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Tech-integration in Vocational Business English Teaching: A Review

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ABSTRACT

In the development of information technology, especially mobile telecom technology, mobile and multifunctional tech-integration has become an effective tool in education. The COVID-19 pandemic, has unexpectedly accelerated the development of tech-integrated education to a further degree with various practices around the globe. Among them, UTAUT Model, TPACK Model, PICRAT Model, and Flipped Classroom stand out because they are not only user friendly and easily applied but also student-focused and triggered thinking. Teaching Business English in vocational colleges in China is not an easy task due to the conflict between the blended academic background and the different learning behaviours of vocational students. The review of mentioned tech-integration practices could serve as effective approaches for reforming teaching and curriculum design for Vocational Business English classes.

Keywords: vocational; business; English; tech-integration; education

INTRODUCTION

Technology brought reforms to most industries, from tourism, finance, and publication to healthcare, entertainment, and education. Among various environments, the education environment is positively influenced by and responds the quickest to information and communication technologies (Ifinedo & Kankaanranta, 2021). However, nothing has lashed the development of technology-integrated education as much as the COVID-19 pandemic. Before COVID-19, educational technology typically referred to the use of networks and devices, modern classrooms looked nearly identical to those in the 20th or 19th centuries, and little attention was paid to the technology application behavior of instructors and learners (Vegas, 2022). Since 2020, the world has been under the threat of COVID-19. While most industries were severely stymied by lockdown policies, educational technology experienced a surge in the number of users and scale of application. According to Li & Lalani (2020), over 1.2 billion children were shut out from school owing to COVID-19. However, teaching and learning did not stop. Online courses and remote learning were encouraged to ensure that learning progressed despite students being unable to sit in classrooms, which were relatively convenient and benefited numerous teachers and students. As a result, a significant increase was witnessed in the usage of educational technology, including language applications, virtual tutoring and video conferencing tools, and online learning software; thus, the overall market potential of online education was estimated to reach $350 billion by 2025 (Li & Lalani, 2020).

Along with the development of information technology, especially mobile telecom technology, mobile and multifunctional tech-integration has become the most effective tool (Christensen, 2019). Tech-integrated education is currently trending and in the spotlight and acknowledged by the public owing to the COVID-19 pandemic. In the 21st century, being equipped with skills to operate different types of educational technology has become a basic requirement for teachers. The National Education Association proposed four core skills that can ensure student success at present and in the future, namely, critical thinking, communication, collaboration, and creativity (i.e., the four C's). Christensen (2019) believed that tech-integration is the key to achievement by enhancing in-class discussions and group work for problem solving.

TECH-INTEGRATION FOR BUSINESS ENGLISH LEARNING

Business English is part of learning English for a specific purpose and can be considered as a specialization within English language learning and teaching or variant of international English. Many non-native English speakers study the subject with the goal of doing business in English-speaking countries or with companies located outside the English-speaking world but use English as a shared language or lingua franca. Much of English communication that takes place within business circles around the world involves non-native speakers. In such cases, the objective of the exercise is efficient and effective communication (The English Learning Centre, 2017).

In business English teaching, the curriculum provides a developmental set of contents and skills-based activities that addresses the standards set by the government (Zha, 2020). According to Language Academia (2021), methods for second-language acquisition vary considerably, as individuals' English proficiency level and means and circumstances for learning English differ substantially. China is taken as an example of the "expanding circle" of English according to three circles theory developed by Kachru (1992), where English is commonly used for specific and limited purposes, generally in the international business context. Moreover, students' English ability differs. The study of business English is heavily influenced by personal and sociocultural factors that could hinder or improve a learner's abilities (Xiong, 2019). Thus, business English teaching requires a student-centered approach that caters to not only students' personal and sociocultural needs but also their environmental needs to make instruction highly effective.

Technology is currently at its peak and developing continuously; thus, technological devices and advancements have been tested in the classroom setting. Khatoony & Nezhadmehr (2020) proved the effectiveness of technology for language teachers in Iran through the use of online platforms and devices to improve students' proficiency under abnormal conditions. Peterson, et al. (2020) shared examples of how schools in Minnesota used their strong tech-integration foundation; provided remote learning solutions to marginalized groups, including special education students, English learners, and financially disadvantaged students; and successfully slowed the spread of COVID-19. Although studies on the use of technology in the classroom presented positive results, the manner of stipulating and integrating such elements in the curriculum design and development of business English classes requires further investigation.

TECH-INTEGRATION FOR VOCATIONAL BUSINESS ENGLISH STUDENTS

Learning English as a second language has high requirements, such as leaners' self-discipline and learning motivation, which are missing in vocational students.

Vocational education is generally referred to as career or technical education (Edglossary.org, 2003), with the general objective of cultivating students' competencies for future employment (Lucas, Spencer, & Claxton, 2012). Thus, vocational education differs from academic education. In vocational colleges, emphasis is placed on effectively preparing students for the workplace (UNESCO, 2018). Business English refers to English communication that occurs within business circles; thus, efficient and effective communication is the priority of business English teaching, which differs from that of traditional English teaching, which is grammar or the preciseness of the language. However, the problem is that most business English professional teachers are equipped with only basic English language and literature knowledge and lack a business background. Thus, authorities and colleges generally encourage teachers to engage in enterprise–college cooperation to introduce learning resources

and practical operations into the business English curriculum, for which tech-integration would be an ideal approach.

In recent years, vocational colleges became the viable and accessible option for higher education in different parts of the world. In China, the massification of higher education means that an increasing number of students are being accepted into higher education institutions, such as universities or vocational colleges. China's higher education expansion began in 1999, and as a result, the number of newly enrolled college students in 2005 reached 4.75 million, which is four times the number in 1998 (Zhu & Shi, 2021), thereby transforming higher education into mass education rather than elite education in the last century (Deng & Ye, 2021). As universities can cater to only a relatively limited number of students owing to intensive requirements such as high scores in national standardized examinations, a large number of secondary school graduates opt to enroll in vocational colleges. However, this massification of higher education in China resulted in the downtrend trend of the overall quality of students in vocational colleges. As a considerable number of high school graduates enroll in undergraduate colleges, and students enrolled in vocational colleges are not as skilled or learned as those in previous years, their college entrance examination scores may be 200 or 300 points lower (750 is full marks) than those of their counterparts 10 years ago and English abilities, learning habits, self-discipline, and learning motivation may be worse (Xu & Xu, 2006). Feng (2020) blamed the decline in the income of vocational graduates on the deteriorating quality of incoming students. By contrast, college lecturers typically graduate from an elite education system and tend to use the way they were taught to teach their current batch of students (Zheng, 2021). Thus, a definite gap exists between teachers' assumptions and students' actual situation, which may lead to low classroom efficiency.

Owing to the current education system of China, vocational students possess unique characteristics compared with regular undergraduates. Vocational students are not considered as ideal students from the perspective of the traditional Chinese value system. In addition, such students prefer being dynamic over being static and acting over thinking. However, they are more passive and inertial in their studies compared with nonvocational students. Tech-integration, especially mobile-friendly tech-integration, may be an excellent option for vocational teachers and students.

Thus, teaching English as a second language in vocational colleges in China is quite challenging for instructors, who may exhaust their ability to make language learning as fun and enjoyable as possible to keep students interested. Owing to the rapid growth of the use of tech-integration in learning, instructors can take advantage of various forms of technology to assist in their teaching activities, such as animation (Sanchez & Weber, 2019), simulations (Flaherty & Costabile, 2020), virtual reality (VR; Rosenfield & Lamkin, 2019), and online learning platforms (Littenberg-Tobias & Reich, 2020) such as Google Workplace Tools (Akcil, Uzunboylu, & Kinik, 2021). Business English teachers in vocational colleges in the 21st century require a sound understanding of learning technology and knowhow to combine them effectively with business English contexts and teaching experience to make the business English learning process attractive to students to help them effectively grasp the subject.

Zhao and Gu (2017, p. 225) noted that institutions are facing challenges in developing a reformed College English curriculum that is for the purpose of fostering inter-disciplinary personnel within this broad educational context and in the context of the globalization of higher education. In a similar case in a developing country such as the Philippines, Barrot (2018) highlighted the weakness of the ESP curriculum in addressing the specific needs of learners with different English abilities and coherence with respect to 21st century principles and environments related to language teaching and learning. Although a curriculum plan was instituted in China to be progressive, from primary to secondary to tertiary education, the programs seem to be disjointed, because the aim of basic education is to enable students to

achieve high college entrance examination scores without contextualizing their need to be well-equipped with practical English abilities and the current environment, which is changing drastically owing to rapid technological advancements (Wu, 2001).

Vocational education, which differs from basic education or traditional academic education, is committed to fostering practical talents and abilities necessary for employment in different industries. Vocational college students have unique learning habits and preferences. Compared with students in regular 4-year universities, vocational college students are less self-disciplined, lack leaning initiatives, and have poor leaning habits (Ma, 2021). Thus, teachers' guidance and effective classroom activities are indispensable in vocational business English classes. As the new generation grew up with the Internet and mobile communication technology, forbidding students from using their smartphone while in class is nearly impossible. According to Wang (2016), a technology-integrated class is an effective solution to this problem, where mobile devices are used in the classroom, and multiple activities are implemented to capture and hold students' attention. Wang (2020) pointed out that the business English curriculum of vocational colleges focuses too much on skills training and neglects value shaping and personality cultivation, whereas a flipped classroom integrated with mobile technology can provide a feasible approach for deepening class exploration and providing sufficient time for inquiries and communication.

In previous vocational business English classes, tech-integration was used as a form of subsidiary support; however, COVID-19 drew online teaching to the forefront and transformed it into a technology-dominated activity. Although most teachers can use applications and platforms efficiently, many encounter different challenges. Studies in Saudi Arabia (Hakim, 2020) and Iran (Khatoony & Nezhadmehr, 2020) identified common obstacles faced by teachers, such as lack of appropriate materials, unstable or delayed transmission, inability to access modern equipment or applications, low participation and demotivation among learners, lack of funding and support, insufficient supervision, differentiation in the learning effect, and decreased intimacy between teachers and students.

China is experiencing a similar situation. In 2020, the implementation of lockdown policies to prevent the spread of the virus facilitated the development of online teaching. A round of home-based online education practices swept the country, which improved teachers' information technology application techniques and abilities comprehensively. The design of complete online courses improved, teaching technology matured, supervision on online learning platforms became active, and theoretical and practical research on Web 2.0 education deepened. In addition, the sharing of teaching resources was promoted, and the function of teaching teams became prominent.

What is the future direction of online teaching? What changes will occur in teaching methods in the post-pandemic period? How can the online teaching resources accumulated during the pandemic be used once face-to-face classes resume? How can the effective connection in online teaching during and after the pandemic be realized? After the pandemic, tech-integrated teaching is bound to become a trend. In contrast to the intermittent use of educational technology in the past, the development of an effective tech-integrated teaching model that is sustainable and can be updated continuously should be explored (Akcil, Uzunboylu, & Kinik, 2021). In the education revolution, the innovation of technology-integrated education has a long way to go, and new technology should be used to serve education, especially vocational education; improve the teaching effect; and optimize teaching quality.

TECH-INTEGRATION PRACTICES

Tech-integration is defined as the use of technological tools in general education areas to enable students to employ computer and technological skills to learn and solve problems. In addition, tech-integration describes the use of technology to enhance and support the educational environment. Tech-integration in the classroom can also support classroom instruction by creating opportunities for students to complete assignments using a computer rather than the typical pencil-and-paper technique (Edutopia, 2007; Dockstader, 2008).

No standardized definition of integration technology exists owing to the numerous practices, models, tools, theories, and strategies adopted by different practitioners. Moreover, nearly every teacher has a unique understanding of and methods for integrating technology according to different student groups, teaching subjects, or environments. Besides, tech-integration is a dynamic term that is updated and upgraded along with the development of new technologies and utilizations. Owing to the rapid development of educational informatization, countries around the world predicted the key role that technology will play in education. With the continuous development of mobile devices, besides traditional computers, tablets and mobile phones are commonly used in classrooms. However, the use of digital devices in education was criticized. For instance, Armstrong (2012) argued that multimedia can limit learning, because delivering complex content is more difficult than delivering simple ideas. The introduction of technological tools into classrooms, such as interactive whiteboards, student response systems, MOOC platforms such as the Khan Academy, and VR systems or AI technology, which have been broadly embraced in the teaching process, has become an irreversible trend. Technology can assist students in learning and exploring (Vega & Vanessa, 2013). Huneycutt and Timothy (2015) believed that technology can help students focus on their studies for long periods of time and explore and research actively.

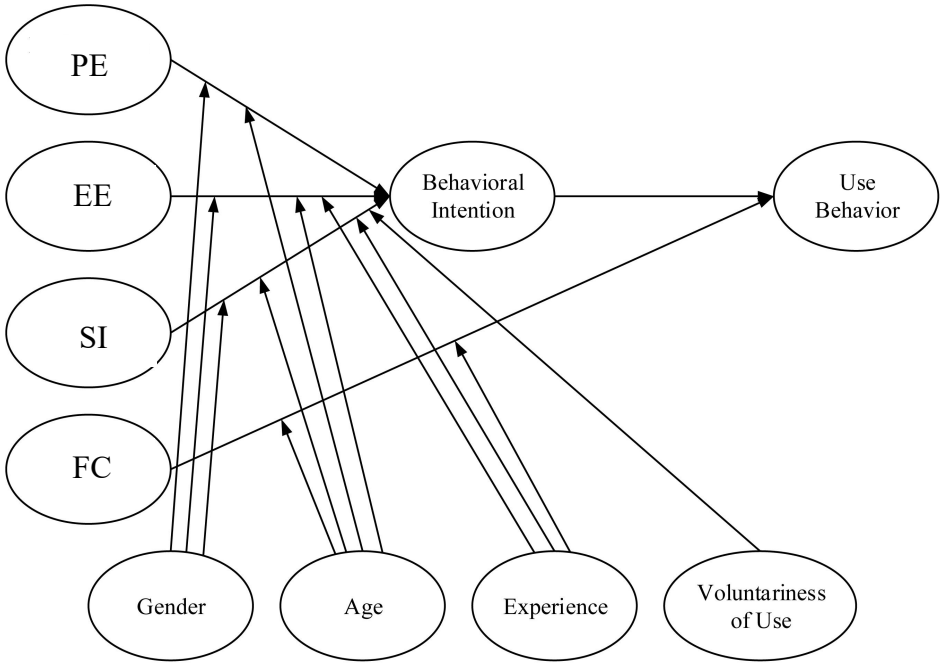
The use of tech-integration as a student-centered approach in the curriculum design of business English classes is heavily documented in previous studies. In teaching grammar to pre-university students in Malaysia, the flipped classroom technique was found to improve students' linguistic competencies and enable them to get high scores in exams (Pudin, 2017). Similarly, technology models, flipped classrooms, and other technology-related approaches were reportedly used in English classes in Malaysian universities, which were positively received by students and lecturers (Rahman, Yunus, & Hashim, 2019). Furthermore, Karamifar, et al. (2019) explained that a shift in ideals in teaching through relevant approaches such as student-centered methods and tech-integration could strengthen English teachers' beliefs and improve students' performance. In China, Hu and Webb (2009) described the prevalent pedagogical paradigm in the Chinese higher education system, which is more teacher centered and less student centered and thus hinders the use of technology in ESP classes for the benefit of students. Zhang (2021) suggested the standardization of online course construction against the background of "Internet+" to stimulate students' leaning interest and promote teaching efficiency. During the COVID-19 pandemic, technology-integrated classes benefited millions of students around the world; however, they also posed a considerable challenge for curriculum development in the context of mobile technology. Micro lectures, online courses, and instant interaction applications are commonly used in business English classes. In some colleges, expensive AI technology or VR systems are used in class. Despite its potential, the necessity of using technology should be explored as well as whether it serves teaching activities effectively or is merely a meaningless accessory.

From the preliminary review of the literature on tech-integration, four models or approaches are identified, namely, the unified theory of acceptance and use of technology (UTAUT) model (Venkatesh & Morris, 2007); TPACK model (Koehler & Mishra, 2005); passive, interactive, creative, replace, amplify, and transform (PICRAT) matrix (Kimmons, Graham, & West, 2020); and the flipped classroom, which are discussed in detail in the following sections.

UTAUT MODEL

Figure 1 show a UTAUT model which was developed from several information system usage behavior models, specifically, the TAM and TAM 2. The theory asserts that performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC) influence users' behavioral intention to use a system and lead to actual usage behavior. The first three constructs have an impact on users' intention to use a technology and use behavior, whereas the last construct affects only users' behavior. Besides, other demographic factors, including gender, age, experience, and voluntariness of use, may influence the impact of the above four key constructs.

FIGURE 1. UTAUT model (Venkatesh & Morris, 2007)



With the rapid advancement of technology, especially the popularization of mobile devices, e-learning or mobile learning, as a major instrument in tech-integration, has considerable potential in education and learning assessments (Nikou & Economides, 2017). However, despite the effectiveness of information technology, its full utilization depends on users' acceptance (Davis, 1989). The previous application of UTAUT theory concentrated on the perspective of students or trainees. For example, Chao (2019) examined the behavioral intention of university students to use mobile learning with UTAUT theory, and Verhoeven (2010) used UTAUT theory to investigate computer use frequency in 714 university freshmen in Belgium. In addition, Welch (2020) applied UTAUT theory to 118 museum staff in England to identify the factors impacting their adoption of mobile learning.

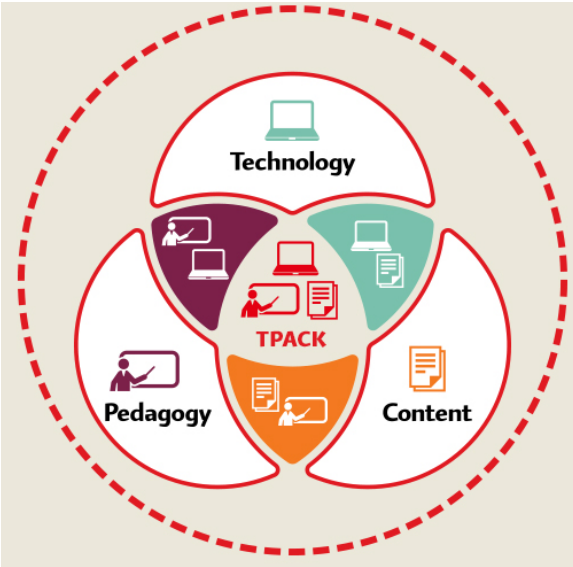
However, little attention was paid to tech-integration implementation from the perspective of teachers or instructors. Teachers and students are the two end users of tech-integration in the teaching–learning process. Teachers' acceptance of technology is no less important than that of students.

TPACK MODEL

As one of the most popular models used in tech-integration shown in figure 2, is a TPACK model which proposes a basic framework with which teachers can easily understand the role

and actual function of technology in the teaching–learning process. Derived from the "pedagogical-content knowledge" model developed by Shulman (1986), Mishra (2006) added "technological knowledge," thereby developing the core concept of the three types of knowledge in the TPACK model that teachers should master during their teaching practice, namely, technological knowledge (TK), pedagogical knowledge (PK), and content knowledge (CK). In 2019, Mishra developed the theory further by adding an outer circle called contextual knowledge (XK).

FIGURE 2. TPACK framework with additional XK domain (Mishra, 2019)



In the model, TK is defined as knowledge of use of different types of technologies not limited to information technology, ranging from traditional teaching aids, such as stickers and whiteboards, to advanced digital technology, such as games, video clips, VR, AI, multimedia, applications, and online platforms, that teachers may use in teaching activities.

Next, PK refers to all the activities needed to implement teaching techniques, or how a lesson should be conducted, including teaching plans, teaching strategies, class activities, evaluation systems, class management, learning methods, and so on.

Meanwhile, CK is the specific content of a course or subject, which is business English in this study.

Finally, XK refers to the general awareness and judgement of the software and hardware of the teaching environment. In this research, XK may include the nature of the school (vocational college), the basic situation of the students (English ability, learning attitude, business background, learning preference, and so on), the campus location (city), the availability and accessibility of teaching technologies (how well-equipped a classroom is), the industrial background (high ratio of dependence on foreign trade, surge in cross-border e-commerce, and clusters of foreign trade businesses), and the micro social environment, such as national policies to mitigate the pandemic in recent years and encourage vocational education and international relationships.

In addition, PCK, which combines CK and PK, addresses how a teacher organizes his/her teaching based on the characteristics of a specific content. The question in this research may be highly complex, as business English involves two subjects. Thus, business English instructors should try to develop effective teaching methods by employing their PK to improve students' practical English communication skills for business situations.

TCK combines CK and TK to change the media to present the content. Mishra and Koehler (2006) expected the adoption of certain technology for specific content to generate new outputs that can facilitate students' understanding of the subject and promote their learning experience. For example, in teaching international exhibition, VR would be an ideal technology for students for an immersive experience in learning the content.

TPK is the general understanding of technology-integrated education or educational technology. Mishra & Koehler (2006) indicated that instructors should fully comprehend instruments, the application and strategies of certain types of technologies, and the extent to which an adopted technology benefits or harms students' learning activities and teaching effectiveness. Smartphones are the most common mobile devices used in technology-integrated business English classes, which are not 100% beneficial. Students may rely excessively on their smartphone, so teachers should have a well-developed strategy to limit the disadvantages of the use of mobile phones in business English classes.

The TPACK model combines TK, PK, and CK. The key idea behind the theory is that the three major domains interact with one another in a complete and complex manner. For instance, in this research, the instructors teach business English in a vocational college using the tech-integration approach and must understand business English (i.e., CK), teaching practices (i.e., PK), and the adopted technology (i.e., TK). However, having such knowledge is far from sufficient, and the teachers must also understand how to teach business English using the proper tech-integration techniques, which differs from teaching English language and literature, because the chosen pedagogical strategies should fit the business English content and vocational college setting.

Kimmons (2020) pointed out that in the TPACK model, TK is not merely used; rather, TK is merged with PK and CK to generate new outputs and learning experiences that are meaningful to students in specific situations.

The TPACK model can be applied to various fields. For instance, Rahimi & Pourshahbaz (2019) proposed an English as a foreign language-TPACK model in the language field, and Anis, et al., (2021) used the TPACK model in vocational education in Indonesia and added an extra component, namely, vocational knowledge.

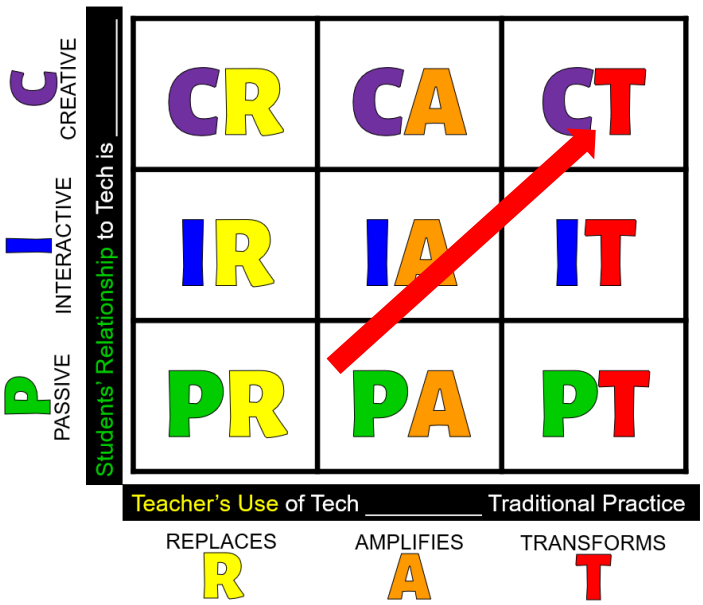
The TPACK framework is not perfect, and criticisms abound on its lack of a precise definition and reliable assessment instruments (Koh, Chai, & Tsai, 2010). Brantley-Dias & Ertmer (2014) argued that the complexity of the framework prevents researchers and teachers from implementing it in their daily teaching practice.

PICRAT MODEL

The PICRAT model as seen in Figure 3, is a newly developed model derived from the RAT model (Hughes, Thomas, & Scharber, 2006), which answers the question of the impact of technology on the teacher's pedagogy, namely three stages of replace, amplify, and transform. The PICRAT model completes the original theory by adding another dimension of the question of students' relationship with technology to form a matrix.

The answer to the new question is the right PIC. In technology-integrated classes, teachers should try to change their practice from PR to CT, in which effective tech-integration is obtained. By answering the two questions, teachers will be able to understand why they failed in a particular practice.

FIGURE 3. PICRAT matrix (Kimmons, Graham, & West, 2020)



Taking this research as an example, if business English teachers shift from writing vocabulary words and expressions on a whiteboard to presenting them using PowerPoint slides, then the practice may be placed in the PR section of the grid, because they are merely using the device to replace the traditional technique, and the students are only passively taking down notes, which makes no difference in the learning experience. By contrast, if teachers guide students to record live-streaming videos to demonstrate a new product in English to elicit feedback from their peers, enterprise experts, and the online community, then the exercise would likely be in the CT grid, because the teachers are using digital technology to transform their practice into something that would not have been possible without the technology, and the students are using the technology as a tool for creation.

Based on the research of Kimmons (2020), when teachers are only beginning to use tech-integration in their teaching practice, the result will typically fall near PR on the grid. However, many of the most exciting and valuable uses of technology for teaching lie firmly in the topmost and rightmost sections of the grid. Thus, teachers should be encouraged to evolve their practice to move continuously from the bottom-left (PR) to the top-right (CT) sections of the grid.

FLIPPED CLASSROOM

A flipped classroom, which is an instructional strategy of blended learning, was first proposed by Nechkina (1984). The flipped classroom practice is an effective demonstration of Bloom's taxonomy, where lectures and basic knowledge are not delivered in the classroom, and students are required to accomplish the lower learning objectives before class on their own with the help of online resources and platforms. Thus, the class time can be used to engage in active learning to apply knowledge and exchange ideas. Output learning is encouraged to achieve higher learning objectives, in which technology is an effective accelerator. Interactions between teachers and students and among students are personalized and not routine (Al-Hoorie & Ali, 2020; Vitta & Joseph, 2020). This teaching strategy can encourage students to develop their problem-finding and solving and group-decision abilities and constructional learning (Bennett, et al., 2013).

Various flipped classroom practices for different subjects are employed around the world. Bergmann & Sams (2012) developed the flipped-mastery technique for chemistry classes, in

which students cannot advance to the next topic until they master the current one (Rosenberg & Tina, 2013). As an inclusive teaching strategy, the flipped classroom can also be used with other educational approaches, such as peer instruction (Dumont, 2014), in which students share with and support one another in the classroom; gamification (Volkswagen, 2009), which is based on fun theory, asserting that having fun and a positive feeling can change students' behavior in class; and cooperative learning (Fortanet, et al., 2013), in which class time is used for teamwork-based problem solving and discussions for group learning.

Although the flipped classroom is flexible and practical, it has critics and disadvantages. For students, Nielsen (2012) believed that a flipped classroom will lead to a digital divide among students owing to their unbalanced socioeconomic background. Families with limited access to digital resources and devices outside the school are underprivileged. Similarly, students with poor self-discipline may lag behind their peers (Strayer & Jeremy, 2012). In addition, most parents are concerned that a flipped classroom will increase their children's computer (Nielsen, 2012) or smartphone usage time. The flipped classroom is a challenge for teachers as well owing to its high requirements on time, effort, funding, and elaboration (Bergmann & Sams, 2012).

CONCLUSION

Based on the previous discussion, as a relatively new subject, no standardized pattern exists for the business English curriculum, and most models are developed by undergraduate colleges or universities. Owing to the different nature of vocational education and academic education, vocational colleges should not merely borrow and degrade existing business English curricula from undergraduate institutes. Thus, a specific and new business English curriculum is necessary for vocational education.

As for tech-integration, though considerable research was devoted to this area, which was a hotspot in the recent decade, most studies tended to focus on primary or secondary education and paid little attention to higher education. A search of "tech-integration" on Google Scholar will generate 5,480,000 results within 0.07 seconds, and a search of "tech-integration + primary school" will generate 5,111,000 results within 0.1 second. However, a search of "tech-integration + higher vocational college" will produce only 256,000 results within 0.29 seconds, and a search of "tech-integration + higher vocational education" will produce only 16,700 results within 0.26 seconds. In conclusion, increased attention should be paid to tech-integration in the context of vocational education.

Moreover, Akcil, Uzunboylu, & Kinik conducted research on tech-integration in the teaching–learning process and used data from current articles obtained through a search of the keyword "tech-integration." In their conclusion, the authors recommended the use of Google Workspace Tools to help ensure tech-integration in teaching. Unfortunately, owing to policy issues, Google products are not easily accessible to most Chinese teachers and students. Thus, another objective of this research is to find a set of effective technological instruments for vocational business English practitioners and learners in the Chinese context.

As mentioned previously, based on the literature on the UTAUT model, most studies focused on students' acceptance of technology and paid little attention to the implementation of tech-integration from the perspective of teachers or instructors. Teachers and students are the two end users of tech-integration in the teaching–learning process.

Teachers' acceptance of technology is no less important than that of students. This research will investigate the major factors affecting instructors' behavioral intention to use and actual behavior of implementing tech-integration in business English teaching using perceived satisfaction, self-efficacy, trust, accessibility, and perceived risk as moderators to identify the

defects of the current implementation of tech-integration for business English teaching in vocational colleges for future optimization and upgrading.

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