



the same issues connected to the outdated teaching approaches and the low interaction of the students, which inhibits the formation of higher-order skills needed in the contemporary workplaces (Kovalchuk et al., 2022).

In most vocational environments, traditional lecture-based pedagogy is still quite common whereby emphasis is laid on the passive delivery of knowledge as opposed to active learning. These methods are also being critiqued due to their failure to make students motivated and engaging, which are crucial in determining successful learning outcomes (Schunk and DiBenedetto, 2020). The concept of motivation, as discussed within the framework of social cognitive theory, is an important factor that determines the readiness of students to engage in learning processes and continue working on them, as often the traditional pedagogies do not encourage intrinsic interest or self-controlled learning processes.

Conversely, modern studies emphasize the relevance of student-centered and interactive learning environments in the promotion of engagement. The behavioral, emotional, and cognitive components of student engagement are closely linked to better academic performance and more profound learning (Fredricks, Reschly, & Christenson, 2019). On the same note, research shows that interactive approaches to ownership of learning may greatly stimulate engagement and dedication with students, especially in applied subjects (Khatteer, Thalaachawr & Blyth, 2024). Situational interest and self-regulation further contribute to the student engagement with learning tasks in technology-mediated environments, which implies that the design of the pedagogy is also an important factor in maintaining attention and effort (Sutarmina, Costley, Gorbunova & Lange, 2025).

In addition, the introduction of digital technologies and Web-based learning platforms in vocational education comes with its opportunities and challenges. Although these technologies may facilitate flexible and resourceful learning processes, their success solely relies on instructional methods that engage learners (Zheng, Lin, & Kwon, 2020). Digitalization will not necessarily result in better outcomes in motivation or engagement unless it is accompanied by proper pedagogical innovation.

Although the process of vocational education reform is still ongoing, there is a rather consistent mismatch between the learning activities and the enhancement of student motivation and engagement. Conventional and evaluation-based methods are not necessarily effective in promoting meaningful learning experiences since the motivation of students is not sufficiently facilitated using interactive or applied pedagogies (Leenknecht et al., 2021). Moreover, the swift change to digital and online learning in particular in such an area as e-commerce has revealed serious issues with active student engagement and participation, where most students remain passive consumers of the information (A. Singh, D. Singh & Chhikara, 2024). Moreover, the vocational education systems still face the problem of matching the classroom instruction with the real-life skills requirements, which restricts the possibility of students to use their knowledge in real-life situations (McGrath and Yamada, 2023). Thus, there is a necessity to explore pedagogical methods which can improve motivation as well as engagement in vocational e-commerce education.

### Research Objectives

- To explore how case-based teaching influences students' learning motivation in e-commerce education within Chinese vocational schools
- To examine how case-based teaching enhances students' classroom engagement and participation through interactive learning processes
- To investigate students' and teachers' perceptions of the role of case-based teaching in improving practical knowledge application and career awareness

The study is important because it discusses the increasing necessity of increasing student engagement and motivation through pedagogical innovation in vocational education. Although the idea of engagement is generally accepted as one of the primary factors of academic achievement, engagement is an outcome of complicated interactions between the practice of teaching and learning conditions, and it cannot be achieved through merely superficial changes in the

instructions (Trowler, Allan, Bryk & Din, 2022). In technologies-oriented and vocational settings, studies have demonstrated the growing value of incorporating effective and student-centered strategies to maintain a significant engagement (Bond et al., 2020). In addition, active learning methods in business education have been demonstrated to create critical workforce competencies, although they continue to be inconsistent in vocational e-commerce (McDonald, Iscaro & Posey, 2022). Thus, the research adds value by offering context-related information on how case-based teaching can help overcome the barriers between theory, engagement, and the development of practical skills.

## LITERATURE REVIEW

### Case-based Teaching Influences Students' Learning Motivation in E-Commerce Education

As a recent area of research, active and case-based pedagogies are now underlined to improve the learning motivation of students, especially in applied and vocational settings. Conventional teaching methods that focus on content delivery rather than interaction have been extensively criticized as not being able to trigger intrinsic motivation or long-term learner interest. In comparison, case-based and problem-oriented learning methods encourage active knowledge building, thus, leading to greater motivation. As an example, a meta-analysis study by Wijnia et al. (2024) shows that case-based, problem-based, and project-based learning positively affect intrinsic motivation among students by involving them in the real-world problem-solving processes.

Equally, empirical researchers point to the fact that, case-based learning settings help students to own their learning process through the ability to relate theory with practical practice. Raza et al. (2020) established that case-based learning has a positive impact on student motivation by rendering the learning process more interactive and relevant especially in the context of teaching business. This is essential in areas like e-commerce where abstract ideas may need to be contextualized to increase the learning and appeal of students.

Active pedagogies also increase the motivational returns of technology-supported learning. According to Unal and Cakir (2021), team-based problem-solving with the help of digital tools improves student engagement and motivation because it allows interaction and knowledge building. Similarly, mobile learning spaces are flexible and personal, and the same has been found to enhance academic motivation and learner agency (Yang & Xiang, 2024). These advantages, however, do not come automatically; the success of technology relies on its implementation into pedagogical design to a considerable extent.

In spite of these benefits, there are difficulties in the application of motivational teaching strategies in vocational education systems. The studies have shown that the effectiveness of innovative teaching methods may be affected by institutional issues, including curriculum design and organizational culture (Hidalgo-Peñate et al., 2022). Practice-based curriculum reforms are presented in the Chinese vocational context to overcome these problems, but due to inconsistencies in their application, they cannot affect the motivations of students to a significant extent (Qiu, 2022). Also, the style of teaching and the activities of an instructor are significant because the motivation of students is commonly mediated by self-efficacy and perceived support (Zhou & Liu, 2025).

Additionally, systematic reviews indicate that active learning strategies are effective in increasing motivation, but their effectiveness varies with the responsible concerns to align teaching approaches, the learning goals, and the requirements of students (Costa & Reis, 2025). In the absence of such alignment, it can be feared that innovative ways can be ineffective in generating significant motivational results.

### Case-based Teaching Enhances Students' Classroom Engagement and Participation

The recent academic literature has placed more emphasis on interactive and student-centred pedagogies and their relevance in increasing classroom engagement and participation. Student-centered methods that change the role of the teacher to active learner participation have been identified to have a profound positive effect on non-academic outcomes like participation, collaboration, and engagement

(Y. D. Li & Ding, 2023). Nevertheless, these strategies are commonly popularized, although, their application is rather superficial, and many classrooms employ a superficial interaction instead of having meaningful engagement.

The idea of student voice and partnership also supports the necessity of being an active participant in learning processes. Matthews and Dollinger (2023) suggest that engaging in the genuine sense must be beyond the representation but must be collaborative partnerships in which students play an active role in building knowledge. This view is similar to that of case-based teaching that places learners in a central role in solving problems instead of a passive receiver of information. However, the institutionalization of such participatory practices can restrict the degree to which such practices can be actualized on the ground due to traditional power relations.

Interactive learning that is facilitated by technology has also been cited as a major force of classroom engagement. Indicatively, Zhang and Hwang (2023) illustrate that combining peer assessment and problem-based learning promotes collaboration and participation because it fosters students to participate in evaluative and reflective activities. On the same note, systematic reviews suggest that online and digital learning environments have the potential to create engagement with the help of collaborative tools and interactive activities but that their effectiveness relies on instructional design (Hu & Xiao, 2025; Brown, Lawrence, Basson & Redmond, 2022). The inadequately organized online spaces can on the contrary result in disconnection, which underscores the importance of designing interactive strategies thoroughly.

The collaborative learning settings also help to increase participation rates through socializing and collective responsibility. Al-Jarf (2026) also stresses that collaborative learning improves engagement by establishing a dialogue and knowledge-building opportunity. Nonetheless, these methods imply successful facilitation because inequality of participation and accountability may spoil the advantages. Moreover, problem-based and project-based learning methods have also been demonstrated to enhance engagement through placing learning in real-world circumstances and, as a result, making

tasks more meaningful and relevant (Boumediene, Ouarniki & Supran, 2025).

Although these benefits have been noted, recent studies also indicate possible contradictions in the application of digital and project-based learning. As Koilam, Mongdong and Sumampow (2026) note, these strategies can improve engagement, but they can also provide a cognitive overload or unequal participation in case they are not effectively managed. This implies that interactive pedagogies cannot be as effective and should be well-adjusted to the needs of learners and the context.

### **Practical Knowledge Application and Career Awareness**

The increasing focus on employability in vocational and higher education has increased the pressure on pedagogical strategies that can be effective in bridging the gap between theoretical and practical knowledge. Work-integrated learning (WIL) and practice-based education are both becoming popular as essential elements in producing job-ready graduates. Jackson and Dean (2023) emphasize that various types of WIL do not add to employability in an even manner, which means that a more effective way of improving practical competencies is a more structured and context-rich learning experience. Similarly, Billett (2025) says that the real-world working experience enables students to develop knowledge in a format that can be immediately transferred to a professional environment that justifies the importance of experiential and case-based learning.

Nevertheless, the co-relation between schooling and employability is still complicated and controversial. Even though institutions of higher learning expect to help learners secure positions in the dynamic labor markets, it is a controversial fact that formal learning could help in effective operationalization of the evolving demands of industries (Hassock & Hill, 2022). This difficulty is especially pronounced in vocational education, where the discrepancies between the curriculum and the demands of the workplace still exist. OECD data also suggests that the vocational system graduates frequently have to cope with the changing labor market, which can demand flexible skills and hands-

on knowledge that traditional teaching methods might not offer adequately (Vandeweyer & Verhagen, 2020).

Career education and the ability to be flexible have taken center stage in the Chinese context. X. Liu, Zhang, Dang and Gao (2023) reveal that career decision-making self-efficacy mediates between positively influencing career adaptability in students but indicates pedagogical practices should not only provide knowledge but also foster confidence in the application of the knowledge in professional careers. This is consistent with the general debates on employability, which focus on the combination of skills, identity, and situational knowledge as opposed to the separation of knowledge alone (Siivonen et al., 2023).

As a type of experiential pedagogy, case-based learning has demonstrated possibilities to overcome these difficulties by contextualizing learning in real-life situations. Y. Li et al. (2025) discovered that dynamic case-based learning models are highly effective in enhancing the practical learning of students as they have the opportunity to study real-life problems and the process of decision-making. These methods also improve the awareness of the learners on the professional roles and duties hence developing career awareness.

Although these can be seen as advantages, practice-oriented pedagogies will be effective depending on their design and implementation. The theories of measuring the results of employability indicate that it is not enough to introduce practical activities without their establishment in relation to the specific learning goals and the industry standards (Dos Santos et al., 2023).

### Literature Gap

Even though the current literature recognizes the effectiveness of case-based and active learning methods in motivation, engagement, and practical learning, the literature is still scattered and has no cohesive view. Majority of the studies investigate these constructs separately, such as studies on motivation (Wijnia et al., 2024; Raza et al., 2020), engagement based on interactive or digital approaches (Zhang and Hwang, 2023; Hu and Xiao, 2025) or employability and acquisition of practical skills (Jackson and Dean,

2023; Liu et al. Moreover, although case-based learning and experiential learning are considered to be effective, there is a lack of focus on these approaches when it comes to vocational e-commerce education, especially in the Chinese context where there are still inconsistencies in implementation (Qiu, 2022). Moreover, most of the previous studies are either quantitative or generalized, and they do not capture detailed qualitative data on the perceptions of students and teachers. This leaves a knowledge gap regarding the overall impact of case-based teaching on motivation, engagement and career-oriented learning outcomes.

### Theoretical Framework Constructivist Learning Theory

This paper is based on Constructivist Learning Theory, which assumes that knowledge is constructed by learners through interaction, experience, and reflection instead of receiving the information passively (Hein, 1991). This theory helps in the application of real-world situations to encourage effective learning and higher mental functioning in the context of case-based teaching. Nevertheless, constructivist methods need to have well-designed environments because poorly organized activities could hinder knowledge building (Bada & Olusegun, 2015). Therefore, student participation is not the only aspect that determines the success of case-based learning in vocational e-commerce learning, but also instructional design, guidance, and relevance of the context (Figure 1).

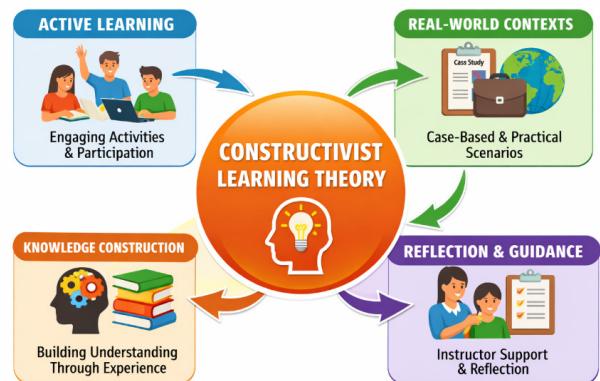


Fig. 1: Constructivist Learning Theory Diagram

## METHODOLOGY

### Research Method

The research methodology used in this study was qualitative research to investigate how case-based teaching can affect learning motivation, classroom engagement, and practical application of knowledge among e-commerce education students. The qualitative approach was deemed to be suitable because it would allow gaining a detailed insight into the experience and perceptions of the participants in a natural educational environment.

### Research Design

The research design was primary research, where semi-structured interviews were used. The design helped to be flexible in the exploration of views of the participants and ensuring consistency across the major research themes. The semi-structured interviews helped to gather rich and detailed information about the experience of both students and teachers in case-based teaching.

### Data Collection

Semi-structured interviews were used to collect data following the instructional intervention. It involved 10 participants (5 students and 5 teachers who were directly involved in the teaching and learning process). The primary areas of interest of the

interviews included learning motivation, classroom engagement, participation, knowledge application, and career awareness. All interviews were performed with a prior consent, recorded and transcribed to be analyzed further.

### Sampling Technique and Sample Size

A purposive sampling technique was used to select participants who had direct experience with the implementation of case-based teaching. The research was carried out in two vocational colleges in China which had e-commerce programs.

### Data Analysis

Thematic analysis was used to analyze the collected data. This was done through a systematic coding of the interview transcripts to establish patterns and themes. Data familiarization, initial coding, theme development, and refinement were part of the analysis process. The thematic analysis method was chosen because it is flexible and useful in making sense of qualitative data and producing meaningful implications to the research objectives. Besides thematic coding, data interpretation was also supported by visual analytical tools that include word clouds and Atlas.ti network diagrams. The word cloud identified commonly used ideas in the interviews of teachers whereas the coding network helped to

Table 1: Data Analysis Procedure

Stage	Process	Description
1	Data familiarization	Interview recordings were transcribed and read repeatedly to gain a thorough understanding of participants' responses.
2	Initial coding	Meaningful statements and repeated ideas were identified and assigned preliminary codes using Atlas.ti.
3	Code grouping	Similar codes were compared and grouped into broader categories based on shared meanings and patterns.
4	Theme development	Categories were further organized into major themes reflecting motivation, engagement, practical knowledge, career awareness, and teaching effectiveness.
5	Theme refinement	Emerging themes were reviewed, revised, and refined to ensure internal consistency and alignment with the research objectives.
6	Interpretation	Final themes were interpreted in relation to participants' experiences, the research objectives, and Constructivist Learning Theory.

demonstrate the interrelationship between student answers and emergent themes which would increase analytical rigor.

### **Ethical Considerations**

The study adhered to ethical principles. The participants were notified of the research purpose and voluntary participation. Data collection included informed consent and guarantee of confidentiality and anonymity. The participants were also granted the right to pull out of the study at any point. All the data collected were utilized only academically.

## **RESULTS**

The outcomes of the research were obtained by conducting thematic analysis in Atlas.ti, which made it possible to undertake systematic coding and classifying of interview data. The analysis established significant trends between students and teachers in relation to motivating, engaging, and obtaining useful learning outcomes. The impact of the case-based teaching produced five overall themes and codes. Given the presentation such results are articulated qualitative results which are consistent with the research aims and contribute to interpretation of the experiences of the subjects.

### **Theme 1: Learning Motivation Enhancement**

#### **Code 1: Active Learning Initiative**

Students reported a clear shift from passive learning to active engagement. Case-based teaching encouraged them to take responsibility for their learning by independently exploring solutions. This shift reflects a transition from teacher-centered instruction to learner-driven inquiry.

#### **Student S2**

*“I tried to explore answers myself through case analysis.”*

#### **Code 2: Increased Interest**

Participants highlighted that real-life e-commerce cases made learning more interesting and relevant. This contextualization increased students’ curiosity and willingness to engage with course content.

#### **Student S1**

*“Cases were related to real e-commerce situations, which made me curious.”*

### **Code 3: Intrinsic Motivation**

Students expressed a stronger internal drive to learn, as they were motivated by problem-solving rather than memorization. This indicates that case-based teaching enhanced intrinsic motivation.

#### **Student S1**

*“I felt motivated to find solutions, not just memorize.”*

### **Code 4: Learning Enjoyment**

Students emphasized that learning became more enjoyable through interactive case tasks. This enjoyment contributed to sustained motivation and participation.

#### **Student S4**

*“Case tasks made learning more enjoyable.”*

### **Theme 2: Classroom Engagement and Participation**

#### **Code 1: Group Collaboration**

Case-based learning promoted teamwork and peer interaction. Students actively engaged in discussions, exchanging ideas and perspectives.

#### **Student S2**

*“We exchanged ideas and learned from each other.”*

#### **Code 2: Active Participation**

Participants reported increased involvement in classroom discussions and activities, reflecting higher behavioral engagement.

#### **Student S1**

*“I participated more in discussions than before.”*

#### **Code 3: Reduced Fear of Participation**

Students experienced reduced anxiety and increased confidence when expressing their ideas, particularly in group settings.

### Student S1

*"I was afraid before, but now I feel comfortable speaking."*

### Code 4: Interactive Learning Environment

Teachers observed a shift toward a more interactive and student-centered classroom environment, enhancing engagement.

### Teacher T3

*"The classroom became more interactive and student-centered."*

## Theme 3: Practical Knowledge Application

### Code 1: Real-World Understanding

Students reported that case-based teaching helped them connect theoretical concepts with real-world e-commerce practices.

### Student S1

*"Cases helped me understand how e-commerce works in real life."*

### Code 2: Applied Learning

Teachers noted that students were able to apply theoretical knowledge in practical situations, improving learning effectiveness.

### Teacher T2

*"Students applied theoretical knowledge to real scenarios."*

### Code 3: Problem-Solving Skills

Students developed analytical and decision-making skills through engaging with real-life case problems.

### Student S4

*"Solving case problems improved my thinking."*

## Theme 4: Career Awareness and Development

### Code 1: Career Clarity

Students gained a clearer understanding of career opportunities in the e-commerce field through case analysis.

### Student S2

*"I now have a clearer idea about working in e-commerce."*

### Code 2: Professional Awareness

Participants became more aware of professional roles and responsibilities within the industry.

### Teacher T2

*"Students started asking about real jobs in e-commerce."*

### Code 3: Skill Awareness

Students recognized the importance of key professional skills required in e-commerce careers.

### Student S1

*"E-commerce jobs need communication and data skills."*

## Theme 5: Teaching Effectiveness and Instructional Design

### Code 1: Student-Centered Teaching

Teachers emphasized that case-based teaching shifted the focus from teacher-led instruction to student-centered learning.

### Teacher T1

*"Students became active learners instead of passive listeners."*

### Code 2: Use of Multimedia and Cases

The integration of multimedia resources and real-life cases enhanced understanding and engagement.

### Student S3

*"Videos and cases made learning easier."*

### Code 3: Instructional Challenges

Teachers acknowledged challenges in designing effective case materials, which require time and effort.

### Teacher T4

*"Designing good cases requires time and effort."*



motivation, engagement, and practical learning outcomes (Figure 4). It shows that case-based teaching affects several dimensions at the same time, and there is a close correlation between active learning, interaction, and career awareness. The well-organized relationships between codes ensure that learning gains will not be solitary and but will be achieved through the combination of participation, application, and contextual learning.

### Thematic Analysis Tables (Atlas.ti)

Case-based teaching turns passive learning to active learning by enhancing interest, intrinsic motivation and enjoyment meaning that contextualized real-world learning plays a crucial role in making students willing to take part and continue making efforts to learn (Table 2).

Interactive case-based activities provide collaboration, participation, and confidence and makes the student less frightened of expression and creates a student-centered environment where

relevant interaction is achieved through the structured interaction and common learning experiences (Table 3).

Case-based teaching is a middle ground between theory and practice, as it facilitates the development of real-life knowledge, applied learning, and problem-solving skills, which would allow students to effectively apply knowledge to practical e-commerce situations (Table 4).

Real-life case exposure helps students gain more knowledge about career options, professional roles and skills demanded in the occupation, increasing career awareness and making the academic life more relevant to future employment requirements (Table 5).

Case-based teaching enhances instructional efficiency as it leads to student-centered learning and integration of multimedia, however its effectiveness relies on the quality of the cases and the willingness of teachers to cope with the challenges related to it (Table 6).

**Table 2: Learning Motivation Enhancement**

Code	Description	Representative Quotations
Active Learning Initiative	Shift from passive to active learning	"I tried to explore answers myself through case analysis." (S2)
Increased Interest	Higher interest due to real-life cases	"Cases were related to real e-commerce situations, which made me curious." (S1)
Intrinsic Motivation	Internal desire to learn and solve problems	"I felt motivated to find solutions, not just memorize." (S1)
Learning Enjoyment	Learning becomes engaging and enjoyable	"Case tasks made learning more enjoyable." (S4)

**Table 3: Classroom Engagement and Participation**

Code	Description	Representative Quotations
Group Collaboration	Increased teamwork and peer interaction	"We exchanged ideas and learned from each other." (S2)
Active Participation	Increased student involvement in discussions	"I participated more in discussions than before." (S1)
Reduced Fear of Participation	Increased confidence in sharing ideas	"I was afraid before, but now I feel comfortable speaking." (S1)
Interactive Learning Environment	Shift to student-centered interaction	"The classroom became more interactive and student-centered." (T3)

**Table 4: Practical Knowledge Application**

Code	Description	Representative Quotations
Real-World Understanding	Linking theory with real-life scenarios	“Cases helped me understand how e-commerce works in real life.” (S1)
Applied Learning	Ability to apply knowledge in practical situations	“Students applied theoretical knowledge to real scenarios.” (T2)
Problem-Solving Skills	Development of analytical and decision-making skills	“Solving case problems improved my thinking.” (S4)

**Table 5: Career Awareness and Development**

Code	Description	Representative Quotations
Career Clarity	Better understanding of career paths	“I now have a clearer idea about working in e-commerce.” (S2)
Professional Awareness	Understanding job roles and responsibilities	“Students started asking about real jobs in e-commerce.” (T2)
Skill Awareness	Recognition of required industry skills	“E-commerce jobs need communication and data skills.” (S1)

**Table 6: Teaching Effectiveness and Instructional Design**

Code	Description	Representative Quotations
Student-Centered Teaching	Focus on learners rather than teacher	“Students became active learners instead of passive listeners.” (T1)
Use of Multimedia and Cases	Integration of digital and case resources	“Videos and cases made learning easier.” (S3)
Instructional Challenges	Difficulty in designing effective cases	“Designing good cases requires time and effort.” (T4)
Improved Teaching Outcomes	Enhanced overall teaching effectiveness	“It improved motivation, engagement, and understanding.” (T5)

### Interpretation of the Findings

The results of this research prove that the case-based teaching is highly effective in meeting all three research objectives due to its capacity to increase motivation to learn, classroom activities, and development of practical knowledge. Firstly, the findings show that the intrinsic motivation of the students increased when they were actively involved in work with real-life examples, which underpins the goal of motivation discovery in e-commerce educational research. Second, the higher engagement and involvement, as well as the lesser fear of

interaction, prove that case-based teaching leads to a more interactive and student-centered classroom, which meets the second goal. Moreover, the results show that students gained more practical knowledge of understanding and problem-solving, as well as better career awareness, which directly fulfill the third goal. These results imply that knowledge is hopefully created through interaction and experience in a constructivist approach. Altogether, the results provide evidence that case-based teaching is an efficient pedagogical tool in vocational e-commerce education.

## DISCUSSION

The results of this research offer solid empirical research to the success of case-based teaching in improving learning motivation, classroom interactions and application of learning in real world scenario vocational e-commerce instruction. To a great extent, these findings are consistent with the previous studies, still some contextual peculiarities and critical nuances can be observed.

First, the enhancing intrinsic motivation of students is consistent with previous research that has discussed the importance of active and case-based pedagogies in enhancing and strengthening learners in deeper learning. The results align with Wijnia et al. (2024), who have proven the case-based and problem-based learning have significant effect on intrinsic motivation during the real-world problem-solving. In line with this, the study conducted by Raza et al. (2020) revealed that case-based learning enhances the student motivation by rendering the process of learning interactive and contextual.

The given research builds on these implications by demonstrating that within the unique framework of the context of Chinese vocational education, the motivation is boosted and maintained not only with the assistance of enjoyment but also of active engagement. That being said, the contemporary work is suggesting motivation heavily relies on contextualization and delivery effectiveness of cases unlike some of the former ones that assume that all motivational means are equal, which honestly serves to favor Costa and Reis (2025) who claim that alignment between pedagogy and the needs of the learners is essential.

Second, existing research has shown that the findings surrounding the aspect of classroom engagement and participation are in line with current research on student-centered learning. The work of Li and Ding (2023) in which student-centered methods could substantially enhance engagement and participation results is in favor of the conditions that appeared to emerge in this research due to a higher collaboration and interaction levels and a decrease in fear of participation in the sessions.

Also, the findings are consistent with those by Matthews and Dollinger (2023), who stress the need

to support student engagement when developing meaningful interaction. The interactive and collaborative classroom setting detected in the current study is also associated with the results reported by Zhang and Hwang (2023), where the importance of peer interaction in boosting engagement has been mentioned. This research however is a critique that engagement does not just come as a natural process and thus must be facilitated through structure and well-planned activities. This finding aligns with those of Hu and Xiao (2025) and Brown et al. (2022) who state that the poorly designed interactive setting could not maintain engagement. Therefore, the results support the critical role of instructional design in achieving engagement results in the most efficient way.

Thirdly, the results on the practical knowledge application and the career awareness point heavily toward the previous studies on the experiential and work-integrated learning. The findings comply with those of Jackson and Dean (2023), who also note that context-rich and structured learning experiences are critical in the welfare of companionate of employability. Equally, Billett (2025) emphasizes that the transferability of knowledge through real-life practices increases.

The current research adds to the existing literature as it proves that case-based teaching is effective to build a practical understanding, but also to expand the awareness of the career opportunities and skills among the students. This observation is in line with Liu et al. (2023) who determined the contribution of career-related learning to enhancing adaptability and decision-making. Nevertheless, the research aligns with other authors, such as Hassock and Hill (2022) and Vandeweyer and Verhagen (2020), who indicate a continuous mismatch between education and labor market needs. As much as case-based teaching can be used to close this gap, its efficacy remains to be reliant on conformity to industry demands and curriculum formulation.

Lastly, the inferences associated with the effectiveness of teaching elicit both potential and difficulty in the use of case-based teaching. This move towards student-centered teaching reinforces the constructivist approach (Hein, 1991) and asserting that

knowledge gets to be built through interaction and experience. Nevertheless, the specified limitations of the development of the effective case strengthen the thesis presented by Bada and Olusegun (2015) that constructivist methods should be planned and organized. This observation is also consistent with Qiu (2022), who observed the variation in implementing innovative teaching methods in Chinese vocational education.

On the whole, although the results mostly fit with the existing literature, the study has a significant contribution as it offers a comprehensive and context-based view of the roles of case-based teaching in both motivation and engagement and practical learning outcomes in vocational e-commerce education at the same time.

## Implications

### *Theoretical Implicationmm*

This research work supports the Constructivist Learning Theory in the sense that the development of knowledge in vocational e-commerce training is enhanced with a real-life interaction based on cases (Hein, 1991). It follows up on previous studies with a more comprehensive approach to incorporate motivation, engagement, and practical learning into a single concept, which confirms the findings of Wijnia et al. (2024). Nevertheless, the findings also suggest that constructivist methods should be designed and facilitated in a structured manner, in order to be successful (Bada & Olusegun, 2015).

### *Practical Implication*

The results indicate that case-based instruction must be used by educators to increase student motivation, involvement, and employability competences in line with the existing literature (Raza et al., 2020; Jackson and Dean, 2023). Practical learning should be incorporated in the curriculum by use of the real-world cases in the institutions. Nonetheless, the implementation process must be accompanied by training the teachers and connection to the needs of the industrial sector since it is possible to restrain the results with poorly designed practices (Qiu, 2022; Costa & Reis, 2025).

## CONCLUSION

This research concludes that case-based instruction constitutes one of the most common pedagogies that may promote learning motivation, engagement in the classroom, and applied knowledge in vocational training on e-commerce. The results show that the contextualization of learning by means of real-life cases makes students more active, motivated, and confident. The approach will also assist in developing problem-solving skills and career awareness, which closes the gap between theory and practice. The work is based on the Constructivist Learning Theory and it confirms meaningful learning as a process that occurs through interaction and experience. Generally, case-based instruction is a holistic and effective approach to enhancing the results of instruction and learning in vocational training.

## LIMITATIONS OF THE STUDY

The research has limitations because it was based on a small sample and only two vocational colleges were investigated, which could limit its generalizability. The use of qualitative data and the use of self-perceptions can also cause bias. Also, long-term learning outcomes are not measured in the study, which restricts the capacity to determine long-term effects of case-based teaching in different situations.

## FUTURE WORK

To improve the generalizability, future research must consider using larger and eclectic samples in various institutions. To test the long-term implications of case-based teaching on the learning outcomes and employability, longitudinal studies are suggested. Furthermore, mixed-method methodology and the investigation of digital case-based models would allow gaining additional information on how to best practice instructional vocational education.

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