

Research on Project-based "Form-focused" Instruction in the Context of Education Digital Transformation

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ABSTRACT

With the deepening development of a new round of technological revolution, emerging technologies with artificial intelligence, big data, and other core technologies have been widely applied in various fields, and education digitization has become an important means of opening up new channels for vocational education. In the context of information transformation, the integration of "form-focused" and "project-oriented" instruction practices presents new requirements such as "creating digital communication scenarios", "respecting student autonomy and emphasizing the value of collaborative communication", "promoting the internalization of language forms and improving project execution efficiency". Against the background of education digital transformation, project-based "form-focused" instruction practice needs to be project driven throughout teaching, promote language internalization through digital means, focus on "meaning negotiation", respect the subjectivity and interactivity of teaching subjects, and reflect the teaching philosophy of student-centered integration of engineering and learning. The innovation and application of this model still need continuous exploration by educators, striving to achieve alignment between language and job skills in instruction.

Keywords: *Focusing on form, Project orientation, Education digitalization.*

1. INTRODUCTION

With the continuous deepening of a new round of technological revolution, emerging technologies such as artificial intelligence, cloud computing, big data, and blockchain are widely applied in many fields such as education, culture, politics, economy, and ecological governance. The impact of information technology on human society is gradually profound and diverse, promoting the digital transformation of education. Education digitalization, as an important focus in opening up new channels for educational development, plays a crucial role in improving the education system, enhancing educational quality, and enhancing educational effectiveness. Therefore, vocational colleges should seize the new opportunities of technological development, actively prepare for the digital transformation of education, follow the trend of the times, and improve the supply and service levels of precision education. The cultivation of vocational English talents should actively respond

to the requirements of social development for talent cultivation, always adhere to the two-way cultivation of English language acquisition and application ability for vocational college students, and improve the quality and efficiency of cultivating applied English talents.

The "form-focused" instruction method, based on the "attention hypothesis" and "interaction hypothesis" as theoretical foundations, focuses on emphasizing the learner's attention to language form. Through the accidental attention of the teaching subject to language forms, the perception and experience of language form characteristics enable the learning subject to generate learning gains and improve grades in the future; This teaching model also pays special attention to the improvement of students' language expression and language application abilities through the two-way interaction between teachers and students in real social situations. [1] In addition, another teaching model based on constructivist "learning by doing" theory, "project-oriented" instruction, is widely

used in vocational English teaching because it emphasizes the improvement of the subject's pragmatic ability based on real project-based and task driven situations, and emphasizes the driving, process, and autonomy of learning. "Focusing on form" and "project orientation" are widely proven effective teaching methods. Exploring how to efficiently, reasonably, and scientifically collaborate with vocational education and jointly educate students in the context of digital education transformation is worthy of current English education workers' special consideration.

2. THE INTEGRATION OF "FORM-FOCUSED" AND "PROJECT-ORIENTED" INSTRUCTION IN THE CONTEXT OF DIGITAL EDUCATION TRANSFORMATION

The integration of "form-focused" and "project-based" instruction in the context of education digital transformation is a practice of vocational English actively responding to digital transformation. The integration practice and collaborative education of the two not only demonstrate respect and recognition for the subjective initiative and creativity of students, but also reflect the educational services and precise educational supply that teachers can provide while respecting students. It is an educational adherence to the concept of interactive development between subjects. Therefore, the integration practice of "focus on form" and "project orientation" has unique value implications and is a necessary aspect of improving the effectiveness of English education in vocational colleges.

2.1 Creating Digital Communication Scenarios Being the Key Point of Integration Formation

Compared to traditional teaching methods, "focus on form" emphasizes the spontaneous expression of attention to language form in the real communication context between teachers and students. This attention based on language form can be organized and planned in advance, as well as immediate, sudden, and accidental. Overall, any teaching method that attracts students' attention to language forms in an explicit or implicit way belongs to the category of "focus on form". [2] According to whether it is planned or not, "focus on form" can be divided into two types: proactive and reactive. The so-called proactive refers to the

teacher's organized and planned mobilization of students to pay attention to language forms in advance; The active type is the opposite, it is a temporary teaching. Although the effectiveness of "focus on form" in vocational English teaching has been widely recognized and confirmed [3-6], how to grasp the timing of "focus on form" while not hindering normal meaningful communication activities is the direction that "focus on form" should focus on thinking and striving for. Project-oriented instruction is a task driven type of teaching that emphasizes the communicative, procedural, and situational aspects of learning. It focuses on improving students' pragmatic abilities during project initiation, implementation, and feedback on project results. It is a targeted educational approach. However, both "focus on form" and "project orientation" emphasize that the improvement of individual language habits and pragmatic abilities requires a certain degree of authentic teaching and communication context. [7] The existence of communication situations is an important foundation for individual learning and experience accumulation. In order to achieve high-quality development of vocational English in higher vocational colleges against the background of education digitization, it is necessary to fully leverage the empowering value of information technology, construct a smart classroom and smart context for teaching. Therefore, the key to the integration of "focus on form" and "project orientation" in the context of education digital transformation is to create digital teaching communication contexts, so as to efficiently execute projects and internalize forms.

2.2 Respecting Student Autonomy and Emphasizing the Value of Collaborative Communication

The digital transformation of education aims to achieve high-quality development of vocational English teaching, enhance students' comprehensive English literacy, and promote their comprehensive growth and development. To achieve innovation and transformation in vocational colleges, the key is to respect and recognize the subjectivity and initiative of students, rather than blindly adhering to traditional one-way teaching, with teacher led teaching and students passively and mechanically learning. Under the traditional teaching model, vocational English teachers often focus on teaching knowledge around the content of textbooks, attach importance to theoretical teaching, while neglecting the cultivation of practical application abilities, and

emphasize formal teaching while neglecting content learning. This fragmented teaching approach, which emphasizes teachers over students, theory over practice, and form over content, has become a key factor restricting the improvement of vocational English teaching quality in higher vocational colleges. The new teaching methods that combine "focus on form" and "project orientation" can effectively improve the drawbacks of traditional teaching models. The integration of "focus on form" and "project orientation" is based on the recognition and respect of the value of student subjectivity, emphasizing the value of collaborative communication, and advocating for efficient and high-quality communication between teachers and students. For example, the "interaction hypothesis" based on "focus on form" emphasizes that the important way of language acquisition is to go through a "meaning negotiation" process, which is to achieve differential interaction between different language levels, thereby achieving mutual learning and knowledge transfer; "Project orientation" based on constructivist theory also emphasizes the important value of feedback and interaction. Previous studies have unanimously agreed that incorporating "form-focused" and "project-oriented" teaching methods into collaborative communication classrooms centered on meaning learning can improve the efficiency of English language acquisition, enhance student language acquisition and expression, and bring them closer to the target language [8-9]. Therefore, as a new type of integrated teaching method, it compensates for the shortcomings of traditional fragmented teaching methods, helps promote the value orientation of vocational education, adheres to student-centered education, and does a good job in humanistic education.

2.3 Promoting the Internalization of Language Forms and Improving Project Execution Efficiency

"Focusing on form" not only emphasizes the attention to language form, but also integrates form learning into the collaborative communication background of meaning teaching to improve language acquisition efficiency. By integrating with project-oriented teaching, not only can the focus on language form be met in "form-focused" teaching, but also the mediating and regulatory functions of task driven and project driven can be utilized to fully mobilize students' subjectivity, promote their language acquisition and communication application abilities, and thus promote the

improvement of project execution efficiency. Following the trend of education digital transformation and guided by the concept of information-based teaching, vocational colleges are integrating "form-focused" and "project-oriented" methods, which is an innovative move to improve the quality of vocational English teaching in vocational colleges. By utilizing digital resources and means, it is possible to effectively improve students' language expression and practical abilities, as well as enhance their communication, cooperation, and problem-solving abilities during project execution, and to fully utilize the characteristics of cultivating applied talents in vocational colleges. [10] The current reform of vocational English teaching faces multiple challenges such as compressed class hours, time-consuming and inefficient teaching. In the context of digital transformation, the integration and application of "focus on form" and "project orientation" can promote the internalization of language forms, improve project execution efficiency, and provide new development directions and transformation ideas for vocational English teaching reform in vocational colleges.

3. INTEGRATION PRACTICE OF "FOCUSING ON FORM + PROJECT ORIENTATION" IN THE CONTEXT OF EDUCATION DIGITAL TRANSFORMATION

The effectiveness of "form-focused" and "project-oriented" teaching in vocational English teaching in vocational colleges has been widely recognized. But it is crucial to study how to create a digital learning and communication context while respecting student subjectivity, promoting the internalization of language forms, and improving project execution efficiency. Therefore, vocational English teaching subjects in higher vocational colleges should strengthen their thinking on technological integration and explore technological entry routes, promote the implementation of integration practices, and summarize teaching demonstration cases.

3.1 Strengthening Technological Integration Thinking and Exploring Technological Entry Routes

With the continuous reform and development of information-based teaching, educational means have changed from traditional indoctrination

education to interactive teaching, and the new educational model "Internet + education" has developed [11]. The digitization of education has broken the limitations of time and space on vocational English teaching in vocational colleges. The application of information technology and platforms in vocational English education and teaching enables students to receive knowledge education anytime and anywhere, promoting the comprehensiveness and full process of vocational English education; Meanwhile, information technology empowers vocational English education, making personalized teaching possible. Therefore, the educational subject should grasp the characteristics of English education in the context of education digitization, continuously summarize educational experience in practice, adjust teaching methods, research technological entry routes, and ensure that technology efficiently empowers English teaching. The integration of "focusing on form" and "project orientation" into vocational English teaching should effectively play their role in promoting vocational English teaching; The teaching team should strengthen their thinking on technology integration, share their teaching integration experiences of "focus on form", "project orientation", and "digital teaching", summarize the timing and methods of formal focus in the project execution process, and achieve a comprehensive and multi angle deep integration of the two.

3.2 Promoting the Implementation of the Integration Model, and Using Aviation Service English as a Demonstration

In the context of digital education, a thorough analysis of the ecological environment of vocational English teaching, summarizing the experience and characteristics of integrated teaching, and exploring technological entry routes are the top priorities for the smooth promotion of integrated teaching models. Taking aviation service English as a demonstration, this study aims to promote the implementation of integrated teaching models, explore the teaching practice of "form-focused" and "project-oriented" integrated teaching models against the background of educational digital transformation, and provide necessary feedback and experience for improving the demonstrative and promotional nature of integrated teaching models, in order to reverse promote the continuous optimization and innovation of teaching models.

3.2.1 Project Design Phase

Taking the scenario of airport security check as an example, with the background of educational informatization, this study is to explore the integrated teaching model of "focus on form" and "project orientation". Adhering to the course principle of task guidance and integration of practice and learning in aviation service vocational English, vocational college students should master the necessary English skills for security check services, and possess the necessary knowledge, literacy, and skills for aviation service English practitioners. Before class, clear task requirements are given to students through online teaching platforms, requiring them to receive project tasks in small groups around airport security guidance, document verification, pre-transmission guidance, personal inspection, personal belongings inspection, and luggage inspection services during actual airport security teaching. The group then discusses how to carry out the project, how to master the necessary aviation service English in the execution of the project, master the grammar rules, language habits, cross-cultural communication skills of aviation service English, and exercise aviation service English skills, work attitude, and career philosophy. Teachers should guide students to master professional terms related to aviation service English, collect language forms and language templates related to aviation service English, and develop specific English service oral language based on problems and special populations that arise during the aviation service process. Teachers can publish various English recordings, videos, PPTs and other materials on platforms such as the Wisdom Tree for aviation security services as specialized teaching aids, guiding students to independently learn relevant knowledge, and complete pre-class assignments and content tests. Teachers can also organize students to develop project reporting plans, etc.

3.2.2 Project Execution Phase

The first is scenario creation. Teachers can make full use of information technology, apply micro courses, MOOCs, and learning apps to create language communication scenarios and carry out situational introduction teaching; teachers can also fully rely on augmented reality (AR) technology, virtual reality (VR) technology and other means to create smart classrooms and smart classrooms, allowing students to understand the real aviation security service work scene and master the security

service process in a nearly realistic classroom. In the process of scenario creation, teachers should consciously guide students to enhance their attention to language forms through questioning, conducting relevant tests on sentence forms, brainstorming, group discussions, etc., infiltrate "form-focused" teaching, and promote students to internalize language forms through meaningful processing, laying a foundation for students to successfully complete projects.

The second is to break down tasks. Teachers distribute the overall teaching tasks to students in stages and levels according to the aviation security service process, and assign different class hours according to the difficulty of the tasks. Students are required to fully exert their subjectivity and complete the project learning objectives.

The third is project implementation. For oral task teaching, teachers can use ESP speech recognition technology to provide specialized teaching on students' pronunciation, English oral reading ability, listening level, etc. in aviation service English through apps such as Youdao Dictionary, Iflytek Verbal Memo, English Fluent Speaking, and Himalaya. They can also organize students to dub teaching videos related to aviation security service processes. [12] For the teaching of reading and writing in aviation security service English, teachers can use the Juku Correction Network App to achieve intelligent correction. Students are required to apply the vocabulary, language structures, and other knowledge they have learned about aviation security service English to write, which not only strengthens their language acquisition ability but also enhances their attention to language learning tasks. [13] Regarding job adaptability, teachers can use role-playing to invite English teachers to play passengers and students to play security service personnel, simulating real security service processes; At the same time, some civil aviation security personnel and civil aviation English teaching experts are invited to form judges to evaluate the English proficiency and job communication ability of students in security services. For the examination of commonly used professional terms and language forms in aviation service English, online academic level monitoring can be fully achieved through apps such as the Wisdom Tree. Effective project implementation does not necessarily mean fully unleashing student autonomy. "Form-focused" teaching emphasizes the creation of meaningful collaborative communication scenarios. Therefore, teachers should enhance communication and interaction

with students in the teaching process in a timely manner, provide real-time feedback and teaching guidance to help students better complete projects. For example, teachers should correct students' pronunciation, grammar errors, etc. in a timely manner during project execution to avoid language expression fossilization [14].

The last is the teaching assignments. In addition to classroom teaching practice, teachers can also distribute, collect, and evaluate the teaching tasks of aviation security service English through the teaching platform, and encourage students to freely determine the form of homework. They can also participate in role-playing, PPT presentations, video shooting, and other forms of learning groups.

3.2.3 Project Evaluation Phase

The evaluation criteria for the integration practice of "form-focused" and "project-oriented" teaching in the context of education digital transformation are not limited to the integration of teaching results, but rather a combination of process evaluation and outcome evaluation, which is a dynamic evaluation process. The addition of digital technology makes this dynamic evaluation process more precise and detailed. This phrase includes scientific evaluation of project execution based on the setting of task objectives and the completion of task objectives. The teaching philosophy, teaching strategies, and teaching methods of teachers will be evaluated based on their teaching performance and achievements. Project outcome acceptance for students will be conducted based on their classroom presentations and assignments. The use of information technology to evaluate student assignments can improve the efficiency and objectivity of evaluation. For example, teachers can use online learning platforms or educational software to design automated evaluation systems. Based on set scoring standards and algorithms, they can rate and provide feedback on student project outputs. At the same time, they can also record and track student learning performance, and provide timely feedback and personalized learning suggestions, to provide more references and decision support for improving teaching. In the evaluation process, attention should also be paid to adopting multiple evaluation methods, fully utilizing information methods such as automatic evaluation, student evaluation, teacher evaluation, expert online evaluation, teacher-student mutual evaluation, etc., to conduct differential analysis and objective evaluation of

each project, and numerically calculate the evaluation of each subject based on the proportion of less result based evaluation and more process based evaluation. Finally, in response to the issues of integrated teaching mentioned in the project evaluation report, all parties should make timely corrections and adjustments to lay the foundation for the next stage of integrated teaching. Teacher evaluation is crucial in this stage. As the direct participant in the project, teachers are responsible for the project progress, helping students clarify language knowledge and grammar rules, improving their language expression and communication skills during the project implementation process. They also need to summarize their own teaching shortcomings based on the quality of project works submitted by students, identify their learning deficiencies, and accumulate experience for the next stage of teaching. In summary, the integration practice of "form-focused" and "project-oriented" teaching, using digital means to drive "focus on form" and internalize language forms to promote project implementation. Therefore, the evaluation of its projects should focus on process evaluation, combined with teaching situations and project implementation for comprehensive evaluation, to examine whether students' knowledge, skills, and problem-solving abilities meet the goals of language acquisition and project-based teaching.

4. CONCLUSION

With the continuous development of information technology and artificial intelligence technology, the digital transformation of education is urgent. The teaching content, teaching methods, and teaching carriers of vocational education urgently need to be updated and transformed. In this context, the integration of "form-focused" and "project-oriented" instruction provides a reference for the reform and innovation of vocational English teaching models in the digital era. Against the background of digital transformation in education, "form-focused" and "project-oriented" instruction, based on clear training objectives, construct information-based communicative contexts, use task-driven methods, fully mobilize students' enthusiasm, and promote the internalization of language forms and the improvement of language acquisition abilities. However, the innovation and application of this model is a systematic project, and in order to achieve seamless teaching between language and job skills, teachers still need to continue to explore in specific teaching practices.

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