



**A STUDY OF THE IMPACT OF INTELLIGENT FINANCE
COURSE LEARNING EXPERIENCE ON ACCOUNTING
STUDENTS' CAREER COMPETENCE: A CASE STUDY OF
BEIJING JIAOTONG UNIVERSITY**

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**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF BUSINESS ADMINISTRATION
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This Independent Study Has Been Approved as a Partial Fulfillment of the
Requirements for the Degree of Master of Business Administration

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Title: A Study of the Impact of Intelligent Finance Course Learning Experience on Accounting Students' Career Competence: A Case Study of Beijing Jiaotong University

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ABSTRACT

With the rapid development of digital technologies, the accounting profession is undergoing a transformation from traditional accounting work to intelligent, digital, and data-driven financial management. In this context, accounting education needs to strengthen students' digital finance knowledge, practical skills, and career competence. Intelligent finance courses have become an important tool to cultivate accounting students' professional knowledge, intelligent finance skills, data analysis ability, and career adaptability. The objectives of this study are as follows: 1) To explore the effect of course content quality on accounting students' career competence. 2) To explore the effect of teaching method effectiveness on accounting students' career competence. 3) To explore the effect of practical training experience on accounting students' career competence.

This study adopted a quantitative research method. Data were collected through an online questionnaire survey among accounting students who had taken intelligent finance-related courses at Beijing Jiaotong University. A total of 300 questionnaires were distributed and collected. 268 valid questionnaires were for data analysis.

The findings indicate that intelligent finance course learning experience plays an important role in improving accounting students' career competence. High-quality course content can help students understand intelligent finance knowledge and professional requirements. Effective teaching methods can improve students' understanding and application of course knowledge. Rich practical training experience can help students transform theoretical knowledge into practical ability and enhance their digital finance skills, data analysis ability, problem-solving ability, and career adaptability.

Keywords: learning experience, course content quality, teaching method effectiveness, practical training experience



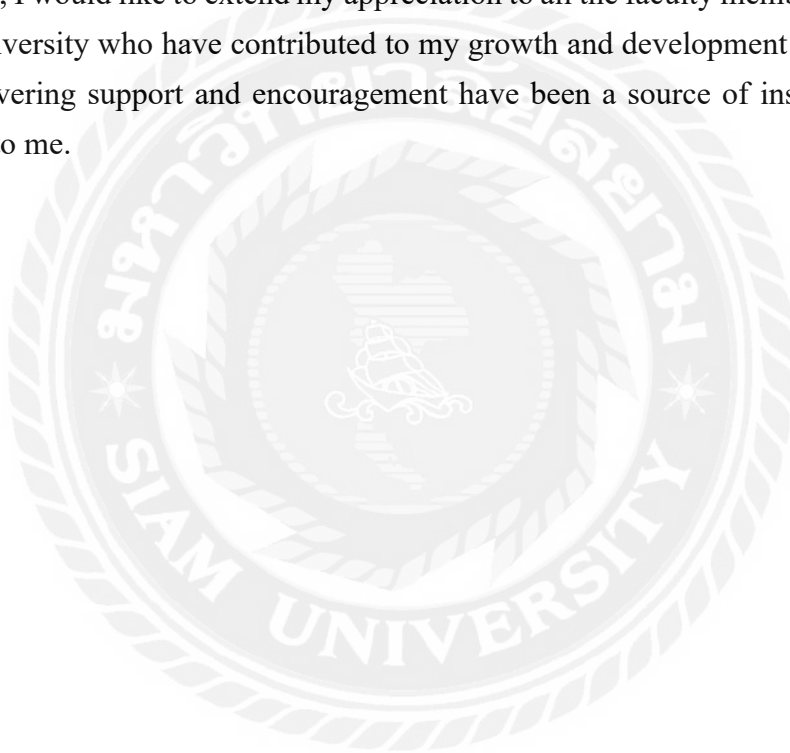
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Liu Xu



DECLARATION

I, Liu Xu, hereby declare that this Independent Study entitled “A Study of the Impact of Intelligent Finance Course Learning Experience on Accounting Students’ Career Competence: A Case Study of Beijing Jiaotong University” is an original work and has never been submitted to any academic institution for a degree.

(Liu Xu)

Aug 7, 2026



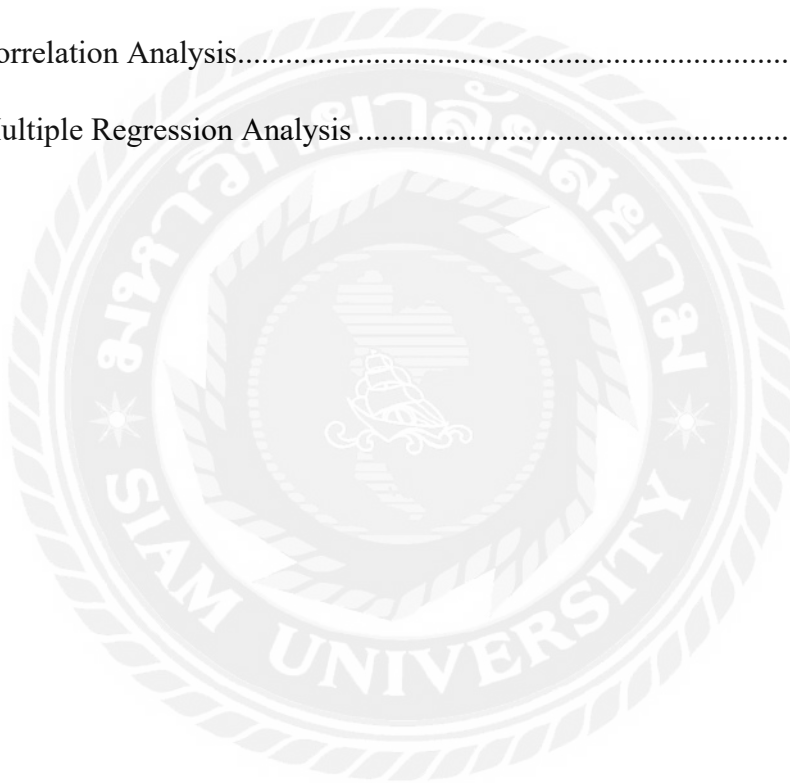
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Chapter 1 Introduction

1.1 Background of the Study

The rapid development of digital technologies is reshaping the accounting and finance profession. Artificial intelligence, big data analytics, cloud computing, robotic process automation, and other digital technologies are increasingly applied to accounting activities. Routine and standardized accounting tasks are becoming more automated, while accountants are increasingly expected to perform non-routine activities involving analysis, interpretation, professional judgment, and decision-making. Pargmann et al. (2023) found that accounting digitalization is changing both professional activities and the competencies required of accountants, with digital competencies and the ability to handle non-routine tasks becoming increasingly important.

These changes have expanded the competency requirements for accounting graduates. Professional accounting knowledge remains fundamental, but employers increasingly expect graduates to combine accounting knowledge with technological and broader professional competencies. Daff (2021) found that employers continued to value accounting knowledge while also emphasizing ICT and software competencies. Similarly, Suarta et al. (2024), based on an analysis of accounting job advertisements, found that employers demanded analytical and problem-solving abilities, interpersonal and communication skills, self-management capabilities, and technological skills such as the use of spreadsheets, accounting software, enterprise resource planning systems, and cloud-based accounting applications.

Accounting digitalization has also become an important direction of professional development in China. The Ministry of Finance of the People's Republic of China issued the *Accounting Informatization Development Plan (2021–2025)*, emphasizing the application of big data, artificial intelligence, cloud computing, blockchain, and other technologies in accounting and promoting the digital transformation of accounting work (Ministry of Finance of the People's Republic of China, 2021). In 2024, the Ministry further revised national specifications for accounting informatization and accounting software in response to rapid technological development, reflecting the continuing institutional promotion of digital transformation in the accounting profession (Ministry of Finance of the People's Republic of China, 2024).

The transformation of professional practice has created corresponding challenges for accounting education. Universities need to prepare students not only with

conventional accounting knowledge but also with digital, analytical, and application-oriented competencies. Handoyo (2024) identified emerging technologies, the changing skills required of accountants, and technology integration into accounting curricula as important themes in contemporary accounting education research. This indicates that accounting education needs to respond continuously to changes in technology and professional practice.

However, the inclusion of digital content in accounting curricula does not necessarily ensure that students develop the competencies expected by employers. Elo et al. (2024) identified gaps between the skills accounting students considered important for their future careers and the extent to which they perceived those skills as being developed through their university studies, particularly in relation to technological skills. This finding suggests that greater attention should be paid not only to what is included in accounting courses, but also to how students experience and apply what they learn.

Against this background, intelligent finance courses provide an important educational approach for integrating accounting and finance knowledge with digital technologies, data analytics, intelligent systems, and professional applications. The effectiveness of such courses may depend on several components of students' learning experience. In the present study, intelligent finance course learning experience is examined through course content quality, teaching method effectiveness, and practical training experience. Course content quality reflects whether students receive updated and professionally relevant knowledge, teaching method effectiveness reflects how effectively students understand and process that knowledge, and practical training experience reflects opportunities to apply acquired knowledge and digital technologies in professional situations.

The development of these learning experiences is closely related to accounting students' career competence. In digitally transformed accounting environments, career competence requires more than technical accounting knowledge. Students increasingly need digital technology application ability, data analysis ability, problem-solving skills, business-finance integration ability, and adaptability in addition to professional accounting knowledge (Daff, 2021; Pargmann et al., 2023; Suarta et al., 2024). Therefore, understanding how intelligent finance learning experiences are associated with students' career competence is important for evaluating and improving accounting education.

Accordingly, this study focused on accounting students at Beijing Jiaotong University who have completed intelligent finance-related courses. It examined

whether course content quality, teaching method effectiveness, and practical training experience are associated with accounting students' career competence. By focusing on students' actual learning experiences, the study sought to provide evidence for improving intelligent finance curriculum design, teaching practices, and practical training arrangements and for strengthening students' preparation for the changing accounting profession.

1.2 Questions of the Study

With the development of intelligent finance, accounting students are expected to possess not only traditional accounting knowledge but also digital finance skills, data analysis ability, intelligent financial software operation ability, and business-finance integration ability. However, in actual accounting education, several problems remain.

Therefore, this study attempted to answer the following research questions:

1. Does course content quality have a significant relationship with accounting students' career competence?
2. Does teaching method effectiveness have a significant relationship with accounting students' career competence?
3. Does practical training experience have a significant relationship with accounting students' career competence?

1.3 Objectives of the Study

The objectives of this study are as follows:

- 1) To explore the effect of course content quality on accounting students' career competence.
- 2) To explore the effect of teaching method effectiveness on accounting students' career competence.
- 3) To explore the effect of practical training experience on accounting students' career competence.

1.4 Scope of the Study

This study focused on the impact of intelligent finance course learning experience on accounting students' career competence. The research was conducted in the context of Beijing Jiaotong University.

The respondents were accounting students who have completed intelligent finance-related courses. The study examined three dimensions of learning experience: course content quality, teaching method effectiveness, and practical training experience.

Career competence was assessed through professional knowledge, intelligent finance skills, digital technology application ability, data analysis ability, business-finance integration ability, problem-solving ability, and career adaptability.

The study was grounded in Experiential Learning Theory and adopted a quantitative research design. Data were collected through questionnaires and analyzed using descriptive statistics, reliability analysis, validity analysis, correlation analysis, and multiple regression analysis.

1.5 Significance of the Study

Theoretical Significance

First, this study enriches the literature on intelligent finance education by examining the relationship between intelligent finance course learning experience and accounting students' career competence. Second, this study extends the application of Experiential Learning Theory to the context of intelligent finance education and explains how learning experiences contribute to competence development. Third, the study provides a structured framework for understanding which dimensions of learning experience are most influential in enhancing accounting students' career competence.

Practical Significance

First, the findings provide useful recommendations for improving intelligent finance courses at Beijing Jiaotong University. Second, the study can help educators better understand students' learning needs and improve curriculum design, teaching methods, and practical training arrangements. Third, the findings can guide accounting students in strengthening practical skills, digital competencies, and career readiness. Fourth, the study provides references for accounting education reform and support the development of practice-oriented and industry-relevant accounting programs.

1.6 Definition of Key Terms

Course content quality: The degree to which intelligent finance course content is current, systematic, professionally relevant, understandable, and applicable to accounting and finance practice.

Teaching method effectiveness: The degree to which teaching approaches help students understand intelligent finance concepts, participate in learning, connect theory with professional problems, and apply acquired knowledge.

Practical training experience: Students' experience of applying knowledge through intelligent finance software, simulations, financial data tasks, enterprise cases, business-finance integration exercises, and projects.

Accounting students' career competence: The combination of professional knowledge, digital skills, analytical ability, business-finance integration, problem-solving ability, and adaptability required for future accounting and finance employment.



Chapter 2 Literature Review

2.1 Intelligent Finance Course Learning Experience

Intelligent finance course learning experience refers to students' overall perceptions and experiences developed through participation in courses that integrate accounting and finance knowledge with digital technologies, data analytics, intelligent systems, and professional applications. It reflects the educational process through which students acquire, understand, and apply knowledge and skills related to intelligent finance. Compared with traditional accounting education, which primarily emphasizes accounting principles, financial reporting, bookkeeping, auditing, and other professional knowledge, intelligent finance education increasingly incorporates digital technologies and data-driven applications into the learning process.

The development of intelligent finance education is closely related to the digital transformation of the accounting profession. Advances in information technology, data analytics, artificial intelligence, cloud computing, automation, and other digital technologies have changed the nature of accounting work and expanded the competencies required of accounting professionals. Pan and Seow (2016) argued that accounting graduates need stronger information technology competencies to respond to the digital transformation of the profession. Their review emphasized that accounting education should increasingly integrate technological knowledge with traditional accounting competencies in order to prepare students for technology-intensive professional environments.

Subsequent research has further demonstrated the need for accounting curricula to respond to technological change. Andiola et al. (2020) examined accounting department leaders' experiences in integrating technology and data analytics into accounting curricula and found that these competencies have become increasingly important in accounting education. Their study also showed that effective technology integration involves curriculum design, faculty capabilities, educational resources, and the connection between technological knowledge and accounting subjects. Similarly, Birt et al. (2023) identified differences between the digital competencies expected by the accounting profession and the extent to which information and communication technology and data analytics were incorporated into university accounting curricula. These findings indicate that preparing accounting students for digitalized professional environments requires an integrated learning experience rather than the simple addition of isolated technological topics.

The increasing importance of digital competence is also evident among finance and accounting students. Januszewski et al. (2024) found that finance and accounting students need further development in areas such as data analysis, database management, and other digital competencies associated with contemporary financial and accounting work. Their findings suggest that students' familiarity with general digital technology does not necessarily translate into professional digital competence. Structured educational experiences are therefore required to help students connect digital technologies with accounting knowledge and professional applications.

Based on the existing literature, this study conceptualizes intelligent finance course learning experience through three dimensions: course content quality, teaching method effectiveness, and practical training experience. The selection of these dimensions reflects three fundamental components of the learning process: what students learn, how students learn, and how students apply what they have learned. The three-dimensional structure is not directly adopted from a single previous study. Instead, it is developed by integrating several streams of accounting education literature.

First, course content quality represents the “what students learn” component of the learning experience. Research on technology integration and accounting curriculum development emphasizes the importance of ensuring that accounting course content remains aligned with technological developments and changing professional competency requirements (Andiola et al., 2020; Birt et al., 2023). Therefore, course content provides the knowledge foundation of intelligent finance learning.

Second, teaching method effectiveness represents the “how students learn” component. Intelligent finance involves complex relationships among accounting knowledge, digital technologies, and professional problems. Appropriate teaching methods are therefore required to help students understand, organize, and apply this knowledge. Tettamanzi et al. (2023) emphasized the importance of active and student-centered approaches in increasingly digitalized accounting education, indicating that technology should be accompanied by teaching practices that facilitate participation, interaction, and meaningful learning.

Third, practical training experience represents the “how students apply what they have learned” component. Accounting is an application-oriented discipline, and intelligent finance requires students to use digital tools and professional knowledge in practical situations. Gittings et al. (2020), through a systematic review of experiential learning activities in university accounting education, found that experiential learning was associated with positive outcomes in areas including technical knowledge and the application of accounting theory. Practical experience therefore provides an important

mechanism through which classroom knowledge can be transformed into applicable skills.

These three dimensions are conceptually distinct but closely related components of the same learning process. Course content quality provides students with relevant knowledge, teaching method effectiveness facilitates the understanding and internalization of that knowledge, and practical training experience provides opportunities for students to apply and transform knowledge into practical abilities. The relationship among the three dimensions can therefore be understood as a progressive learning process from knowledge acquisition, to knowledge understanding, and finally to knowledge application. However, this progression represents the theoretical relationship among the dimensions rather than additional causal paths to be tested in the empirical research model.

The relationship among these dimensions is also consistent with Experiential Learning Theory. Kolb (1984) proposed that effective learning involves a continuous cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation. In intelligent finance education, students need both conceptual knowledge and opportunities to reflect on, apply, and test that knowledge in professional situations. Course content contributes to the conceptual knowledge foundation, effective teaching assists students in interpreting and organizing knowledge, while practical training provides concrete experience and active experimentation. Gittings et al. (2020) further demonstrated the relevance of experiential learning to accounting education by showing that practical learning activities support the connection between accounting theory and its application.

The integration of these three dimensions is particularly important because weakness in one component may limit the overall learning experience. Relevant course content may have limited educational value when students cannot understand it effectively, while effective classroom instruction alone may not fully develop professional competence if students have insufficient opportunities to apply what they have learned. Therefore, intelligent finance education should be considered as an integrated learning process in which content, teaching, and practice jointly contribute to students' learning development.

In this study, intelligent finance course learning experience refers to accounting students' overall evaluation of the educational process through which they acquire, understand, and apply intelligent finance-related knowledge and skills. It is represented by three dimensions: course content quality as the knowledge foundation, teaching method effectiveness as the process of facilitating understanding and knowledge

transfer, and practical training experience as the process of applying and transforming knowledge into practical abilities. Together, these three dimensions provide a structured representation of students' intelligent finance course learning experience and provide the basis for examining its relationship with accounting students' career competence. The specific concepts and related literature for each dimension are discussed separately in the following sections.

2.2 Course Content Quality

Course content quality refers to the extent to which the knowledge, learning materials, and professional topics included in a course are current, systematic, relevant, and applicable to students' future professional activities. In intelligent finance education, course content quality is particularly important because accounting and finance work increasingly involves information systems, data analytics, automation, and other digital technologies. High-quality course content should therefore provide students with a sound accounting knowledge foundation while reflecting technological developments and contemporary professional requirements.

The increasing use of big data and information technologies has created a need to reconsider the content of accounting curricula. Sledgianowski et al. (2017) emphasized the importance of integrating Big Data, technology, and information systems competencies into accounting education. Rather than treating technology as knowledge separate from accounting, they proposed integrating relevant technological competencies into existing accounting subjects. Their study suggests that accounting course content should enable students to understand how technology and data are applied within different areas of accounting and business.

Data analytics has become an especially important element of contemporary accounting course content. Dzurain et al. (2018) examined approaches to incorporating data analytics into accounting curricula and identified three possible approaches: focused, integrated, and hybrid. Their findings showed support for incorporating data analytics competencies into accounting education and highlighted the importance of developing an analytical mindset and students' ability to work with data and relevant software. These findings indicate that high-quality accounting course content should reflect not only established accounting knowledge but also the analytical competencies increasingly required in professional practice.

Qasim et al. (2020) further proposed that data analytics should be integrated progressively across undergraduate accounting courses. Their model links data analytics learning outcomes with different levels of study and accounting subjects,

allowing students to develop analytical knowledge gradually as their accounting knowledge becomes more advanced. The study also emphasizes the use of appropriate learning materials, cases, and analytical applications that connect data analytics with accounting tasks. This progressive approach demonstrates that course content quality involves not only including contemporary topics but also organizing them systematically so that students can develop knowledge from basic understanding toward more advanced professional application.

More recent evidence suggests that gaps remain between the growing importance of data analytics and its implementation in accounting curricula. Losi et al. (2022) surveyed 321 accounting faculty members and found continuing challenges in integrating data analytics into accounting programs. Their study identified issues related to curriculum development, assessment, students' abilities, and faculty competencies, and supported introducing analytics skills earlier and more extensively throughout accounting curricula. These findings indicate that universities need to continuously review course content to ensure that technological and analytical competencies are incorporated at appropriate stages of students' learning.

This need for curriculum updating is also reflected in professional accounting education. The CPA Evolution Model Curriculum developed by the American Institute of Certified Public Accountants and the National Association of State Boards of Accountancy was designed to help accounting programs respond to changing professional competency requirements. The curriculum incorporates technology throughout core accounting areas and includes learning objectives associated with accounting and data analytics, information systems and controls, and technology-supported professional activities. This professional guidance demonstrates that technological competence is increasingly considered part of mainstream accounting knowledge rather than an optional addition to accounting education.

Cainas et al. (2025) further examined how accounting faculty integrate and assess data analytics competencies. Based on a survey of 192 accounting faculty members, their results indicated that substantial work is still required to integrate data analytics throughout accounting curricula and to ensure that program-level competency goals are appropriately assessed. This recent evidence reinforces the importance of regularly reviewing course content so that what students learn remains connected with technological developments and professional expectations.

Taken together, previous research suggests that course content quality in intelligent finance education should emphasize currency, systematic organization, professional relevance, and applicability. Course content needs to respond to

developments in data analytics and digital technologies while remaining connected with accounting and finance knowledge. It should also be organized progressively so that students can develop from basic technological understanding toward the application of digital and analytical knowledge to accounting problems (Dzuranin et al., 2018; Qasim et al., 2020). At the same time, continuous curriculum review is necessary because technological developments and professional competency requirements continue to change (Cainas et al., 2025; Losi et al., 2022).

Therefore, course content quality in this study refers to accounting students' perception of whether intelligent finance course content is updated, systematic, professionally relevant, and practically applicable. It reflects whether the courses provide contemporary intelligent finance knowledge and appropriately connect accounting and finance concepts with digital technology and data analytics. High-quality course content provides the knowledge foundation through which students can better understand changes in accounting practice and develop competencies relevant to their future careers.

2.3 Teaching Method Effectiveness

Teaching method effectiveness refers to the extent to which instructional approaches facilitate students' understanding, participation, knowledge application, and development of relevant skills. In intelligent finance education, effective teaching methods are particularly important because students are required to learn not only accounting and finance concepts but also digital technologies, data analysis, intelligent financial systems, and their professional applications. Therefore, teaching methods should help students move beyond passive knowledge reception toward active understanding and application.

Traditional lecture-based instruction remains useful for explaining fundamental concepts, but intelligent finance education requires students to engage more actively with technological and professional problems. Nurkhin et al. (2020) examined the application of blended problem-based learning in accounting higher education and found that a combination of online learning tools, problem-based activities, group discussion, and face-to-face instruction contributed to students' critical and creative thinking and improved learning outcomes. Their study suggests that teaching effectiveness can be strengthened when students are required to participate actively in solving accounting problems rather than only receiving information from instructors.

The flipped classroom represents another teaching approach relevant to accounting education. Mayer et al. (2023) examined the use of flipped classroom training in an

accounting-related setting. In a flipped classroom, students normally acquire basic course content before class, while classroom time is used for discussion, problem-solving, and application activities. This structure allows instructors to devote more classroom time to higher-order learning activities and provides students with greater responsibility for preparing and processing course knowledge.

Prastiwi and Syahdan (2023) investigated accounting students' perceptions of an online flipped statistics course. Their study focused on student engagement, satisfaction, and self-efficacy and identified teaching practices that could support students' participation in a flipped learning environment. The findings indicate that teaching effectiveness in technology-supported accounting education depends not simply on providing online materials but also on designing learning activities that encourage students to engage with course content and participate actively in the learning process.

Case-based learning also provides an important approach for helping accounting students connect theoretical knowledge with professional situations. Tran and Herzig (2023) examined blended case-based learning in a sustainability accounting course and found that this approach supported both knowledge development and professional skills, including critical thinking, teamwork, and communication. Their study also identified the importance of educator roles and instructional design in supporting students' learning outcomes. This evidence suggests that effective teaching requires instructors to organize meaningful activities and provide appropriate guidance rather than relying solely on the transmission of course content.

Recent research has also demonstrated how flipped and collaborative approaches can be used to integrate new knowledge into accounting education. Li and Cui (2025) applied a cross-curricular flipped classroom approach in which accounting students worked collaboratively, researched real companies, extracted financial information, and prepared financial analysis reports. The study found improvements in students' knowledge and high levels of engagement, while students were also required to apply previously learned accounting knowledge to new problems. This illustrates the value of teaching methods that combine independent learning, collaboration, information searching, and professional application.

These studies indicate that teaching method effectiveness is not determined by whether a course uses a particular innovative method. Rather, effectiveness depends on whether the teaching approach enables students to understand course knowledge, participate actively, interact with learning materials, solve problems, and apply knowledge in meaningful contexts. Blended learning, flipped classrooms, problem-based learning, and case-based learning can provide these opportunities when

instructional activities are appropriately designed and aligned with learning objectives (Li & Cui, 2025; Nurkhin et al., 2020; Tran & Herzig, 2023).

This perspective is particularly relevant to intelligent finance courses. Intelligent finance knowledge involves the integration of accounting concepts with digital technologies and data-based applications. Students therefore need teaching approaches that help them understand the relationship between technological tools and accounting problems rather than merely learning operational procedures. Effective teaching can facilitate this process by using demonstrations, discussions, cases, problem-solving activities, collaborative assignments, and technology-supported learning to connect theoretical concepts with professional situations.

Based on the literature, teaching method effectiveness in this study refers to accounting students' perception of the extent to which teaching approaches used in intelligent finance courses help them understand course knowledge, participate actively in learning, connect theory with professional problems, and apply what they have learned. Effective teaching methods provide an important link between course content and students' ability to transform intelligent finance knowledge into skills relevant to their future professional development.

2.4 Practical Training Experience

Practical training experience refers to students' learning experiences gained through participation in practice-oriented activities that allow them to apply theoretical knowledge to accounting and finance-related tasks. In intelligent finance education, practical training may involve intelligent financial software operation, financial data analysis, accounting simulations, business cases, digital accounting systems, business-finance integration exercises, and project-based activities. Such experiences provide students with opportunities to move beyond conceptual understanding and apply accounting knowledge and digital technologies in situations resembling professional practice.

The importance of practical experience in accounting education is closely related to the need to reduce the gap between academic learning and professional practice. Jackson and Meek (2021) emphasized the importance of work-integrated learning in accounting education and argued that authentic and practice-oriented learning can contribute to students' career preparedness. Their review highlighted that accounting programs increasingly need to provide opportunities for students to engage with professional contexts and apply university learning to workplace-related activities. This is especially important in intelligent finance education, where students are expected to

develop both accounting knowledge and the ability to use digital tools in professional situations.

Simulation is one approach through which practical experience can be incorporated into accounting education. Aldamen et al. (2021) examined a cross-cultural, skill-based simulation project involving accounting students and demonstrated the value of simulation for developing competencies relevant to the global workplace. Simulation activities allow students to experience professional situations in a controlled educational environment and require them to analyze information, communicate with others, make decisions, and respond to realistic business problems. Such activities can therefore provide a bridge between theoretical classroom knowledge and the competencies required in accounting practice.

Van Akkeren and Tarr (2022) also demonstrated the value of experiential learning in accounting education through the use of a mock trial with forensic accounting students. Their findings showed that practical experience, active learning, and continuous feedback helped students understand complex professional topics more effectively. The study indicates that students can develop deeper understanding when they are required to apply disciplinary knowledge within realistic professional situations rather than learning complex concepts exclusively through lectures and conventional exercises.

Technology-supported simulations are particularly relevant to intelligent finance courses. Reginato et al. (2022) examined the role of business games and specialized simulation software in accounting programs and found that students were able to transfer their learning to real-world business problems. Their findings also indicated that the simulation experience contributed to the development of professional skills, particularly collaboration and adaptability. This suggests that practical training can help students transform knowledge acquired during accounting courses into capabilities that can be applied in workplace situations.

Practical learning can also contribute to the development of broader accounting competencies. Reginato et al. (2025) investigated serious-game projects developed by accounting students and found evidence of competency development in areas including analytical thinking and problem-solving, planning analysis and control, external reporting and analysis, and process management and improvement. The study demonstrates that project-based practical activities can provide opportunities for students to integrate knowledge from different accounting areas and apply it to complex tasks.

Another important feature of practical training is the opportunity for reflection. Practical activities do not automatically result in meaningful learning simply because students perform a task. Students also need opportunities to evaluate their experiences, understand the consequences of their decisions, and connect practical outcomes with theoretical knowledge. Dellaportas et al. (2023) found that combining experiential activities with structured reflective practice encouraged accounting students to reconsider their understanding of accounting practice and professional roles. Their findings indicate that reflection can strengthen the learning value generated by practical experience.

Taken together, previous studies indicate that practical training in accounting education can take different forms, including simulations, business games, authentic professional tasks, project-based activities, and other forms of experiential learning. These approaches share a common purpose: providing students with opportunities to apply theoretical knowledge, experience professional problems, make decisions, evaluate outcomes, and develop relevant competencies (Reginato et al., 2022; Van Akkeren & Tarr, 2022). For intelligent finance education, such opportunities are particularly important because many digital and analytical competencies require repeated application rather than theoretical understanding alone.

Accordingly, practical training experience in this study refers to accounting students' perception of the extent to which intelligent finance courses provide meaningful opportunities to apply theoretical knowledge and digital technologies through practice-oriented activities. It includes experiences related to intelligent financial software, financial data analysis, simulation exercises, enterprise cases, business-finance integration, and practical projects. Positive practical training experiences can help students connect classroom knowledge with professional accounting situations and transform acquired knowledge into practical capabilities relevant to future employment.

2.5 Accounting Students' Career Competence

Accounting students' career competence refers to the knowledge, skills, abilities, and professional capacities that enable students to prepare for and perform accounting and finance-related work effectively. Career competence extends beyond the mastery of accounting theories and technical procedures. As accounting work becomes increasingly digital, analytical, and technology-supported, accounting graduates are expected to combine professional accounting knowledge with digital capabilities,

analytical skills, problem-solving abilities, communication skills, and adaptability to changing professional environments.

The International Education Standards provide an important basis for understanding professional competence in accounting. The International Federation of Accountants distinguishes professional competence into several interconnected areas, including technical competence, professional skills, and professional values, ethics, and attitudes. In particular, IES 2 emphasizes technical competence in areas such as financial accounting and reporting, management accounting, finance, taxation, audit and assurance, governance and risk management, information and communication technologies, and business strategy. IES 3 further emphasizes intellectual, interpersonal and communication, personal, and organizational skills. These standards indicate that professional competence requires accounting graduates to integrate technical knowledge with broader abilities that enable them to apply their knowledge effectively in professional situations.

Employers similarly expect accounting graduates to possess a combination of technical and non-technical skills. Tan and Laswad (2018) analyzed job advertisements for accounting positions and found that employers consistently demanded a broad set of professional skills. Communication, teamwork, interpersonal skills, self-management, problem-solving, and technological capabilities were among the competencies frequently required. Their findings demonstrate that career competence should not be understood solely in terms of accounting knowledge; accounting graduates also need transferable professional skills that allow them to work effectively with information, technology, colleagues, and business problems.

The Fourth Industrial Revolution has further expanded the competencies expected of future accountants. Tsiligiris and Bowyer (2021) examined the implications of Industry 4.0 for accounting education and proposed that future accountants require a combination of digital, analytical, technical, and personal capabilities. Their study emphasized that technological developments are changing accountants' professional roles and that accounting education should prepare students not merely to perform routine accounting tasks but also to work with technology, analyze information, exercise judgment, communicate insights, and adapt to continuing change.

Career competence in contemporary accounting therefore includes a significant digital component. Al-Htaybat et al. (2018) examined accounting educators' views of curriculum requirements for digitally oriented students and emphasized the need for accounting education to prepare graduates for a profession increasingly influenced by Big Data and digital technologies. The study highlighted the importance of moving

beyond traditional accounting content and developing students' ability to respond to technological transformation. This perspective supports the inclusion of digital technology application and data-related capabilities within accounting students' career competence.

Recent evidence also shows that accounting students themselves recognize the importance of both hard and soft employability skills. Haidar (2025) examined the employability skills identified by accounting students in their curricula vitae and found that students emphasized computer use, Microsoft Office proficiency, communication, English-language proficiency, ability to work under pressure, teamwork, and time management. The study also showed that training participation was associated with differences in students' reported employability skills. These findings reinforce the view that accounting students' readiness for employment depends on a combination of technological capabilities and broader professional skills rather than technical accounting knowledge alone.

Professional competence also involves the ability to solve problems and apply knowledge in situations characterized by uncertainty and complexity. IFAC's competency framework distinguishes levels of proficiency partly according to the complexity and ambiguity of professional tasks, illustrating that competence develops from understanding and performing relatively structured activities toward evaluating more complex problems and exercising professional judgment. This is particularly relevant to intelligent finance because digital systems may automate routine processes, while accounting professionals are increasingly expected to interpret results, identify problems, evaluate alternatives, and contribute to management decisions.

In addition, career competence requires adaptability. Technological development continuously changes the tools, processes, and knowledge used in accounting and finance. Tsiligiris and Bowyer (2021) emphasized that future accountants need personal qualities that allow them to operate effectively in rapidly changing professional environments. Therefore, students' ability to learn new technologies, adjust to changing job requirements, and transfer existing knowledge to unfamiliar situations represents an important aspect of career readiness.

Based on previous literature and the requirements of intelligent finance work, the present study understands accounting students' career competence as a multidimensional capability. It includes professional knowledge, intelligent finance skills, digital technology application ability, data analysis ability, business-finance integration ability, problem-solving ability, and career adaptability. These aspects reflect the combination of technical competence, technological capability, analytical

thinking, knowledge application, and adaptability increasingly expected of accounting graduates.

Professional knowledge provides the disciplinary foundation required to understand accounting and financial information, while intelligent finance skills and digital technology application ability reflect students' capacity to use contemporary financial technologies. Data analysis ability enables students to process and interpret financial and business information. Business-finance integration ability reflects the capacity to connect accounting and financial information with broader organizational activities and decision-making. Problem-solving ability enables students to identify and respond to professional issues, while career adaptability reflects their ability to respond to technological and occupational changes. These capabilities correspond broadly with the technical, intellectual, digital, and personal competencies emphasized in international professional standards and accounting employability research (International Federation of Accountants, 2026; Tan & Laswad, 2018; Tsiligiris & Bowyer, 2021).

Accordingly, accounting students' career competence in this study refers to students' perceived ability to integrate accounting knowledge, intelligent finance skills, digital technologies, analytical capabilities, problem-solving skills, and adaptability in preparation for future accounting and finance-related employment. Career competence therefore represents the outcome of students' professional learning rather than a single technical skill. In the context of intelligent finance education, stronger career competence indicates that students are better prepared to apply accounting knowledge and digital technologies to professional tasks and to respond to the continuing transformation of accounting work.

2.6 Experiential Learning Theory

Experiential Learning Theory was developed by Kolb (1984) to explain how individuals learn through the transformation of experience. The theory views learning as a continuous process in which knowledge is created through the interaction between experience and the learner's interpretation of that experience. Rather than treating learning as the passive acquisition of information, Experiential Learning Theory emphasizes that effective learning requires individuals to participate in experiences, reflect on those experiences, develop conceptual understanding, and apply what they have learned to new situations (Kolb, 1984).

Kolb (1984) proposed four interconnected stages of experiential learning: concrete experience, reflective observation, abstract conceptualization, and active

experimentation. Concrete experience occurs when learners participate directly in a learning activity or encounter a practical situation. Reflective observation involves reviewing and interpreting that experience. Abstract conceptualization occurs when learners connect their observations with concepts, theories, and existing knowledge. Active experimentation involves applying the resulting understanding to new tasks or situations. These four stages form a continuous learning cycle in which experience is transformed into knowledge and subsequently applied to further experiences.

Kolb and Kolb (2005) further emphasized that experiential learning is particularly relevant to higher education because effective learning environments should provide opportunities for students to move among different modes of experiencing, reflecting, conceptualizing, and acting. Their concept of “learning spaces” suggests that higher education should create environments in which students can participate actively and connect conceptual knowledge with experience rather than relying exclusively on the transmission of theoretical information.

Experiential Learning Theory is particularly applicable to accounting education because accounting is both knowledge-based and practice-oriented. Students need to understand accounting concepts and principles, but they also need to apply those concepts when analyzing information, solving problems, using accounting systems, and making professional decisions. Gittings et al. (2020), in a systematic review of 50 studies of experiential learning activities in undergraduate accounting education, found that commonly reported benefits included technical knowledge and comprehension, student attitudes and satisfaction, and authentic application of accounting theory. These findings demonstrate the relevance of experiential approaches for connecting classroom learning with accounting practice.

The theory is even more relevant in the context of intelligent finance education because intelligent finance requires students to integrate accounting and finance knowledge with digital technologies and practical applications. Students need to understand concepts related to digital accounting and financial management, but they must also learn how to use digital systems, analyze financial data, interpret technological outputs, and solve finance-related problems. These competencies are difficult to develop through theoretical instruction alone. Learning experiences involving cases, simulations, software applications, data-analysis activities, and projects allow students to test their understanding and apply knowledge in situations resembling professional practice.

Experiential Learning Theory also provides a theoretical explanation for the selection of the three dimensions of intelligent finance course learning experience

examined in this study. Course content quality, teaching method effectiveness, and practical training experience correspond to different but complementary components of the experiential learning process. Course content quality provides the conceptual knowledge and professional information required for abstract conceptualization. Teaching method effectiveness helps students understand, interpret, discuss, and reflect on this knowledge, supporting reflective observation and conceptual understanding. Practical training experience provides opportunities for concrete experience and active experimentation, allowing students to apply intelligent finance concepts through software operation, financial data analysis, simulation, case analysis, and project activities.

Therefore, the three dimensions do not represent unrelated characteristics of a course. Instead, they contribute to an integrated process through which students move from acquiring relevant knowledge to understanding that knowledge and ultimately applying it. This relationship is consistent with Kolb and Kolb's (2005) argument that effective higher education should support multiple modes of learning and create opportunities for students to connect conceptual understanding with experience and action.

Experiential Learning Theory also helps explain why intelligent finance course learning experience may be associated with students' career competence. Career competence requires more than knowledge acquisition. Students need to be able to transfer what they have learned to professional tasks and unfamiliar situations. Experiential learning provides opportunities for this transformation by requiring students to apply knowledge, evaluate outcomes, identify problems, and modify their understanding through experience. Research in accounting education has shown that experiential learning activities can facilitate the authentic application of theory and the development of technical knowledge (Gittings et al., 2020).

More recent research also supports the role of active learning activities in accounting competency development. Reginato et al. (2025) examined accounting students participating in serious-game projects and found evidence of the development of technical and interpersonal competencies across foundational, accounting, and broader management competency areas. The study illustrates how active and experience-based learning environments can create opportunities for students to integrate knowledge and develop competencies relevant to professional accounting work.

Within this study, Experiential Learning Theory therefore provides the theoretical foundation for explaining how intelligent finance course learning experiences can

contribute to accounting students' career competence. High-quality course content provides the knowledge required for understanding intelligent finance; effective teaching methods facilitate reflection, interpretation, and knowledge development; and practical training allows students to test and apply this knowledge in professional contexts. Through this integrated process of acquisition, reflection, conceptualization, and application, students can gradually transform intelligent finance knowledge into professional knowledge, digital technology application ability, data analysis ability, problem-solving ability, business-finance integration ability, and career adaptability.

Accordingly, Experiential Learning Theory supports the proposition that effective learning experiences can contribute to the development of career competence. In this study, the theory is used to explain why course content quality, teaching method effectiveness, and practical training experience are expected to be positively associated with accounting students' career competence. The theory therefore connects the three dimensions of intelligent finance course learning experience with the dependent variable and provides the theoretical basis for the research framework and hypotheses.

2.7 Conceptual Framework

Based on Experiential Learning Theory and previous studies on accounting education, this study developed a conceptual framework to examine the relationship between intelligent finance course learning experience and accounting students' career competence. Accounting students' career competence is the dependent variable and reflects students' professional knowledge, intelligent finance skills, digital technology application ability, data analysis ability, business-finance integration ability, problem-solving ability, and career adaptability.

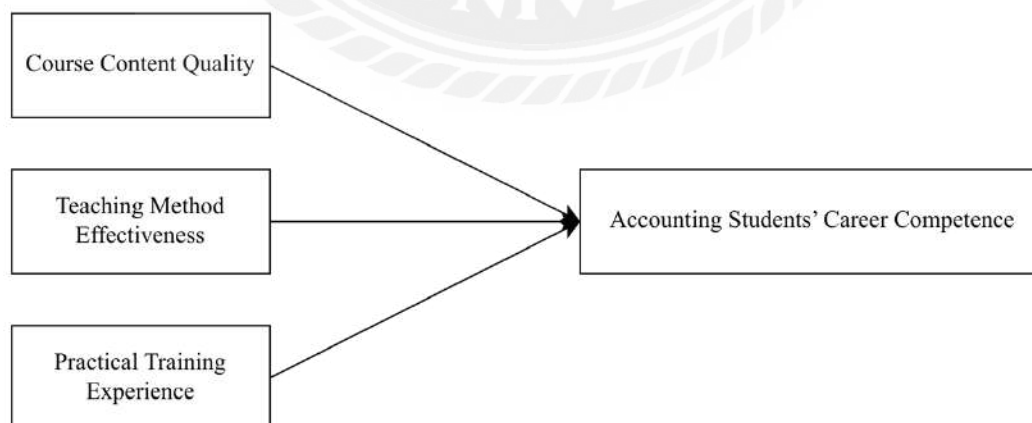


Figure 2.1 Conceptual Framework

Chapter 3 Research Methodology

3.1 Research Design

This study employed a quantitative design to examine the relationships between intelligent finance course learning experience and accounting students' career competence. A structured questionnaire was used to collect data.

3.2 Questionnaire Design

The questionnaire consisted of three sections. Section A confirmed that respondents had participated in at least one intelligent finance-related course. Section B collected demographic and learning information. Section C measured course content quality, teaching method effectiveness, practical training experience, and accounting students' career competence. All construct items used a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Items were adapted and paraphrased from the literature and aligned with the operational definitions and Experiential Learning Theory.

Table 3.1 Questionnaire Design

Variable	No. of Item	Measurement Source
Course Content Quality	5	Pan and Seow (2016); Januszewski et al. (2024)
Teaching Method Effectiveness	5	Ma and Ruannakarn (2024)
Practical Training Experience	5	Gittings et al. (2020); Reginato et al. (2025)
Career Competence	12	Pan and Seow (2016); Januszewski et al. (2024)

3.3 Hypothesis

H1: Course content quality has a significant positive effect on accounting students' career competence.

H2: Teaching method effectiveness has a significant positive effect on accounting students' career competence.

H3: Practical training experience has a significant positive effect on accounting students' career competence.

3.4 Population and Sample

The target population consisted of students majoring in accounting or accounting-related programs at Beijing Jiaotong University who had completed or participated in at least one intelligent finance-related course. Purposive sampling was used to ensure relevant course experience, and convenience sampling supported efficient online distribution.

3.5 Data Collection

The questionnaire was distributed through online survey platforms, course groups, class communication groups, and academic communication channels. Respondents were informed that participation was voluntary, responses would be used for academic research, and results would be reported in aggregate. The collected responses were screened and coded before statistical analysis.

A total of 300 questionnaires were collected. After screening for incomplete responses, patterned answers, duplicate submissions, and failure to meet the course-experience requirement, 268 valid questionnaires were retained, producing a valid response rate of 89.3%.

3.6 Data Analysis

Data analysis was performed using SPSS and comprised descriptive statistics, reliability analysis, validity assessment, Pearson correlation analysis, multiple regression analysis, and multicollinearity diagnostics. Frequencies, percentages, means, and standard deviations were used to summarize the respondents' characteristics and the variables. Cronbach's alpha was calculated to evaluate internal consistency, while the KMO measure and Bartlett's test of sphericity were employed to assess the suitability of the data for construct analysis. Pearson correlation analysis examined the associations among the variables, and multiple regression analysis tested the proposed relationships and compared the relative influence of the predictors. Tolerance and VIF values were examined to identify potential multicollinearity. Statistical significance was determined at the 0.05 level.

3.7 Reliability and Validity Analysis of the Scale

Reliability analysis was conducted to examine the internal consistency of the questionnaire scales. As shown in Table 3.2, the Cronbach's alpha values were 0.902 for course content quality, 0.889 for teaching method effectiveness, 0.914 for practical

training experience, and 0.928 for accounting students' career competence. The Cronbach's Alpha values of all variables were above 0.80.

Table 3.2 Reliability Analysis

Variable	Number of Items	Cronbach's Alpha
Course Content Quality	5	0.902
Teaching Method Effectiveness	5	0.889
Practical Training Experience	5	0.914
Accounting Students' Career Competence	12	0.928

Table 3.3 KMO and Bartlett's Test

Test	Result
KMO Value	0.935
Bartlett's Test Approx. Chi-square	3862.447
df	351
Sig.	0.000

As shown in Table 3.3, the KMO value was 0.935, which indicates a high level of sampling adequacy. Bartlett's test of sphericity was statistically significant, $\chi^2 = 3862.447$, $df = 351$, $p < .001$. These results indicate that meaningful correlations existed among the questionnaire items and that the data were suitable for factor analysis. Therefore, the measurement instrument demonstrated acceptable reliability and preliminary construct validity.

Chapter 4 Findings and Discussion

4.1 Demographic and Learning Characteristics

Table 4.1 summarizes the respondent profile. Female students accounted for 63.4% and male students accounted for 36.6%, showing that female students formed the majority of the sample. Third-year students represented the largest academic-year group at 34.0%, followed by second-year students at 25.4%, fourth-year students at 25.0%, and first-year students at 15.7%. Regarding intelligent finance course participation, 38.8% had completed two relevant courses, 35.8% had completed one course, and 25.4% had completed three or more courses. The distribution indicates that all respondents had relevant learning experience and that most had participated in more than one intelligent finance course.

Table 4.1 Demographic and Learning Characteristics

Characteristic	Category	Frequency	Percentage
Gender	Male	98	36.6%
	Female	170	63.4%
Academic year	First year	42	15.7%
	Second year	68	25.4%
	Third year	91	34.0%
	Fourth year	67	25.0%
Participation in relevant courses	One course	96	35.8%
	Two courses	104	38.8%
	Three or more	68	25.4%

4.2 Descriptive Statistics

Table 4.2 presents the means and standard deviations of the variables. All mean values were above the midpoint of 3.00, indicating generally positive evaluations. Career competence obtained the highest mean ($M = 3.88$, $SD = 0.60$), suggesting that respondents perceived themselves as having a relatively good level of professional and digital competence. Course content quality had a mean of 3.86 ($SD = 0.62$), showing that students generally viewed the content as current, systematic, practical, and relevant.

Practical training experience recorded a mean of 3.82 (SD = 0.63), indicating positive but improvable experiences with software, simulations, data tasks, and projects. Teaching method effectiveness had the lowest mean ($M = 3.79$, $SD = 0.65$), although the value remained positive. Its comparatively larger standard deviation indicates slightly greater variation in students' evaluations of teaching approaches.

Table 4.2 Descriptive Statistics of Variables

Variable	Mean	Standard Deviation
Course Content Quality	3.86	0.62
Teaching Method Effectiveness	3.79	0.65
Practical Training Experience	3.82	0.63
Accounting Students' Career Competence	3.88	0.60

4.3 Correlation Analysis

Table 4.3 Correlation Analysis

Variable	Course Content Quality	Teaching Method Effectiveness	Practical Training Experience	Career Competence
Course Content Quality	1			
Teaching Method Effectiveness	0.612***	1		
Practical Training Experience	0.598***	0.626***	1	
Career Competence	0.642***	0.615***	0.689***	1
Note. *** $p < 0.001$.				

As shown in Table 4.3, course content quality was significantly and positively correlated with accounting students' career competence, $r = .642$, $p < .001$. This indicates that students who perceived the course content as updated, systematic, and professionally relevant also tended to report higher career competence.

Teaching method effectiveness was significantly and positively correlated with career competence, $r = .615$, $p < .001$. This result suggests that teaching methods that

facilitate understanding, participation, and knowledge application are associated with stronger professional and digital capabilities.

Practical training experience had the strongest positive correlation with career competence, $r = .689$, $p < .001$. This indicates that students who had more positive practical learning experiences tended to report stronger software operation ability, data analysis ability, problem-solving ability, and career adaptability.

4.4 Multiple Regression Analysis

Table 4.4 Multiple Regression Analysis

Dependent Variable	Independent Variable	β	t	Sig.	Tolerance	VIF
Accounting Students' Career Competence	Course Content Quality	0.285	5.021	0.000	0.559	1.790
	Teaching Method Effectiveness	0.236	4.178	0.000	0.520	1.923
	Practical Training Experience	0.368	6.514	0.000	0.535	1.869

Table 4.4 shows that all three independent variables were significantly and positively associated with career competence when entered in the same regression model. Course content quality had a standardized coefficient of $\beta = 0.285$ ($t = 5.021$, $p < 0.001$), supporting H1. Teaching method effectiveness had a standardized coefficient of $\beta = 0.236$ ($t = 4.178$, $p < 0.001$), supporting H2. Practical training experience had the largest standardized coefficient, $\beta = 0.368$ ($t = 6.514$, $p < 0.001$), supporting H3. The relative order was therefore practical training experience, course content quality, and teaching method effectiveness.

Tolerance values ranged from 0.520 to 0.559, exceeding the commonly used minimum of 0.10. VIF values ranged from 1.790 to 1.923, remaining well below 5.00. These results indicate that multicollinearity did not materially distort the regression coefficients. All three predictors therefore made statistically significant and distinguishable contributions to career competence within the model.

4.5 Discussion

4.5.1 Course Content Quality and Career Competence

Course content quality was significantly and positively associated with career competence. Updated, systematic, and professionally relevant content appears to provide students with the knowledge needed to understand digital accounting processes,

intelligent finance tools, and changing occupational requirements. This finding corresponds with Pan and Seow (2016) and Januszewski et al. (2024), who emphasized the importance of information technology and data-related competencies in accounting education. From the perspective of Experiential Learning Theory, content quality supports abstract conceptualization by giving students organized concepts that can later be tested and applied.

4.5.2 Teaching Method Effectiveness and Career Competence

Teaching method effectiveness was significantly and positively associated with career competence. Explanations, demonstrations, cases, interaction, and guided problem-solving can help students process complex intelligent finance concepts and transfer knowledge to professional situations. The finding is consistent with Ma and Ruannakarn (2024), who highlighted the role of technology-supported interaction and practical learning opportunities. In experiential learning, effective teaching facilitates reflection and helps students connect experience with conceptual understanding.

4.5.3 Practical Training Experience and Career Competence

Practical training experience had the strongest correlation and regression coefficient. Software operation, simulations, financial data tasks, enterprise cases, and projects provide direct opportunities to develop technical, analytical, and problem-solving abilities. This result is consistent with Gittings et al. (2020) and Reginato et al. (2025), who reported positive outcomes from experiential, project-based, and game-based accounting activities. Practical training closely represents concrete experience and active experimentation, enabling students to transform knowledge into competence.

4.5.4 Overall Interpretation

The findings show that career competence is associated with an integrated learning process. Course content provides the knowledge foundation, teaching methods support understanding and knowledge transfer, and practical training enables application. The stronger coefficient for practical training does not make content and teaching unimportant; effective practice depends on relevant concepts and instructional support. Because the study used cross-sectional self-report data from one university, the relationships should not be interpreted as definitive causation or automatically generalized to all accounting students.

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

This study examined the effects of course content quality, teaching method effectiveness, and practical training experience on accounting students' career competence in intelligent finance education at Beijing Jiaotong University. The findings directly respond to the three research objectives.

Regarding the first research objective, course content quality had a significant positive effect on accounting students' career competence. This result demonstrates that updated, systematic, practical, and professionally relevant course content helps students develop intelligent finance knowledge, digital awareness, and an understanding of changing career requirements.

Regarding the second research objective, teaching method effectiveness had a significant positive effect on career competence. Effective teaching methods help students understand complex intelligent finance concepts, connect theoretical knowledge with professional problems, and apply what they have learned in practical situations.

Regarding the third research objective, practical training experience had a significant positive effect on career competence. Practical training was the strongest predictor among the three independent variables. This result confirms that software operation, data analysis, simulation, enterprise cases, and project-based tasks are particularly important for transforming theoretical knowledge into professional ability.

Overall, the findings support Experiential Learning Theory. Career competence is developed through an integrated process in which students acquire relevant concepts, reflect on and understand those concepts through effective teaching, and apply them through practical experience. Course content quality provides the knowledge foundation, teaching method effectiveness facilitates comprehension and knowledge transfer, and practical training experience converts knowledge into observable professional competence.

The study therefore concludes that intelligent finance course learning experience plays an important role in developing accounting students' professional knowledge, intelligent finance skills, digital technology application ability, data analysis ability, business-finance integration ability, problem-solving ability, and career adaptability. Universities should develop intelligent finance courses as integrated learning systems rather than focusing only on theoretical instruction.

5.2 Recommendation

5.2.1 Continuously Update Course Content

Universities should review intelligent finance curricula regularly and incorporate developments in intelligent accounting, financial digitalization, data analytics, cloud platforms, accounting information systems, automated processes, and business-finance integration. Content should be organized progressively and connected to authentic professional responsibilities. Curriculum updating should focus on skills and judgment rather than introducing technology only as isolated concepts.

5.2.2 Improve Teaching Methods

Teachers should combine conceptual explanation with demonstrations, cases, collaborative analysis, problem-based learning, and project work. Difficult technical processes should be presented through clear steps and opportunities for guided practice. Formative feedback should help students identify errors, reflect on their decisions, and improve their ability to apply knowledge independently.

5.2.3 Strengthen Practical Training

Because practical training showed the strongest relationship with career competence, universities should increase meaningful software operation, accounting simulation, data-processing tasks, business-finance integration exercises, and project-based activities. Training should move from basic operation to integrated problem-solving and include assessment of both technical accuracy and professional reasoning.

5.2.4 Expand University-Enterprise Cooperation

Universities should cooperate with accounting firms, enterprises, financial software providers, and professional organizations. Partners may contribute anonymized cases, platform demonstrations, guest instruction, internships, competitions, and project mentoring. Cooperation should ensure that practical tasks reflect real work requirements while protecting confidential business information.

5.2.5 Support Students' Career Development

Students should be encouraged to develop portfolios demonstrating software use, data analysis, case solutions, and project outcomes. Career guidance may help students connect course activities with accounting roles and identify areas requiring improvement. Universities should also provide access to learning resources for students with different levels of prior digital experience.

5.3 Further Study

1. Future studies should include students from multiple universities and different regions to improve representativeness and permit comparisons across institutional contexts.

2. Probability sampling should be used when an appropriate sampling frame is available. Larger samples may also support comparisons by academic year, course experience, or career intention.

3. Longitudinal or time-lagged designs should examine how learning experience and career competence develop across a course or program and provide stronger evidence about temporal relationships.

4. Future research may include additional variables such as learning engagement, digital self-efficacy, teacher support, assessment quality, internship experience, or career motivation.

5. Mixed methods should be used to combine questionnaires with interviews, focus groups, classroom observation, project assessment, or skill-performance tasks to explain how learning activities contribute to competence.

6. Future research can distinguish among different intelligent finance courses, platforms, and practical tasks because their relationships with competence may vary according to course design and technical complexity.

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Appendix

Dear respondent: This questionnaire is designed for an academic study of intelligent finance course learning experience and accounting students' career competence. Participation is voluntary, and responses will be used only for academic analysis and reported in aggregate. Please answer according to your actual learning experience.

Section A: Screening and Background Information

1. Have you completed or participated in at least one intelligent finance-related course?
Yes / No
2. Gender: Male / Female / Prefer not to say
3. Academic year: First / Second / Third / Fourth / Other
4. Number of intelligent finance-related courses completed: One / Two / Three or more
5. Have you used intelligent finance or accounting software in a course? Yes / No

Section B: Measurement Items

Please indicate your agreement with each statement using the following scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree.

Code	Statement	1	2	3	4	5
CCQ1	The course content reflects current developments in intelligent finance.	☐	☐	☐	☐	☐
CCQ2	The course content is systematically organized.	☐	☐	☐	☐	☐
CCQ3	The course content is relevant to accounting and finance careers.	☐	☐	☐	☐	☐
CCQ4	The course content connects professional knowledge with digital technology.	☐	☐	☐	☐	☐
CCQ5	The course content can be applied to practical financial problems.	☐	☐	☐	☐	☐
TME1	The teaching methods help me understand intelligent finance concepts.	☐	☐	☐	☐	☐
TME2	The instructor explains complex digital finance processes clearly.	☐	☐	☐	☐	☐
TME3	Teaching activities encourage participation and reflection.	☐	☐	☐	☐	☐

Code	Statement	1	2	3	4	5
TME4	Cases and demonstrations help me connect theory with practice.	☐	☐	☐	☐	☐
TME5	The teaching methods help me apply course knowledge.	☐	☐	☐	☐	☐
PTE1	I have sufficient opportunities to operate intelligent finance software.	☐	☐	☐	☐	☐
PTE2	Practical activities include realistic financial data tasks.	☐	☐	☐	☐	☐
PTE3	Simulations and cases help me solve professional problems.	☐	☐	☐	☐	☐
PTE4	Practical projects help me integrate accounting and business knowledge.	☐	☐	☐	☐	☐
PTE5	The practical training improves my confidence in using digital tools.	☐	☐	☐	☐	☐
CC1	I have a sound foundation in accounting and finance knowledge.	☐	☐	☐	☐	☐
CC2	I understand how digital technologies are used in financial work.	☐	☐	☐	☐	☐
CC3	I can operate relevant intelligent finance or accounting software.	☐	☐	☐	☐	☐
CC4	I can collect and organize financial data for analysis.	☐	☐	☐	☐	☐
CC5	I can interpret financial data and identify meaningful information.	☐	☐	☐	☐	☐
CC6	I can use digital tools to support accounting tasks.	☐	☐	☐	☐	☐
CC7	I can connect financial information with business operations.	☐	☐	☐	☐	☐
CC8	I can analyze problems involving business-finance integration.	☐	☐	☐	☐	☐

Code	Statement	1	2	3	4	5
CC9	I can propose solutions to practical accounting and finance problems.	☐	☐	☐	☐	☐
CC10	I can communicate the results of financial analysis clearly.	☐	☐	☐	☐	☐
CC11	I can adapt to changes in accounting technologies and work processes.	☐	☐	☐	☐	☐
CC12	I feel prepared to develop further competence for an intelligent finance career.	☐	☐	☐	☐	☐

