

Constructing Virtual Teaching and Research Centers for Business English Education: A Framework for Application-Oriented Universities

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Abstract: This article explores the construction of virtual teaching and research centers in Business English education in application-oriented universities. They face unique challenges in preparing students with practical skills and career readiness demanded by industries; traditional teaching models often lack the interactive, experiential components that are necessary for the development of practical skills. Guided by Experiential Learning Theory, this article tries to propose a framework for the construction of virtual teaching and research centers, including design principles, curriculum development, assessment strategies to cope with the challenges and to align with industrial needs. The proposed framework aims to enhance students' practical skills, improve engagement, and ensure Business English learners are career-ready. Recommendations for the construction are also put forward.

Keywords: Virtual Teaching and Research Centers; Application-Oriented Colleges; Business English; Experiential Learning Theory.

1. Introduction

Business English education is an important part in application-oriented colleges in China as it can not only provide language teaching but also aim at the development of practical skills in real business activities like business negotiation, business response, and other cross-cultural communication. For students in non-English speaking countries, they need to have a good command over English to effectively communicate with foreign customers and colleagues in the future. While it is difficult to create business atmosphere for students to apply their business knowledge, a virtual environment imitating business activity is valuable. Thus, how to optimize Business English education in cultivating talents' practical skills in higher education is vital.

Virtual teaching and research centers (VTRCs) provide flexible online environments for teaching and learning. In VTRCs, information technology enables shared teaching resources, collaborative teaching, asynchronous learning, simulations and industrial engagement. Since COVID 19, the establishment of VTRCs in China has been a significant focus in educational planning and the National Education Bureau issued a first list of pilot VTRCs in 2021. Hence the agender to build VTRCs arouses more and more discussions. With collaboration in VTRCs, experiential learning become easier to achieve through virtual simulations of business negotiations or presentations, providing convenience for students to accumulate practical skills.

However, the construction and research of VTRCs is still at the beginning phase and awaits more exploration [1]. And there is limited research on Business English courses in VTRCs context in application-oriented colleges.

This article tries to address how can Business English education equip students with practical skills that are needed in real business settings. For this, a systematic framework for VTRCs in Business English education in application-oriented colleges will be established, offering actionable insights into

the VTRCs design principles, course development and implementation strategies.

2. Literature Review

Virtual Teaching and Research Centers (VTRCs) are increasingly recognized as transformative digital platforms in higher education, facilitating collaborative teaching, research, and learning across geographical boundaries [2]. These centers utilize digital tools and advanced technologies to create virtual spaces that allow educators, students, and researchers to engage in educational activities, share resources, and collaborate on research and course-related discussions [3]. VTRCs support various activities, including interactive simulations, collaborative research projects, and asynchronous forums, enabling participants to overcome geographical and demographic barriers and pursue educational goals in a streamlined, flexible format [4]. Research indicates that virtual learning environments can significantly enhance student engagement, fostering both intrinsic motivation and active participation in the learning process [5,6].

VTRCs have gained momentum in recent years, particularly within undergraduate education, where they are now at an experimental stage of development [7]. In applied universities, these centers are often used to foster closer links with industry, offering students realistic, practical experiences that align with regional economic and business needs. For applied universities, addressing the gap between classroom learning and workplace demands has become a top priority, and VTRCs present a promising avenue for providing relevant, skill-oriented training [8].

Up till now, there has been no specific investigation into the construction of VTRCs for Business English education within application-oriented universities. However, increasing research has examined the construction of VTRCs in general, analyzing their background, types, and distinctive features [9,10,11]. Scholars suggest that the development of VTRCs

should be question-led, student-centered, and integrative in nature [12,13], while optimizing curricula and evaluation systems is also essential in the design of VTRCs [14]. Recent discussions have explored the role of digitalization in advancing Business English education as well [15].

Among the theoretical frameworks underpinning VTRCs, Experiential Learning Theory (ELT) offers a relevant approach focused on learning through experience. According to ELT, learners engage in a cyclical process consisting of four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation [16]. In VTRCs, students can follow this learning cycle in simulated business environments, which allows for the immediate application of theory in practical scenarios. ELT's focus on active learner involvement aligns with VTRCs' objective of providing immersive, authentic learning experiences, particularly beneficial for applied learning in professional fields.

As applied universities aim to develop students' professional skills, Business English education within VTRCs is well-suited to address the practical needs of industries. Unlike traditional universities, which often emphasize academic research and theoretical knowledge, applied universities focus on producing industry-ready graduates who possess both specialized language skills and the cultural competence needed for international business. VTRCs can simulate business negotiations, case analyses, and other realistic business interactions, which students can practice, reflect upon, and refine [17]. This approach not only aligns with the experiential learning model but also meets the practical demands of the business environment, ensuring that graduates are equipped to transition smoothly from classroom to workplace.

In Business English education within application-oriented universities, there is a clear goal to prepare students for regional industries. These students are expected to adopt themselves quickly to industry requirements after graduation because they have aided by relevant training during their studies [18]. To be industrial-ready, students must analyze business cases, simulate business negotiations and acquire practical skills for business activities. However, recreating business scenarios in traditional classrooms is challenging, and VTRCs offer a viable solution. Within VTRCs, experiential learning is easy to be carried out in Business English education: students can practice in simulated business environments, like digital marketing communication, cross-cultural email correspondence, or mock negotiation, and they can also reflect on their interactions, and refine strategies in response to realistic feedback.

Despite the rising interest in VTRCs, there is limited research on their application in specific courses like Business English, particularly within the context of applied universities. Most studies focus on the broad application of VTRCs across institutions, without delving into the unique challenges and benefits for skill-focused programs. Therefore, this study aims to address this gap, exploring the specific ways VTRCs can be designed and implemented to enhance Business English education in applied universities. By bridging the research and application gap, this study seeks to provide a targeted framework for integrating VTRCs in Business English courses to improve students' readiness for real-world industry demands.

3. Need for VTRCs in Business English Education

3.1. Problems in Traditional Business English Teaching

Traditional Business English education encounters various challenges on developing student practical skills. Business courses often emphasize theoretical content over practical applications, focusing on vocabulary and formal communication structures while giving not sufficient emphasis on practical business scenarios. For instance, students may learn ways of formal correspondences, but they often lack exposure to the fast-paced styles of email exchanges and business negotiations in international settings, failing to create strong connections with real business environments [19]. The gap between theories and the perception of real business activities may lead to difficult transition into the workforce after graduation.

Furthermore, traditional teaching is largely instructor-centered, i.e., students passively receive information rather than actively engaging themselves with the content. While the development of essential business skills, like decision-making, problem-solving and negotiation needs constant practices, passive learning approaches can lead to low levels of student engagement and retention of practical skills.

Additionally, traditional Business English teaching environment often lack the digital and interactive tools to simulate business scenes. Given limited time in class and the lack of tools to show business scenes, teachers have difficulties in developing student spontaneity and their ability in reflection. Faced with the rapid changing market and the high demand for cross-cultural communication and practical skills, traditional methods lack the capacity to build efficient learning practices and career readiness in students [20]. Despite the fact that multimedia and internet resources are increasingly common in education, online learning tools in Business English remain underutilized, potentially limiting students' digital competencies and failing to prepare them for the interactive-demands of cross-cultural business activities [21].

These challenges in traditional education of Business English highlight the need for innovation solutions, within-and-without class, to create immersive and practical business environment.

3.2. Importance of Practical Skills and Career Readiness

Developing practical skills and career readiness is essential for aligning Business English education with industry demands and supporting students' long-term career trajectories. Unlike undergraduates in purely academic universities, students in application-oriented universities should be equipped with practical skills to handle real-world challenges like effective communication, problem-solving, teamwork and cross-cultural sensitivity. These skills are vital in navigating business scenarios.

As practical skills are concerned, they should be interpreted appropriately. Effective communication in business not only requires a good master of language structure, but also requires students to adapt their tone, timing, and format based on counterparts of business communication. These specific skills can only be developed through practice in realistic contexts. Besides, teamwork involves a wide

network: besides the traditional collaboration between peers, and teacher-student patterns, collaboration can break physical and cultural differences with remote teams. These necessary adaptability and cross-cultural competence can enable Business English graduates to quickly engage themselves with diverse colleagues, enhancing their employability and probability of career development [22].

Career readiness in Business English education means more than having fundamental business and English knowledge. It involves understanding jargons, being informed with business and economic trends, and cultivating the ability to solve problems in reality. For employers in industries, they would prioritize candidates who have practical experience and critical thinking abilities. In the way, Business English students who have undergone practical training in universities are more likely to fill the vacancy.

Therefore, fostering practical skills and career readiness through innovative educational framework is critical, in order to develop talents who are language-proficient and career-ready, well matching the industry needs. Thus, integrating such practical training into curriculum can create opportunities for students to experience simulated business fields, bridging the gap between theoretical learning and real practices.

3.3. Potential for VTRCs in Business English Education

VTRCs offer significant potential to bridge the gaps in traditional Business English education by providing a dynamic and immersive environment that imitates business activities in the real-world. These digital platforms allow students to engage in interactive simulations, gain practical experience through reflection and repetition, and develop the professional skills demanded by the business world. Through VTRCs, students can participate in scenario-based activities, like virtual negotiations, customer communication and case analyses. All these activities are with in control, and they are repeatable, fostering experimentation and growth.

One key benefit of VTRCs is their ability to increase student motivation and engagement. By integrating multimedia tools, collaborative forums, and simulation software, VTRCs create a flexible learning environment that empowers students to explore complex business situations at their own pace. Research shows that learners are more motivated when they are active participants in their learning process, especially when they can see a direct connection between their coursework and real-world applications [23]. The interactive, hands-on experiences available in VTRCs can lead to greater student engagement, retention, and practical understanding.

Another important feature of VTRCs is their capacity for customized learning pathways. Unlike traditional classroom settings, where teaching often follows a one-size-fits-all approach, VTRCs enable a personalized educational experience that adapts to individual learning styles and career goals. Students can select modules, exercises, or simulations that best align with their skill gaps or areas of interest. This customization allows students to progress according to their own learning speed, helping them gain confidence and competence in their Business English skills before transitioning to a professional environment.

Besides, VTRCs facilitate collaboration between universities and industries. By establishing partnerships with business professionals and integrating industry-based

scenarios, VTRCs can help students develop practical skills that directly align with current industrial needs. For example, industrial professionals can participate in virtual guest lectures or contribute to real-world project simulations, providing students with invaluable insights and feedback. This connection with industry helps ensure that the skills acquired through VTRCs remain relevant and immediately applicable to the workplace, which is crucial for students in application-oriented universities aiming to enter the job market quickly and confidently.

Moreover, VTRCs promote continuous learning and skill refinement, as students can revisit specific simulations, participate in peer evaluations, and receive feedback to improve their performance over time. This approach allows students to build a strong foundation in Business English and then refine their abilities through ongoing practice. By providing an environment where learners can repeatedly engage in authentic business scenarios, VTRCs prepare students to navigate the complexities of the business world.

In sum, the incorporation of VTRCs in Business English education has the potential to transform the learning experience, making it more relevant, flexible and influential. By enabling practical skill acquisition, industry engagement and personalized learning, VTRCs represent a forward-thinking approach that can address the limitations of traditional educational models and better prepare students for the demands of the global business environment.

4. Framework for VTRCs Construction in Business English Education

To establish VTRCs is an important tactic to improve the efficacy of Business English education in application-oriented universities. By integrating modern technology and teaching ideologies, VTRCs can address the limitations of traditional education by providing rich and flexible learning experience.

This article tries to construct VTRCs under the guidance of the Experiential Learning Theory. According to the theory, learning is spontaneous—it's an active and cyclical process: knowledge is acquired in an experiential process, containing experience, reflection on experiencing and application [16]. Therefore, this framework of VTRCs construction aims to make effective use of VTRCs to enhance the learning process so as to improve skill-building and career readiness.

4.1. Design Principles

Prior to VTRCs construction, necessary effort should be probed into the design principle of VTRCs, the course development in VTRCs, and the strategies of implementation, i.e., a framework of VTRCs construction, so that we could better understand how VTRCs could improve student practical skills and make them career-ready.

Design principles are prioritized in the construction of VTRCs. A good learning environment should be flexible and interactive [24]. Education should be grounded in real-world experiences, encouraging inquiry, collaboration and active participation. Experiential Learning Theory lays emphasis on student involvement. The following four principles should be adhered so as to ensure a participative and collaborative virtue environment:

Firstly, student-focused is the core. Different from traditional class, VTRCs focus on students' learning need and

interest. This approach includes providing flexible courses structures, comprehensive materials for self-study, online discussion and peer study, all designed to stimulate spontaneous, self-directed learning.

Secondly, it should ensure students' interaction. Interactive learning is key to VTRCs. Collaboration could be established via projects for virtual teams, case study, and simulations that mimic business settings. And at the same time, students can also develop team spirit and communication skills collaboratively.

Thirdly, practice orientation is necessary. Application-oriented universities aim to bridge the gap between theories and practices. VTRCs should take real business scenarios into consideration and build up data base for business cases, project-based tasks relevant to job market, allowing students to build practical skills and to adapt to industrial needs.

Fourthly, it should guarantee flexibility. Successful VTRCs design cater for different learning styles and schedules. Offering a range of resources and access of learning, such as online course, recorded lectures, and ongoing discussion, allows students to approach to content that fits individual needs and learning paths. Flex time and individualized process also foster continuous learning.

4.2. Curriculum Development

A careful structure curriculum is vital for the implementation of VTRCs. Application-oriented institutes can optimize current curriculum of Business English to address the specific goals of training talents industry-relevant skills and knowledge, taking the positing of the school, i.e. the level of universities and the purpose of developing talents into consideration. In developing curriculum, four strategies could be adopted:

Firstly, industrial-orientation. To keep a close eye on industrial needs, application-oriented institutions should partner with industries. The university-industrial collaboration can design curriculum content that matches market needs, and provide opportunities for students to know well about market trend and practical skills. For example, online lectures and case analysis by company representatives is beneficial, exposing students to current industry practices.

Secondly, modular curriculum structure. Curriculum of Business English can include modules that cover essential skills, such as business communication, market analysis, cross-culture management and other themes depending on the orientation of developing talents and local job market.

Thirdly, practical training opportunities. VTRCs prioritize learning hands-on. Internship, project team and simulation and other opportunities allow students to apply what they have learned in realistic contexts, reinforcing the learning and preparing them for future work.

Fourthly, interdisciplinary integration. A holistic approach to Business English should integrate knowledge in different fields. Information technology, management, and other fields interlink to provide a broad foundation that enhances students' language skills and business acumen, preparing them for complex work demands in the future.

These above features of curriculum would collectively guarantee the alignment between Business English teaching and market requirements, in most cases, well match the market and thus could arouse students' interest in learning in a continuous process.

4.3. Assessment Strategies

As experiential learning focuses on practical skills, the assessment should not only check students' theoretical understanding but also their progress of practical skills acquisition. A combination of tools and feedbacks mechanisms can ensure a comprehensive evaluation:

Firstly, diverse assessment methods. Final exams, project reports, peer evaluation and self-reflection can be used to evaluate student performance in VTRCs, allowing teachers to gauge student progress on multiply dimensions. These methods provide insight into both the development of practical skills and knowledge retention for career readiness.

Secondly, the continuous feedback system. A robust feedback system is important to both student development and instructional improvement. Regular feedback from students and instructors informs continuous refinement of teaching strategies and content, resulting in a more adaptive and responsive virtual environment

Thirdly, evaluation of assessment efficacy. Periodic review, regular check of assessment tools can ensure they remain reliable, relevant and practical for the evaluation process in virtual learning. This reflective process can help maintain a sound and adaptable assessment mechanism that meets educational needs.

By adhering to above principles and strategies, VTRCs can act as transformative space in Business English education by bridging theoretical learning with practical experience.

5. Recommendations for VTRCs Construction in Business English Education

Establishing VTRCs is essential in enhancing Business English education, particularly for application-oriented colleges striving to meet evolving industry demands. With guidance from Experiential Learning Theory, the following recommendations focus on advancing students' practical skills and career readiness through a structured VTRC framework.

5.1. Establish Clear Objectives and Expectations

Setting clear objectives for VTRC use ensures that learning outcomes align closely with industry needs, enabling students to apply acquired skills in practical contexts. Clear learning goals enhance students' ability to reflect on and internalize their knowledge, thereby increasing learning effectiveness and facilitating skill transfer to real-world scenarios [26].

5.2. Design Interactive and Modular Courses

A highly interactive environment promotes student engagement and enhances learning efficacy [26]. Designing multi-module courses that incorporate key areas—such as business communication, market analysis, and cross-cultural management—addresses diverse student needs. Interactive activities like case analyses, group discussions, and role-playing exercises immerse students in realistic business scenarios, deepening their practical skills and knowledge application.

5.3. Provide Authentic Practice Opportunities

Close collaboration with industry partners is critical in providing authentic learning experiences. Internships, project collaborations, and business simulations foster social learning

and help students gain real-world insights, bridging the gap between theoretical knowledge and practice.

5.4. Enhance Feedback and Evaluation Mechanisms

Timely and constructive feedback improves student learning efficacy and confidence. In the VTRC framework, regular assessment of student progress facilitates adaptive teaching strategies and fosters continuous improvement. Feedback channels—between students, faculty, and industry partners—create a robust support system that aligns educational objectives with industry standards.

5.5. Invest in Faculty Training and Development

The expertise and adaptability of faculty members directly impact the success of VTRCs. Ongoing professional development in virtual tools, modern teaching methods, and theoretical advancements is essential for instructors to effectively guide students in a technology-driven learning environment. Comprehensive training programs ensure that educators remain current and capable of leveraging VTRC resources to their full potential.

6. Conclusion

To sum up, the construction of effective VTRCs is crucial for advancing Business English education in application-oriented colleges. This framework for VTRC development focuses on establishing clear objectives, designing interactive and practical coursework, and fostering meaningful industry partnerships. By providing immersive, real-world learning experiences, VTRCs address existing gaps in traditional education and enhance students' career readiness. Future research should further investigate the implementation and impact of VTRCs, promoting optimal use of technology in higher education and supporting continuous improvement.

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