basis of full investigation and demonstration of the opinions of teachers, students, enterprises, parents and other stakeholders, combined with the marketing professional talents training objectives, this paper first defines the marketing research talents ability training index system. The indicator system mainly includes five first-level indicators and 13 second-level indicators, indicates the corresponding curriculum development ability indicators, as shown in Table 1.

Designing an Integrated Talent Cultivation Curriculum Plan

The integrated talent cultivation curriculum plan is a systematic approach to ensuring that each course is connected and supported by realigning and designing the curriculum. As shown in Fig. 2, the basic framework of the integrated marketing research talent cultivation curriculum consists of four parts, namely, professional guidance projects, professional foundation courses, professional main courses and comprehensive practice projects.

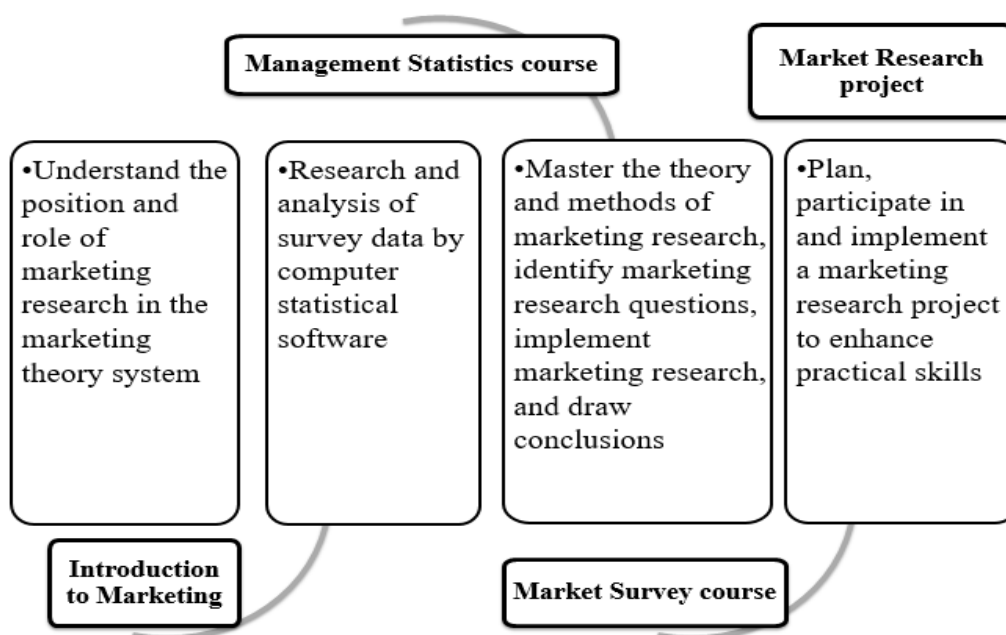


Figure. 2 Integrated talent cultivation curriculum plan

(1) The major guiding project is ‘Introduction to Marketing’. The teaching goal of the project is to enable students to have a macro understanding of the theory and practice of modern marketing, including understanding the purpose and significance of marketing research.

(2) The major basic course is ‘Management Statistics’. This course focuses on quantitative statistical analysis methods for management. Through the course study, students can use statistical analysis software to analyze the survey data and draw reasonable data analysis conclusions.

(3) The major core course is ‘Market Research’. This course helps students master the basic principles and methods of marketing research. Students can identify corporate marketing research questions, collect research information, analyze research findings, and suggest marketing improvements. This course enhances students' ability to discover, analyze and solve problems.

(4) The comprehensive practice project is ‘Market Research and Combat’. The content of this project is that in the real marketing environment, students actually plan, participate in and implement a marketing research project. Through project practice, we will further consolidate the study of theoretical knowledge and enhance students' practical skills.

Implementing a Project-Based Talent Cultivation

In the marketing research talent cultivation mode, the project teaching is carried out throughout the talent cultivation process, so that students systematically get the overall training of conception, design, implementation, operation (CDIO) [8]. The entire curriculum system is combined through project design. This talent cultivation model is characterized by all the content that needs to be learned and mastered around the core of project design, and is integrated with this core to form a whole [9].

As shown in Fig. 3, this paper designs four phased projects to implement marketing research talent cultivation. In the first stage, through the professional guidance project (Introduction to Marketing), students will be able to understand the content and status of market research from the macro perspective of marketing professionals. In the second stage, the statistical analysis practice project was designed in the course of Management Statistics to improve the ability of statistical analysis of data. In the third stage, the research and practice project was designed in the 'Market Research' course to plan and implement the marketing research project. Finally, a centralized practice project was designed. In the market research practice project, students combine the real enterprise's marketing research needs, systematically and completely plan, design, implement and summarize a marketing research practice project[10].

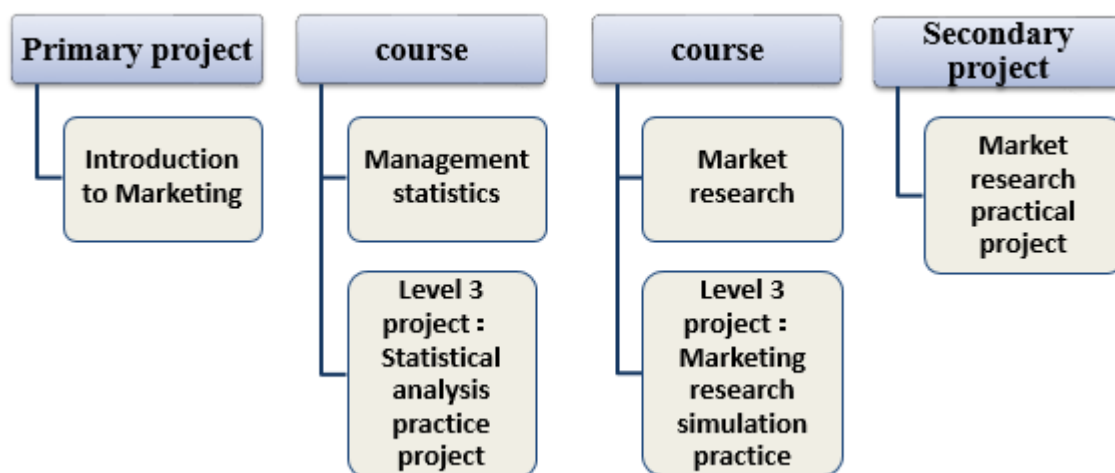


Figure. 3 Implement project-based talent cultivation

Operating a Task-Driven Active Learning Process

CDIO is a product-oriented teaching model, which designed a learning-driven active learning and experience learning model. During the course and project implementation, students are free to team up and complete project tasks in a teamwork manner. The teaching process highlights the student's main body status, emphasizing the students' self-learning ability, team communication and cooperation ability. After the completion of the project, the student is the subject to report the results of the project, the teacher only takes the responsibility of evaluation. This teaching process fully mobilizes students' learning initiative, cultivates students' independent thinking ability, and realizes students' active learning.

Abandoning the traditional academic evaluation norms and methods, this teaching reform introduced the CDIO-based academic evaluation method, which implements the stage evaluation in the process of students' knowledge and skills learning. Through evaluation and feedback, it can provide suggestions and help for students' follow-up learning improvement. In the process of talent cultivation, the project is the main body. The project results are evaluated in a team manner, and the learning effect of each student is evaluated according to personal log, personal summary, and team mutual evaluation. In each evaluation stage, the teacher can clarify the completion content of each

student, analyze its inadequacies, and propose improvements. After the end of the course, the teacher assessed the students' understanding and comprehensive application of the basic theory through a closed-book written test.

Summary

This paper discusses and studies the teaching reform around the training mode of marketing research talents. This paper conceives the training index system, designs an integrated curriculum plan, and implements the project as the carrier, task-driven teaching means, skill learning as the main body, and diversified assessment as the monitoring means of learning process. Through teaching reform, students' learning enthusiasm and learning ability have been greatly improved. In the future, we must continue to adhere to the teaching and teaching reform based on the CDIO concept, learn from successful experiences, and promote to other courses.

Acknowledgements

We gratefully thank Education Science Planning Project in Liaoning Province for supporting this paper. the Project No. is JG17DB044.

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