A study on the experience teaching mode for the working process of the "supply chain management" course

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Reconstruct the main teaching direction and according to the teaching content establish the learning context based on the characteristics of supply chain management curriculum and orientated towards working process. Turn the curriculum knowledge into learning project. Construct a five-segment-circulated-experienced teaching mode of "experience into environment--lead to experience--explore experience--sublime experience (practice training) --summarize commentary and feedback ". Take "bullwhip effect", one of the "supply chain management" projects as an example, discuss the conduct process of experimental teaching facing the working process.

Keywords: the working processes-oriented; supply chain management curricula/ courses; experience teaching model

INTRODUCTION

Supply Chain Management (SCM, Supply Chain Management) is the latest development trend of modern logistics, the most active part of the logistics management research, also the most urgent problem to resolve about enterprise internationalization development and cross-region operation. "supply chain management" as one of the core courses of logistics engineering major, predominates the skill modules of transportation, warehousing and distribution etc, integrates and improves the key subject of logistics system overall efficiency. It is a strongly theoretical, practical and applied curriculum, but the theory and knowledge are more abstract and boring. Now most universities use analysis cases teaching method. Through the case analysis, it can develop students' thinking ability and improve the individual learning enthusiasm.

But in the face of today's fierce market competition environment, many enterprises have to redesign the business process and the performances improve significantly with particular emphasis on the effective connection between enterprise and enterprise business process. The theory of supply chain management is in the process of continuous development and the theoretical system is still improving. Enterprises constantly respond to changes in economic environment, competition, customer in practice and break their original supply chain management mode. This increases the complexity of supply chain management. Therefore, only by cases teaching in classes obviously cannot meet the social demand for logistics talents. It is difficult for a teacher to teach the deep soul of supply chain management essence from the whole system thoroughly and vividly.
Combine the characteristics of the course and found the experimental teaching mode facing working process

Characteristics of supply chain management courses

(1) There is much content and involve a wide range. The requirements of knowledge is very high for students. Supply chain management involves much content. It not only includes the construction and optimization of supply chain system, also includes inventory management, production planning management, marketing management, logistics management, procurement management, information system management etc. Each of these parts is an independent field of application. Basic knowledge of their requirements are not the same. Therefore, it involves many aspects. For example, inventory management requires knowledge of optimization, production planning management needs to use the materials management and the knowledge of human resources management. In the short class time, it is very difficult to explain the content of these all comprehensively and detailedly. Teachers usually only teach the emphases and the collaboration requirements of the supply chain management clearly according to the teaching programs. This requires students to have knowledge more widely and solidly, otherwise it is very difficult to go deep.

(2) all kinds of general textbooks have a very weak consistency. At present, the consistency between the supply chain management general textbook chapters and between the knowledge is very weak. Mostly, in the beginning teaches the introduction of supply chain and supply chain system construction as continuity. Then the order of each chapter doesn’t have a strict logical requirement. On one hand, this increases the flexibility of the lecture and teachers can arrange the order of chapters flexibly according to their own understanding. On the other hand, students can be free to choose focus in the learning process without affecting later learning. This is an advantage, but it will also bring unfavorable factors. Its advantage is that the students are free to choose their own interest of the knowledge points to go further in learning. Its shortcoming is due to without continuity among various knowledge points and hard to arouse the enthusiasm of students from the beginning to the last. Some students mistakenly believe that whenever cut into learning they can catch up with the teaching process.

(3) It is difficult to practice. All kinds of management principles and methods in supply chain management are the summary of the related work of previous people and are explained by certain economic theories. The content is theory and abstract. We can’t use experiments to verify the correctness of the theory in the classroom. (this point is very different from that the science and engineering students majoring in mechanical, electronic and other professional courses can verify the consequences by experiments in class). It’s also not possible for students to practice in the enterprise for this course for a long time, so the ability of practical learning is very weak. This comprehensive knowledge is hard and abstract to understand. It increases the students’ learning difficulties and it’s difficult to achieve the teaching goal.

2.2 working processes-oriented teaching reconstruction

The teaching reform based on working processes-oriented has been carried out in various colleges and universities. This teaching reform has a positive effect on the improvement of student’s learning motivation, training student’s skills and cultivation of students’ ability. Its essence is to combine the work environment and work process into the teaching practice, but focusing on practice at the same time, do not weaken the teaching in theory. It is that to rebuild the basic theoretical knowledge, to organically select and combine the knowledge. What need to understand most is that the subject itself has its own internal logical structure. Throughout the working processes-oriented teaching thought, according to the internal logic of knowledge it needs to reorganize and cannot abandon the internal logical to teach, otherwise knowledge and working process is difficult to combine. Teachers should pay attention to the process-oriented teaching method, projectable design and guiding students learning methods and avenue and the variety of curriculum design and other aspects.

Through the investigation of certain numbers of representative enterprises, based on understanding enterprises’ characteristics and the logistics station groups, according to the required ability and basic quality of enterprises’ actual jobs, make sure what professional qualities and abilities logistics graduate students should have.

The arrangement of the chapters of most of the current supply chain management textbooks is carried out by the work flow contents of suppliers, manufacturers, vendors, such as logistics management, inventory management, procurement management, production planning management etc. These chapters arrangement is necessary to systematic study and research on supply chain management. But for students whose major are logistics management, before they study supply chain management, they have basically taken elective courses about the above subjects according to the requirement of specialized courses. So when students have to learn these parts in supply chain management class again, it is very difficult for them to listen. In fact, in the course of
supply chain management, the introduction of these courses is more superficial than separating the courses to teach. Therefore, the teaching effect is not good, so does the students feedback. This requires that in the process of teaching, according to the actual situation make necessary changes to the teaching content, highlight the focus, and construct teaching main line. In actual teaching, we construct a teaching main line in the following order: introduce and summarize supply chain management—design supply chain—select partnership—analyze the system operation process of supply chain—introduce the main technology of Supply Chain Management (MRPII, ERP, JIT, CRM, DM, QR, etc)—analysis the performances of supply chain. Through the construction of the main line, make each section have continuity and relevance and lead students thought deeper and deeper by teaching.

The design of experimental teaching content, structure and system

"The experimental teaching mode emphasizes the effect of “student-centered and teacher-led". Put students "learning" in the first place when elaborately design the teaching process. By establishing study situation conforming to content, teachers find out the link between the old and new knowledge, create a relaxed and harmonious atmosphere to lead the problem into deep and organize students to communicate to deepen their understanding of learning content. In the experimental teaching process, students initiatively explore, construct knowledge and apply knowledge to finish the teaching task from first to last.

Based on deep analysis of the characteristics of learners, teaching objectives and combining the experimental teaching mode, we creatively construct unique system of content and structure of supply chain management course. On the premise of deeply grasping the internal logical connection and the core elements of the teaching content of supply chain management, we divide the main teaching line that is based on the reconstruction of working process into several learning projects. Each project is wrote in the basic mode in accordance with the "learner Analysis -- teaching goal – situation setting -- guide experience/design problems) -- experience exploration (obtain truth) -- sublimation of experience (practise)". Also consider the unique life practice and ability level of college students to determine the breadth and depth of the content. First of all, according to the the knowledge points carefully select experiential materials to create actual operation situation of enterprises’ supply chain management, that is, applying the knowledge into the real situation. Then, based on this situation design corresponding questions to lead students to experience and explore in person, so that students would master the necessary and important knowledge and skills of supply chain management. Finally, write a series of practical training materials to test the truth in order to enhance the consciousness and ability of students’ transferring knowledge and using knowledge to solve problems. Through designing experiential teaching content, integrate the curriculum content and theory. Teachers teach theories in practice and achieve the teaching goal though lively activities.

Practical analysis of experimental teaching mode facing the working process

According to the teaching objectives and content of experimental teaching of supply chain management course, we put forward a five-segment-circulated-experienced teaching mode of “experience into environment –lead to experience –explore experience--sublime experience (practice training) –summarize commentary and feedback ". Take "bullwhip effect", one of the "supply chain management" projects as an example; discuss the conduct process of experimental teaching. Firstly, according to the teaching objectives of "bullwhip effect", we aboratively design the teaching content and script--coke game. It is used to simulate the inventory decision model of supply, production and distribution system in the supply chain. This game can be used to describe the "bullwhip effect" phenomenon in the supply chain. In the teaching process, teachers play the customers who is responsible for the transferring work of information and organizing games in order.

(1) experience into environment; effectively inspire students interest in learning and enthusiasm for learning by creating appropriate teaching situation. Before the game, teachers tell students the rules of the game. Then assign roles and make sure the certain work of each role. Group students and make students play manufacturers, wholesalers, retailers and customers and engage in their own business activities. Each role receive customers’ orders, and then consider the existing inventory, safety inventory and procurement lead time and so on to produce your own order. Then send out the order to the suppliers.

(2) lead to experience; in the process of game teaching, teachers can enlighten and guide students to experience in the game by setting situation questions in advance and inspire students to "test by body and heart ". In the process of "bullwhip effect" teaching, we set the following
questions: What is the reason of out-of-stock fluctuation? How to solve or alleviate this phenomenon? How do you determine the order quantity and order time? Is it necessary to further improve the company to increase the profit? These problems can be experienced deeply by students in the game, cause students to think and discuss and arouse their profound experience in the game. By active and right guide, it will inspire students’ desire for knowledge naturally and prepare for students to actively explore.

(3) explore experience; exploration process is the process of interaction among students themselves, knowledge and environment and understanding. In the process of exploring knowledge, students have a strong desire for knowledge acquisition. In the game of "bullwhip effect" teaching, in order to improve the company profit, students give full play to students' subjective initiative and analysis various causes of the bullwhip effect as far as possible and actively seek the corresponding measures. They will summarize the experience for their own success and also summarize the lessons for their own failure. In the process of exploring the experimental learning, students not only obtain "the activity of knowledge" but also the methods to solve the practical problems. This is our key professional ability to train in higher vocational schools education. At the same time, we get emotional sublimation and gain a certain level of fulfillment.

(4) sublime experience; this process is not only the process of consolidating and improving knowledge, but also the process of training students' practical thinking. Students acquire knowledge by exploring and experience. Students can only through the practice to promote their ability of applying knowledge and skills in different situation and effectively improve the ability of flexibly and creatively solving problems.

(5) summarize commentary and feedback. Through the previous phases of the study, students obtain the knowledge and skills, enrich their emotion and practice their ability. But the teaching process is not over. Through the summary, students realize and find their own shortage, find out the gap, lay a solid foundation for the next phase of the study and positively devote into the following learning project.

CONCLUSION

Supply chain management is a quite new research field of management science. Like other management courses, the teaching process has the following clear characteristics: Firstly, attach great importance to interactive participatory teaching method, this is decided by the management features of science and art. Secondly, attach great importance to cooperative learning. Management and communication are inseparable. Management education and cooperative learning are inseparable. Thirdly, pay great attention to the close combination of theory and practice. Some scholars have pointed out that the business management courses adapt for the experimental teaching mode because it attaches great importance to "learn by doing" and emphasizes the interaction between teachers and students and the cooperation learning between teachers and students as well as among students which is good for the integration of theory with practice. These characteristics also will help achieve the teaching target of supply chain management. Therefore, supply chain management teaching adapts for the working situations-oriented experimental teaching mode.

REFERENCES


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