Reflection on Diversified Practical Teaching in Supply Chain Management Major at Applied Undergraduate Institutions

Yin Wang

Xingzhi College, Xi'an University of Finance and Economics, Xi'an, 710038, China

Keywords: Supply Chain Management, Applied Undergraduate, Practical Education, Diversification, Teaching Strategies

Abstract: From the perspective of application-oriented undergraduate colleges, this study deeply discusses the diversified practical teaching mode of supply chain management majors, aiming to solve the problems existing in the current practical teaching and improve students' practical operation ability and application skills. First of all, this paper makes a comprehensive and in-depth analysis of the shortcomings of the current teaching mode, and clarifies some aspects that need to be improved, such as the disconnection between theory and practice, and the lack of student participation. In view of these problems, this paper puts forward a series of diversified practical teaching strategies and methods, in order to fully stimulate students' interest in learning and practical motivation. Finally, this paper demonstrates the effectiveness of the proposed diversified practical teaching mode through detailed practical cases. Through in-depth analysis, proposing innovative practical teaching strategies, and verifying their effectiveness through practical cases, this paper provides useful experience and enlightenment for the practical teaching of supply chain management majors in applied undergraduate universities. This study not only provides solutions to the current problems, but also provides a valuable reference for the teaching mode design of similar majors in the future.

1. Introduction

Supply chain management has gradually emerged as a critical component of modern enterprise operations and strategic management over the past few decades. With globalization, the rise of e-commerce, and advancements in new technologies, the complexity of supply chains has been on the rise, making supply chain management an increasingly vital role. Enterprises now need to ensure not only production efficiency and smooth logistics but also to confront various risks, ranging from resource shortages to geopolitical changes, and even unforeseen global events like the COVID-19 pandemic.

In this context, the demand for supply chain management talent has also increased. Enterprises are no longer merely seeking individuals with basic knowledge of logistics and procurement but are looking for experts who can perform complex analyses, engage in strategic thinking, and possess cross-cultural and interdisciplinary knowledge. However, is the education sector adequately prepared
for this demand? Can traditional teaching methods still meet the current industry requirements?

Applied undergraduate education, as an educational form aimed at cultivating students' practical application skills, provides a robust answer to this challenge. Particularly in the field of supply chain management, applied teaching methods can offer students experiential learning integrated with real-world work, aiding them in understanding theories and applying them in practice. However, whether the current teaching models and strategies are fully adapted to this shift and how they can be further optimized and improved are the focal points that this paper aims to explore.

This paper will first examine the current status and issues in applied undergraduate supply chain management education and then delve into the proposal and implementation of diversified practical teaching strategies. Finally, its effectiveness will be analyzed through practical case studies, offering insights and recommendations for the future development of supply chain management education.

2. Current Status and Problem Analysis of Teaching in Applied Undergraduate Supply Chain Management

2.1. Characteristics of Teaching in Applied Undergraduate Supply Chain Management

Applied undergraduate supply chain management programs emphasize the development of students' practical operational skills and application abilities. Such teaching models are often closely aligned with the actual requirements of the business sector, ensuring that students can seamlessly integrate into the work environment upon graduation. The curriculum is designed to encompass the entire supply chain management process, covering supplier selection, procurement, production, logistics, sales, and after-sales service, comprehensively nurturing students' supply chain management capabilities.[1]

Furthermore, the applied nature is also evident in the integration of interdisciplinary knowledge. In the teaching of supply chain management, in addition to core professional courses, it also includes content from related disciplines such as information technology, financial management, marketing, and others. This enables students to not only master the core skills of supply chain management but also possess cross-disciplinary comprehensive qualities.

2.2. Issues in Teaching Applied Undergraduate Supply Chain Management

Supply chain management education plays a significant role in applied undergraduate education. However, in the actual teaching process, some issues persist that impact the effectiveness of teaching and students' learning experiences.

2.2.1. Gap between Theory and Practice

In supply chain management education, theoretical knowledge serves as the foundation. Still, an excessive emphasis on theory while neglecting practical application can result in students being unable to apply what they have learned in real-world scenarios. Many textbooks and courses emphasize the theoretical frameworks and models of supply chain management, but they often lack practical application and operational aspects.[2] This leaves students with a basic theoretical understanding of supply chain management after completing the course but frequently leaves them feeling ill-prepared when facing real work environments.

2.2.2. Lack of Practical Experience

Supply chain management is a highly practical profession, and practical experience is crucial for students’ career development. Nevertheless, many applied undergraduate programs currently focus
too heavily on theoretical teaching during the training process, while neglecting the importance of practical operations. This means that students may acquire a wealth of theoretical knowledge but lack the necessary practical experience and skills in real work settings.[3]

2.2.3. Insufficient Teaching Resources

For teaching applied undergraduate supply chain management, high-quality teaching resources are crucial for enhancing teaching effectiveness. This includes modern teaching equipment, case materials integrated with actual business practices, and a teaching staff with extensive experience. However, many schools currently face shortages in these areas. Outdated teaching equipment, a lack of textbooks and cases that align with modern supply chain management practices, and an unbalanced teaching staff structure are common issues in current teaching.

These problems not only affect students' learning experiences but may also make it challenging for them to adapt to the actual job requirements after graduation. Therefore, addressing these issues, optimizing teaching models, and strengthening the integration with real business practices are essential for improving the teaching quality of supply chain management programs.[4]

3. Proposal of Diversified Practical Teaching Strategies

3.1. Case-Based Teaching Method

The case-based teaching method holds a significant place in the teaching of supply chain management. This teaching approach focuses on introducing real-world business environments and complex supply chain issues into the classroom, allowing students to grasp relevant knowledge while solving practical problems. It helps students develop independent thinking and problems-solving abilities, enhancing their understanding and application of theoretical knowledge. By analyzing real cases, students can gain a deeper insight into the operational mechanisms of supply chains and how to make decisions when faced with various issues.[5]

3.1.1. Case Selection and Design

Selecting appropriate cases is key to the case-based teaching method. Case selection should align with the course's educational objectives, reflecting core issues in supply chain management and stimulating students' interest and curiosity.

When designing cases, it is essential to ensure their authenticity and complexity. Authenticity means that cases should originate from real business environments rather than being purely fictional. This allows students to relate more easily and engage in in-depth discussions.[6] Complexity requires that the issues presented in the cases should not be overly simplistic but rather demand students to apply their knowledge and skills for in-depth analysis.

Additionally, case design should also focus on interdisciplinary integration. Supply chain management itself is an interdisciplinary field, so cases can incorporate content from other areas such as finance, marketing, and information technology, enabling students to apply knowledge from various disciplines while analyzing supply chain problems.

In summary, a good case not only helps students understand and apply knowledge in supply chain management but also nurtures their comprehensive qualities, laying a solid foundation for their future careers.

3.1.2. Transformation of Student Roles and Engagement

In the case-based teaching method, there is a significant transformation in student roles. In
traditional teaching models, students are often passive recipients of knowledge, whereas in case-based teaching, students become active participants and creators of knowledge. They are no longer just the audience but rather become problem solvers, requiring in-depth thinking and application of the content they have learned.

This role transformation deepens student involvement in the learning process, making the process of problem discovery and resolution more realistic and specific. Faced with a specific supply chain problem, students need to apply their theoretical knowledge, combine it with information from the case, and perform analysis and decision-making. This situational learning allows students to understand and master the knowledge better and also increases their enthusiasm for learning.

Furthermore, student interaction becomes more frequent and profound. During case discussions, students need to communicate, share viewpoints, engage in debates, and discussions with their peers. This interaction not only helps students understand and master knowledge but also cultivates their teamwork and communication skills.

In conclusion, the transformation of student roles in the case-based teaching method shifts them from passive knowledge receivers to active knowledge participants. This participatory learning model better stimulates students' interest in learning and enhances their learning effectiveness.

3.2. Industry Internships and Collaboration

Industry internships and collaboration are integral components of applied undergraduate supply chain management education. They offer students an opportunity to apply theoretical knowledge in real-world work environments, enabling students to gain a better understanding of actual supply chain management operations.

3.2.1. Establishing Educational Partnerships with Enterprises

Establishing educational partnerships with enterprises is crucial for promoting student internships and practical experience. Through collaboration with various supply chain-related businesses, educational institutions can ensure that students have the opportunity to engage in various aspects of supply chain management. This collaboration encompasses not only providing internships but also inviting industry experts into the classroom to share real-world experiences or to provide real supply chain cases for course design.

Stable educational collaboration with enterprises also serves as a channel for educational institutions to stay informed about the latest industry trends and technological advancements. This assists educational institutions in adjusting their course offerings to ensure that the content taught aligns with industry demands.

3.2.2. Regularly Organizing Student Site Visits and Internships

Site visits and internships offer students a crucial way to gain in-depth insights into the workings of supply chains. By visiting company sites, students can directly observe various elements of the supply chain, such as procurement, production, logistics, and sales, leading to a more profound understanding of the theoretical knowledge they have learned.

Regularly organizing site visits and internship activities also provides students with an opportunity to interact with the industry. During internships, students can engage in direct discussions with company employees, inquire about the practical challenges they face at work, and learn how to solve them. This interaction not only helps students understand the practical aspects of supply chain management but also fosters their communication and teamwork abilities.

Through close collaboration with enterprises and the organization of regular site visits and internships, students can integrate the theoretical knowledge learned in the classroom with real work
environments, gaining a better grasp of supply chain management knowledge and skills.

3.3. Simulation Experiments and Digital Teaching Tools

In modern supply chain management education, there is an increasing emphasis on simulation experiments and digital teaching tools. These tools provide a safe environment for students to experience and explore the complexity and challenges of supply chains without real-world risks.

3.3.1. Establishing Supply Chain Simulation Labs

Supply chain simulation labs are platforms that simulate real business environments, allowing students to make decisions, observe, and analyze results within a simulated context. Through simulation labs, students can gain a deep understanding of how supply chains operate and how to optimize them for increased efficiency and cost reduction.

The establishment of supply chain simulation labs necessitates consideration of various factors. For instance, the lab's hardware should support highly complex simulation programs. Additionally, the lab's content should cover all aspects of supply chain management, including procurement, production, logistics, sales, and more, ensuring students receive a comprehensive learning experience.

3.3.2. Utilizing Digital Teaching Tools and Software

Digital teaching tools and software have brought revolutionary changes to supply chain management education. They offer rich interactive content that helps students better understand and apply knowledge. For example, digital simulation software allows students to run supply chains in virtual environments, observe the impact of various decisions on supply chain performance.

Apart from simulation software, there are many other digital tools that can be used in supply chain management education, including data analysis tools, visualization tools, and collaborative work platforms. These tools help students analyze real data, propose solutions, and collaborate with team members to complete projects.

Digital teaching tools and software not only enhance teaching efficiency and effectiveness but also provide students with exposure to modern supply chain tools, preparing them for their future careers.

4. Actual Effects of Diversified Practical Teaching and Case Analysis

4.1. Enhancement of Student Abilities through Diversified Practical Teaching Models

The promotion and application of diversified practical teaching models in the field of supply chain management have brought about a range of noticeable improvements in student capabilities. This teaching model breaks away from traditional education paradigms, emphasizing the integration of theory and practice while providing students with more opportunities for hands-on experience.

Within this model, students are no longer passive recipients of knowledge. They become active participants in various practical activities, such as simulation experiments, case analyses, and corporate internships. This active participation enables students to gain a more intuitive understanding of the complexity of supply chains and to acquire critical skills in managing them.

The accumulation of practical experience provides students with valuable opportunities to validate the theoretical knowledge they have acquired within a real business context. This deepens their understanding of professional knowledge while nurturing their practical skills and decision-making abilities.

Moreover, diversified practical teaching models highlight the importance of teamwork. In most practical activities, students need to collaborate with their peers to accomplish tasks. This teamwork
experience not only hones their collaborative abilities but also fosters communication and coordination skills.

4.1.1. Integration of Theoretical Knowledge and Practical Skills

Diversified practical teaching allows students to apply the theoretical knowledge they have learned in the classroom to real-life situations. This integration prompts students to develop a deeper understanding of their theoretical knowledge. For instance, through simulation experiments and corporate internships, students can visually witness the processes and decision-making involved in supply chain operations. This helps them better grasp and apply relevant theories and methods.

Furthermore, this integration method promotes students' critical thinking and problem-solving skills. Faced with real supply chain issues, students must apply their theoretical knowledge and combine it with real-life scenarios to propose practical solutions.

4.1.2. Enhancement of Students' Self-directed Learning Abilities

Diversified practical teaching models encourage students to actively engage in the learning process. Whether through case discussions, corporate internships, or simulation experiments, students are required to think critically, ask questions, and explore actively. This nurtures their self-directed learning abilities.

When students become accustomed to this active learning model, their self-motivation and desire for knowledge are strengthened. This not only enhances their academic performance but also establishes a solid foundation for continuous learning in their future work and life.

4.2. Win-Win Collaboration between Businesses and Schools

When educational institutions establish close collaboration with enterprises, offering students practical opportunities within the supply chain management field, the benefits extend beyond just the students. This collaboration model, in fact, brings significant advantages to both parties, creating a genuine win-win situation.

For educational institutions, collaboration with enterprises provides an opportunity to offer students a more realistic and challenging learning environment. This environment allows students to gain a more intuitive understanding of various aspects of supply chain management and develop practical operational and decision-making skills. This real, business-based learning experience undoubtedly significantly aids students’ career development. Students' internship experiences within enterprises not only deepen their understanding of professional knowledge but also accumulate valuable work experience, laying a solid foundation for their future employment.

From the perspective of enterprises, this collaboration model also brings various advantages. Firstly, enterprises can identify and attract potential talents through this collaboration. Students, during their internships, often bring fresh perspectives and innovative ideas, aiding enterprises in resolving long-standing issues. Furthermore, enterprises have the opportunity to participate in the education and training process, ensuring that the knowledge and skills students acquire align better with the practical needs of the business.

On a broader scale, close collaboration between educational institutions and enterprises provides significant benefits to the entire supply chain management industry. This collaboration model offers a more systematic and comprehensive mechanism for talent development within the industry, ensuring its continued growth and competitiveness.
4.3. Specific Case Analysis

In recent years, several universities have partnered with leading companies to provide practical opportunities for students majoring in supply chain management. The following is a specific case analysis that reveals how such collaborations are conducted in practice and the benefits they bring.

A renowned business management school in the Eastern region of China entered into a cooperation agreement with a large domestic retail corporation. This corporation operates over 300 stores nationwide and is involved in extensive aspects of supply chain management, including goods circulation, warehousing, and logistics. The collaboration between the university and the corporation primarily focused on the corporation's supply chain management practices. Students had the opportunity to enter the corporation and participate in real business operations, such as goods procurement, warehouse management, and logistics distribution.

During their practical experiences within the corporation, students gained firsthand exposure to various aspects of supply chain management, deepening their understanding of the theoretical knowledge learned in the classroom. For example, when participating in logistics distribution, students could intuitively observe how orders were scheduled based on order volumes, how logistics routes were optimized, and how timely and accurate delivery to customers was ensured.

For the corporation, this collaboration model also brought several benefits. Students, as a source of fresh perspectives, offered numerous innovative ideas that helped the corporation address long-standing issues. Additionally, the corporation had the opportunity to identify and nurture potential talent early, laying the foundation for future talent reserves.

The benefits of this collaboration extended to the entire supply chain management industry. It provided a more systematic and comprehensive mechanism for talent development, ensuring that the industry maintains its growth and competitiveness.

5. Conclusion

In today's increasingly globalized and digitized business environment, supply chain management has become a critical factor in a company's competitive edge. With its growing significance in the business arena, there is an increasing demand for relevant talent. Therefore, applied undergraduate education in supply chain management aims to nurture students' practical skills and their ability to address complex problems, rather than just impart theoretical knowledge.

To achieve this goal, educational institutions need to employ diversified practical teaching strategies. From case-based teaching, corporate internships and collaborations, to simulation experiments and digital teaching tools, these methods help bridge the gap for students from traditional classroom settings to real-world business scenarios. This not only assists students in deepening their understanding of theoretical knowledge but also enhances their practical skills and self-directed learning abilities. Concurrently, collaboration between businesses and educational institutions provides valuable practical opportunities for students, allowing them to apply their acquired knowledge in real business settings, further enhancing their competitiveness.

The significance of diversified practical teaching strategies in applied undergraduate education in supply chain management is self-evident. Only through continuous innovation and refinement of teaching methods can we cultivate professionals who can genuinely adapt to and lead the future development of supply chain management.

References