

Cultivation Path of Vocational College Students' International Competence through Language Education under International Development

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Abstract: With the acceleration of globalisation and cross-border industrial integration, more and more demand is being made for high-end, globally competitive technical talent. Vocational colleges are the primary incubators of applied talents, so they need to change the language education system in line with the needs of the outside world. This paper will explore how the cultivation path of international competitiveness for vocational college students can be achieved by means of language education under the background of international development. Based on the theoretical intersection of English for Specific Purposes and intercultural communicative competence, this study finds that there are systemic deficiencies in the current vocational language curriculum; specifically, too much emphasis is placed on general linguistic mechanics and little attention is paid to practical, workplace-oriented intercultural training. In response to the above problems, this paper puts forward an all-round teaching system based on content and language integrated learning, task-based instruction and the concept of global Englishes. According to the above results, the old grammar-translation model for teaching foreign language in schools needs to be replaced. Finally, this change of model can help vocational college students adapt better to the changes in the new economy and society and improve their own livelihood as well as the economy.

Keywords: Vocational Education, Language Education, International Competence, Intercultural Communication, English for Specific Purposes, Globalization.

1. Introduction

Artificial intelligence has changed the way we live, work and interact with the world at a basic level. Intelligent virtual assistants are used to manage people's daily schedules, self-driving cars navigate complex traffic situations, sophisticated medical diagnostic systems have been developed, financial analysis tools based on artificial intelligence are used, and so on; thus, AI technology is being applied to many places in our daily lives. This change in technology will alter many parts of society and give us new ways of life.

Deep learning and neural network technology have developed rapidly in recent years, and now artificial intelligence systems can achieve some remarkable results. GPT-4 is a very capable large language model that can generate good text, translate different languages and answer people's questions in an all-round way; now many people also use it to write. These models are able to understand context and reason about information to generate natural-sounding language that is difficult to distinguish from that produced by people. DALL-E and Midjourney are representative image generation models that have added new colours to digital art and design, producing excellent pictures based on human-created words. Reinforcement learning algorithms have been used to solve many difficult problems in game theory; chess, Go and StarCraft are all very famous examples of intelligent artificial intelligence.

Currently, artificial intelligence is changing the way personalised learning is carried out in schools. Intelligent Tutoring Systems can meet the different learning needs of students and adjust the content and path of study accordingly. The system can know which areas the students are lacking in, provide corresponding study materials, and adjust the pace of study according to their own ability. Adaptive Assessment

Tools can give students timely feedback to know what they have done incorrectly and learn from it. Customisation of education has the potential to distribute excellent learning resources more widely and help all students achieve their best in terms of learning, regardless of where they come from or what their family situation is; this is especially true for students in remote or economically disadvantaged areas without good educational resources.

The health care sector is changing a lot because of artificial intelligence. Artificial intelligence-aided diagnosis can be used by doctors to more accurately and conveniently determine diseases early on and thus save many lives. Algorithms for computer vision can be employed to examine medical images and detect minor changes in the pictures that are not easy to notice with the naked eye, such as small tumours in mammograms and early signs of diabetic retinopathy. Natural language processing tools can extract some precious information from a large number of medical papers and patients' medical records to keep pace with new developments in medical research and better manage illness. Artificial intelligence can be used in drug discovery to quickly screen a large number of potential drugs and accelerate the development of new drugs and therapies. The above applications show that artificial intelligence can help solve some of the serious problems of human health.

AI innovation is changing the businesses and finance companies too. According to the behaviour of users, a personalised list of products and services can be presented to them to increase satisfaction and purchase intention. Predictive Analytics can help a company predict the future changes in its market, adjust inventory planning, etc. Algorithmic trading systems in finance can conduct many more trades at high speeds and volumes than human traders and respond to changes in the market within milliseconds.

Risk assessment models have started to employ machine learning in order to evaluate credit risk and detect fraud from earlier on. With the help of natural language processing, customer service chatbots can answer all kinds of questions from the public around the clock to improve service and save costs.

With the rapid development of artificial intelligence technology, many problems in ethics and society have also arisen. The second is the problem of privacy protection; therefore, to run well, the AI system needs access to a lot of people's data. The other is algorithmic bias; that is, if the data used to train the AI system is biased, then it may make discrimination and worsen social inequality. The problem of employment in the process of automation is also urgent; AI and robot technologies have the power to change the workforce in all sectors and require new skills for the new jobs that will emerge. There are also worries about the power being concentrated in the hands of a few technology companies that possess advanced artificial intelligence technology, and about the potential for this AI to be used for bad reasons, such as spreading fake news or surveillance.

To address the above problems, scholars, policymakers and enterprises have been developing responsible rules for the development and application of artificial intelligence. Ethical rules that are fair, open, responsible and supervised by people are being introduced and applied. Regulators in different countries have been taking different roads; some are concentrating on high-risk applications of artificial intelligence and others are building an all-encompassing regulatory system. The Artificial Intelligence Act in the European Union will set rules for the development, application and use of artificial intelligence within the EU and give special weight to high-risk applications that could affect people's basic rights and freedoms. At the same time, under the direction of the Partnership on AI, enterprises, non-governmental organisations and universities have been cooperating to tackle social and ethical problems posed by artificial intelligence and to build a good AI system.

Looking ahead, as technology keeps developing and various problems are addressed through careful innovation and policy, artificial intelligence will be a powerful force for promoting the development of human society. In the future, there will be more advanced multimodal AI systems that can integrate information from all directions, such as text, images, audio, sensors, etc.; low-power AI algorithms that do not require a large amount of power for computation; and more explainable AI that can show clearly how it reached a certain result. With the addition of new technologies, such as quantum computing, biotechnology and robots, artificial intelligence will also be employed to tackle some of the difficult problems of the environment, health care, etc.

Through international cooperation, ethical standards and the well-being of the people will be promoted to use the power of artificial intelligence for the good of all people in building a better, richer society. Many different parties will need to continue talking and cooperating together, such as researchers, policymakers, industry leaders, teachers and students, the public, etc. With the ongoing development of artificial intelligence, we need to be aware of the potential risks it poses and at the same time seize the opportunities for change that can help solve some of the severe problems facing people today and in the future.

Artificial intelligence is one of the notable new technologies of our time and has the power to change many

things in society. Although there are some problems that need to be solved, with good planning and reasonable regulations, we will do our best to ensure that artificial intelligence technology helps all people make life better responsibly. The future of AI will not be preordained; it will be built with our choices today. With both optimism and caution, we can advance this technology to help better live and solve important problems around the world. In recent years, the speed of economic globalization, technological convergence and cross-border industrial integration has increased unprecedentedly. With the expansion of multinational corporations and the construction of long-distance supply chains, many parts of the world's labour force are aging rapidly. Historically, most of the people involved in foreign relations were diplomats, high-level employees of foreign companies and scholars. Now, the requirement for cross-border cooperation has reached all parts of the economy. Frontline technicians, engineering specialists, nursing professionals and other service industry staff are now required to work closely with foreign clients and operate imported digital equipment, and they need to cooperate with various multicultural teams. Therefore, today's labour market needs new types of applied talents: technically proficient people who can operate machinery well and also have good international skills.

Vocational colleges are the first places for training this type of applied technical staff. Given the changes in the macroeconomy, more and more institutions have been moving towards internationalisation of their educational systems. At the bottom of all this internationalisation is language education. Language serves as the main channel for the exercise of international competitiveness; it is needed to read foreign technical documents, engage in negotiations for overseas enterprises, and create a good environment for cross-border cooperation in the workplace. Although vocational language education is very important, it has been unable to provide practical and industry-specific results that are required by the new world economy. Traditional teaching methods in vocational schools are often based on the generalised, test-oriented model of universities, which places too much emphasis on correct grammar and reading comprehension at the expense of practical workplace communication skills.

There is a substantial mismatch between the outputs of education and the needs of industry; as a result, vocational college graduates have difficulties in their career development, and all-weather industries require an abundant supply of high-quality technical talent. To address this problem, there will be a fundamental change in the system of vocational language education. It should no longer be a general academic exercise, but a specific, culturally rich and vocationally oriented training programme. Teachers need to change their ideas about how to teach, assess and integrate language with the main technical disciplines completely.

This paper will investigate the development path of international competitiveness for students at vocational colleges in the new era of language education. Based on the above introduction, Section 2 will lay the theoretical foundation and present the framework of special language instruction. Section 3 will introduce some problems with teaching and structure in the current vocational language courses. Section 4 puts forward new kinds of cultivation for practical skills, such as integrated curricula, task-based learning and cross-cultural exchange. Finally, Section 5

summarises the main content and offers some thoughts on the strategic direction of internationalised vocational training. The speed of digitalisation in the world's work has also made this education reform more urgent. With the development of cloud computing and decentralised remote-work platforms and advanced digital communication facilities, people no longer need to be in the same place to work. A technician in a domestic manufacturing base may need to participate in many remote diagnosis video conferences with engineering teams that are far away in other parts of the world. Digital connectivity needs to be able to communicate with the outside world spontaneously and accurately, as it did not need to in the past for vocational workers. Therefore, the inability to communicate effectively in a cross-cultural and cross-linguistic environment is no longer just a small professional inconvenience; it has become a serious structural impediment to the development of one's career and the efficiency of the enterprise. Given the above changes in the economy, it is necessary to reform the current model of vocational education. Education policymakers should know that international competitiveness is no longer only for top management; now, it has become a fundamental necessity for all employees to live and thrive in today's digital, open world of work.

2. Theoretical Foundations of International Competence and Specialized Language Education

To build a good cultivation path, we need to establish the theoretical basis of the criteria for international competitiveness in vocational education first. The field of international competence includes many things and goes beyond language proficiency. It is a combination of global consciousness, intercultural communication skills and the ability to use specific professional knowledge in an international setting. The foundation of intercultural communicative competence is that in cross-cultural communication, one should have the attitude of curiosity, openness, and a willingness to suspend disbelief about other cultures; at the same time, deep knowledge of culture and critical sociolinguistic awareness are required [2]. In the workplace, it is necessary for the technician to understand that the explicit request made by a colleague is not the whole story; cultural pragmatics governing feedback, hierarchy, urgency and so on in different societies must also be considered.

In addition, to assess this ability, one cannot only conduct standard vocabulary tests but should also observe people's behaviour in simulated international situations. In the identification and assessment of intercultural competence, scholars have put forward that both the inner result of a person's frame-of-reference shift and the outer result of effective and appropriate communication in intercultural situations should be taken into account [5]. Vocational students need to be aware of their own cultural prejudices and have the psychological flexibility to function well in the very diverse corporate culture.

In parallel with intercultural theory, there is the pedagogical framework of English for Specific Purposes (ESP), which is also necessary for vocational language education. ESP is a result of the idea that, in order to learn better, language needs to be close to one's own studies and work [1]. Unlike general English, which is broad and lacks direction in terms of language learning, ESP is an all-purpose style that focuses strictly on meeting the needs of different

disciplines and enables learners to acquire specific vocabulary, grammar, expression, etc., suitable for a particular community [3]. Whether it is English for engineering, nursing, international trade, etc., the ESP framework requires that the design of syllabi, selection of teaching materials and classroom methods be based on a rigorous analysis of authentic work tasks [6]. Therefore, in order to cultivate the international competitiveness of students in vocational colleges, it is necessary to integrate the practical language goals of ESP with deep socio-cultural awareness cultivated through intercultural communication. To understand the psychology of a special language system better, one should also know about the inner workings of that educational system. When vocational school students learn general English and the content of literary studies or other discussions is too abstract and far removed from their lives, they will show a strong negative attitude. This is because they do not believe it will help them in life, so the older students and vocational students need to know what they are studying for quickly. The ESP framework does not need to be indirectly evoked, so its own context is direct. When a nursing student learns the particular language rules for handing over patients in an overseas hospital, or an auto student learns the exact words needed to order special spare parts from a foreign supplier, they will feel a sense of purpose. The language will no longer be an abstract problem in school but rather a tool we can use in life. It is a kind of mentality that can help someone stay in a learning mood for a long time and learn Chinese continuously. The integration of intercultural competence theory will also ensure that the practical language usage is still centred on people, and thus, it will not become rigid and lacking in emotional depth.

3. Current Challenges in Vocational Language Education

Although ESP and intercultural communication theories have been clearly laid out, there are still serious systemic problems in the practical implementation of language teaching at many vocational colleges. The main problem is that the old teacher-centred teaching mode still exists to this day. Communicative language teaching principles have long held that the acquisition of language should be achieved through active, purposeful use and negotiation of meaning [7]. Many vocational classrooms still employ the grammar-translation method; thus, instructors lead the class and students must passively learn decontextualised vocabulary lists. This way is unable to cultivate the spontaneous, adaptive communication skills required in the real world of international business, so when facing native or fluent foreign speakers, students are unable to speak.

The other problem is that language teaching is separate from the main career education. Most of the institutions have a language department and a technical college, but they are separate. Therefore, language teachers often lack the particular industry knowledge required to create authentic and vocationally related teaching materials; at the same time, technical instructors do not have the pedagogical tools to improve students' language skills in practical workshops. The siloed way is not in line with the necessary conditions for effective learning of workplace language; as a result, students consider the general-purpose courses irrelevant to their future careers and thus lose interest in studying.

In recent years, vocational language education has also

been based on an old idea of the English language. Curricula are generally based on the idealized norms of native speakers, which are mostly British or American. However, in the reality of modern international trade, English mainly serves as a lingua franca; that is to say, it is a contact language used by people who do not share the same mother tongue or national culture [9]. There are now many accents and other changes in local language use around the world. By disregarding the paradigm of Global Englishes, vocational schools fail to equip students with the language skills needed for international supply chain communication and cannot teach them to use accommodation strategies, communicate flexibly, and adapt to various non-standard grammatical forms [10]. Too much emphasis on native-speakerism will reduce the scope of experience available to students from various parts of the world and lower their confidence. In addition, the current assessment forms for vocational language teaching do not promote the all-round development of international literacy. Most of the institutions' assessment of students' academic performance is based on the final standardized test results. These tests focus too much on isolated knowledge of grammar, reading comprehension of general texts and rote memorisation of individual words. This test mode will have a bad impact on classroom teaching, and teachers will be forced to modify their lessons in order to help the students pass the test, rather than preparing them for the chaos and unpredictability of actual work communication. Standardised tests cannot assess students' ability to read non-verbal cultural cues, negotiate a good outcome in a business environment at present, or adjust their language according to the different cultures of people who are not good at English. As a result, although students will have good examination results, they will lack practical foreign industrial skills for work abroad. Too many tests can be designed easily but do not align with the actual requirements of life, so many people are left behind in their learning and fail to meet the demands of employers.

4. Innovative Cultivation Paths for International Competence

To address the problems in the above system and cultivate truly competitive graduates, new teaching methods must be introduced at vocational colleges. The first and most important reform is to use Content and Language Integrated Learning (CLIL) widely. CLIL is a two-way type of education in which an extra language is used for the learning and teaching of content and language simultaneously [8]. CLIL can help the departments of vocational colleges work together. For example, the module on international logistics or mechatronic engineering is taught entirely or partially in the target language. Immersion helps students use language for learning and acquisition of new technical knowledge through other means; they will not be learning language as an isolated subject. Therefore, it is more familiar to the participants and can quickly learn some specialized terms.

Second, the vocational language curriculum should be reformed to move towards Task-Based Language Teaching (TBLT). TBLT does not organise the syllabus based on abstract grammatical structures but rather sets difficult, meaningful tasks that are close to the actual demands of work [4]. The language teacher can invite various professionals from all walks of life to conduct different kinds of simulations for the students, such as having the students write technical defect reports for foreign suppliers, organising cross-cultural

video conferences regarding shipping delays, and presenting product pitches to international groups of judges. In performing these tasks, students need to use all kinds of language flexibly, make inferences, and understand cross-cultural communication rules. The above is an experience to connect the theory learned in class with life at work.

Finally, the path of cultivation should explicitly include intercultural communication training in the language curriculum. It is not enough to teach the vocabulary of international trade; we should also teach students how to navigate the psychological and cultural differences in the world of global business. Teachers can have students learn about cases of cross-cultural communication errors or business failures caused by cultural differences and perform critical analysis. Through guided reflection and role-playing, students can learn about the basic cultural characteristics of various places, such as high-context and low-context communication, different concepts of time and hierarchy, and various ways of resolving conflicts. Through such circumstances, vocational students can develop strong cultural empathy and behavioural flexibility; it is one of the necessary conditions for all-round competitiveness in the current globalised world to become outstanding high-demand talents for the labour market in a small country.

5. Conclusion

In short, the internationalisation of the world economy has changed the needs of the new-generation technical workforce in fundamental ways. Vocational colleges are the main source of applied technical talent, so it is urgent to adjust their education plan and cultivate graduates with strong international competitiveness. This paper has shown that language education is not a side branch of the discipline but rather the very environment where cross-cultural professionalism is formed. However, to realise this potential, one needs to move away from the old style of general language teaching.

To gain real international competitiveness, we need to integrate special-purpose vocational education with strong language skills. By switching to Content and Language Integrated Learning and task-based instruction, teachers will provide students with more realistic, practical applications of the language in life. In light of the reality of Global Englishes, intercultural empathy training can be added to the curriculum voluntarily so that students are psychologically and practically ready to live and work in all kinds of corporate cultures.

Finally, the reform of vocational language education is a necessary change in direction. Give technical students some excellent foreign-language communication ability so they will be able to move up in their careers after graduation. More importantly, they can also support the overall economic development of the country and provide excellent high-quality talent for domestic industries to meet the demands of the world. The future of vocational excellence will be globalised, and modernised language education will remain one of its essential foundations.

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