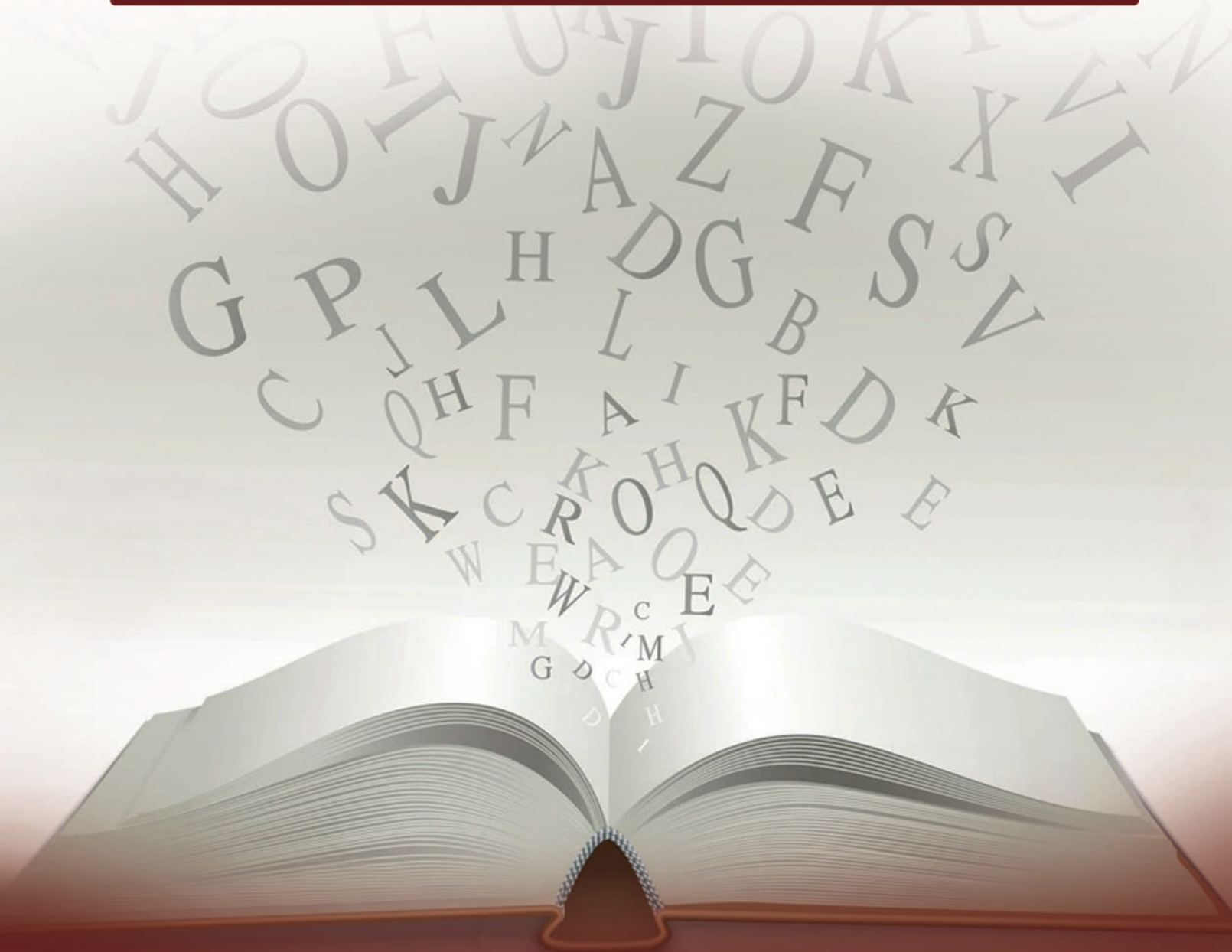




**BILINGUAL  
PUBLISHING CO.**  
Pioneer of Global Academics Since 1984

# Review of Educational Theory

Volume 4 · Issue 4 · October 2021 ISSN 2591-7625(Print) 2591-7633(Online)





**BILINGUAL  
PUBLISHING CO.**  
Pioneer of Global Academics Since 1984

**Editor-in-Chief**

**Evangelos Dedousis**

American University in Dubai

**Associate editor**

**Shuzhu Gao**

Capital Normal University

**Victoria Lynn Lowell**

Purdue University

**Hua Xu**

Xizang Minzu University

**Meina Mao**

Beijing Union University

**Editorial Board Members**

**Chong Li**

Graduate School of Education/Dalian University of Technology

**Belkis Rojas Hernández**

University of Gent

**Toh Tin Lam**

National Institute of Education / Nanyang Technological University

**Soshan Deen**

National Institute of Education / Nanyang Technological University

**Chew Fong Peng**

University of Malaya

**Bronwen Swinnerton**

University of Leeds

**Chin Hai Leng**

University of Malaya

**Martin O'Brien**

University of Wollongong

**Josep Gallifa**

Ramon Llull University

**Ya-Ling Chen**

National Pingtung University

**Peter Grainger**

University of Sunshine Coast

**Song Jia**

Shanghai Normal University

**Masuda Isaeva**

Seoul National University

**Chei-Chang Chiou**

National Changhua University of Education

**Nethal Jajo**

University of Sydney

**Rendani Sipho Netanda**

University of South Africa

**Moeketsi Letseka**

University of South Africa

**Joanna Kidman**

Victoria University of Wellington

**Epimae Niyibizi**

University of Rwanda

**Carolyn Tran**

International College of Management

**Marcella S. Prince Machado.**

Universidad Monteavila

**Ines Duzovic**

University of Zagreb

**Liang Hsuan Chen**

University of Toronto Scarborough

**Juanjo Mena**

University of Salamanca

**Khaled Alzafari**

Technical University of Berlin

**Cho Heetae**

National Institute of Education / Nanyang Technological University

**Joseph Schwarzwald**

Ashkelon Academy College/Bar Ilan University

**Joselia Neves**

Hamad bin Khalifa University

**Omer Faruk Islim**

Ahi Evran University

**Maria Poulou**

University of Patras

**Babak Daneshvar Rouyendegh**

Ankara Yildirim Beyazit University

**Mustafa Kale**

Gazi University

**Kendall Amy King**

University of Minnesota

**Pathmanathan Moodley**

Department of Education

**Mona Wong**

Faculty of Education

**Myrto Foteini Mavilidi**

Priority Research Centre for Physical Activity and Nutrition

**Tome Awshar Mapotse**

Science and Technology Education

**Yi-Chun Hong**

Division of Educational Leadership & Innovation

**Christo Nikolov Kaftandjiev**

Faculty of Journalism and Mass Communications

**Mauro Vaccarezza**

School of Pharmacy and Biomedical Sciences

**Robin Renee Dada**

University of Northern Iowa

**Terrence Kevin McCain**

Central Washington University

**Gloria Kirkland Holmes**

University of Northern Iowa

**Argnue Chitiyo**

Ball State University

**Quangui Yin**

Chiang Rai Rajabhat University

**Guopeng Wang**

The Open University of China

**Liping Ma**

Xi'an International Studies University

**Lei Wang**

Special Police of China

**Yanjie Sun**

Yunnan University Secondary School

**Xiaoling Li**

Beihai Kangyang Vocational College

# Review of Educational Theory

---

Volume 4 Issue 4 · October 2021 · ISSN 2591-7625 (Print) 2591-7633 (Online)

**Editor-in-Chief**

Evangelos Dedousis



**BILINGUAL  
PUBLISHING CO.**  
Pioneer of Global Academics Since 1984

# CONTENTS

1	<b>A Qualitative Study Examining Macao's Parents' Attitude towards Native and Non-native English-speaking Teachers for Private Online Synchronous One-on-one English Lessons</b> Cheng Tak Chan
6	<b>Applying Constructivism in Neurodiverse Classrooms</b> Seoyoon Eunie Choi    Sun Lee
12	<b>Building a Sustainable Learning Cycle: The Role of 'the Formative Use of Summative Tests' (FUST) in Promoting Students' Developments</b> Jingjing Fu
16	<b>Analysis on the Status Quo and Paths of Informatization Teaching Ability of Teachers in Rural Primary and Middle Schools in Hotan Area</b> Yongtang Chen
21	<b>Research on Nie Weigu's Art Education Thought and Creative Practice</b> Qiang Hao
24	<b>On the Instruction Design of the Course <i>Business English Writing</i> Based on Blended Learning Model</b> Qian Liu
29	<b>Understanding the Process of Second Language Acquisition</b> Yixu Ding
35	<b>Teachers are Deprofessionalized when Control of the Curriculum is Taken away from them: Discuss in Relation to High School Teachers in China</b> Dan Cheng
43	<b>Research Progress of College Students' Learning Burnout</b> Yongmei Hou
51	<b>The Immutability of Online Course in Art Education</b> Jie Fan
56	<b>A Preliminary Analysis of Text Coverage and Extensive Reading of Chinese ESL Learners-- Range Analysis of <i>The Little Prince</i> and <i>Pride and Prejudice</i></b> Jiayu Zhuo
61	<b>A Brief Discussion on the Causes and Countermeasures of College Students' Psychological Confusion and Mental Health Problems</b> Huiting Guo
65	<b>On the Role of Distinctive Features of British English Sounds in the Cartoon <i>Peppa Pig</i> for Chinese Learners to Conquer Mother Tongue's Negative Transfer</b> Gang Li
74	<b>The Effectiveness and Issues of Using Feedback in Second Language Writing</b> Yichen Wang

- 79      **Research on Implementation Modes of Ideological and Political Courses in Pediatric Nursing**  
Weiwei Zhou
- 83      **Turn-taking in EFL Classroom Discourse**  
Longfei Zhang
- 90      **Value-added Evaluation System for Vocational School Students Construction and Practice Research**  
Jian Zhang   Yurong Cheng   Bing Ran
- 96      **On the Monarch and Reflections on Machiavellism from the Oriental Perspective**  
Xiaou Jin
- 100     **Reform of Elastic-Plastic Mechanics and Strength Design of Pipelines Based on Ideological and Political Education**  
Yanfei Chen   You Zong   Mingchang He   Chunsha Wan
- 105     **Difficulties and Breakthrough Strategies in the Team Construction of Part-time Teachers in Application-oriented Universities**  
Shijie Wang
- 114     **Discussion of the Relationship between Fairness and Efficiency——Based on Rawls' “A Theory of Justice”**  
Wenlin Feng
- 119     **"Seed Science and Engineering" Exploration on the Construction of Curriculum Ideological and Political System**  
Huawei Cui   Bin Yang   Yixiong Zheng
- 123     **Benefit Evaluation of Real Estate Industry Based on SBM Model**  
Mengting Zhuang



# A Qualitative Study Examining Macao's Parents' Attitude towards Native and Non-native English-speaking Teachers for Private Online Synchronous One-on-one English Lessons

**Cheng Tak Chan**\*

Faculty of Humanities and Social Sciences of City University of Macau, Macau, China

## ARTICLE INFO

### *Article history*

Received: 14 September 2021

Revised: 25 September 2021

Accepted: 15 October 2021

Published Online: 30 October 2021

### *Keywords:*

Online English teachers

Native English-speaking teachers

Non-native English-speaking teacher

## ABSTRACT

In terms of English learning, whether native English-speaking teachers (NESTs) surpass non-native English-speaking teachers (NNESTs) or vice versa has been a heated topic. These two types of teachers have their own respective benefits and drawbacks with respect to English teaching. Most of the current related studies are on the traditional educational classroom setting in both secondary school and higher education. However, the study of the virtual learning platform as a method of teaching English is rare. This research displays valuable significance in identifying whether parents in Macao have a preference towards NESTs and NNESTs before they purchase the online synchronous one-on-one English lessons for their children. This qualitative study, after two participants were interviewed, concludes that they both prefer NESTs due to their authentic accent and pronunciation and believe it is more suitable in such a speaking-and-listening oriented online lesson. Price is not the prioritized factor to consider. They are generally satisfied with the teaching style of the online NESTs but it is also important to take note of the teaching approach conducted in the online lessons towards children, to ensure that it holds their interest appropriately.

## 1. Introduction

Online learning has been an increasingly popular choice in the field of education as it offers flexibility and other advantages for both teachers and students. English online learning has been popular in recent years. English online learning with synchronous one-on-one English lessons has its unique advantages: in cities where either NESTs or NNESTs are rare, students can make good use of the Internet to connect online English teachers from all over the world, widening their choice of teachers and competitive prices of lessons. In such a virtual setting,

when it comes to private online synchronous one-on-one English lessons, whether to choose between NESTs and NNESTs is an interesting issue. In regular English lessons in a physical secondary school classroom setting, students cannot choose their English teachers themselves as English teachers are assigned to different classes. Only students in higher education stage may be able to choose their English teachers when it comes to elective English lessons. However, due to the flexibility and principle of demand and supply, learners can choose their own English teachers between NESTs and NNESTs in terms of their own needs in private online synchronous one-on-one Eng-

*\*Corresponding Author:*

Cheng Tak Chan,

Faculty of Humanities and Social Sciences of City University of Macau, Macau, China;

Email: [kenton198958@yahoo.com.hk](mailto:kenton198958@yahoo.com.hk)



lish lessons when purchasing their lessons.

With regards to choosing a teacher for a young child who may not be qualified to choose for themselves, their parents then play an important role in helping them with choosing the online English teacher and pay the respective fees for purchasing the online lessons. To some extent whether parents know how to choose the teachers between NESTs and NNESTs could be very interesting and their understanding as well as selection between the two groups of teachers may affect the learning progress and outcomes of their kids. This paper will explore this for further discussion and make suggestions on this topic.

## 2. Literature Review

With the development of technology, online learning is getting more and more popular. It was also pointed out that technology helps with the transition towards completely-distant courses <sup>[1]</sup>. Some studies show the advantages of online learning. It was found in the study <sup>[2]</sup> that learning results of online learners were as good as or even better than traditional learners no matter what their background characters were and that the learners were substantially satisfied with online learning. Online learning can help to improve not only education and training but also the quality of learning and teaching <sup>[3]</sup>. In another study <sup>[4]</sup>, three main advantages to online learning were mentioned: 1) learners can choose their own studying place; 2) learners can organize their own personal learning agenda, rather than having the lesson on a particular day at a particular time; 3) learners can set their own individual pace of study without being interrupted by slow learners or vice-versa. It was mentioned that learner independence is a main input to success in online learning surroundings in which learners have their responsibility for their own learning <sup>[5]</sup>. It was found in another study that in formal remote education, there is great potential for wide access to higher education and enhancing the variety of pupils' population since remote technologies offer chances to learn without regional and time limitation <sup>[6]</sup>. It was stated that an online learning ought to have numerous features: a space for information; interaction based on education; diverse forms from words to 3D worlds; combines technologies and different teaching approaches; supports for remote learning; an online environment overlap with traditional surroundings <sup>[7]</sup>. However, there are also disadvantages for online learning. It is mentioned in another study that online learning has no teachers nearby in reality for face-to-face interaction and no peers who can help for immediate reminders about assignments <sup>[8]</sup>. This may lead to distraction in lessons.

## 3. Native and Non-native English-speaking Teachers (NESTs and NNESTs)

Images of NESTs have frequently been used on printed or electronic advertisements to attract students in the field of English learning. It was particularly noted that many websites of language centers in mainland China, Japan, Thailand, etc often describe their ideal teachers as white and energetic native speakers from an English-speaking country <sup>[9]</sup>. There has often been the stereotype that NESTs generally surpass NNESTs. With the increasing number of NNESTs in the world <sup>[10]</sup>, studies appear more interested in their differences in terms of teaching outcomes, and there has been much useful data gleaned from such studies <sup>[11]</sup>. It is a commonly held belief that NESTs help with the English improvement.

3 classifications of important teaching factors for language proficiency were suggested: general teaching approach, their use of English, and specific language-teaching approaches <sup>[12]</sup>. It was noted that students developed a positive attitude towards native speakers of the language, regardless of whether or not the teacher themselves was a native, so long as the tutor encouraged open-mindedness and was enthusiastic in the target language <sup>[13]</sup>.

It was mentioned that it was common for many to feel that teachers with non-native accents were less qualified and therefore less effective. This could possibly be a reason for employment prejudice in this sector, despite the reasoning not necessarily being true <sup>[14]</sup>.

According to a study <sup>[15]</sup>, detailed features advantages and disadvantages of NNESTs were well mentioned. NNESTs tend to be able to use students' mother tongue in teaching; their pedagogical skills are effective; they are knowledgeable in English language; they have positive personality traits. However, the drawbacks of NNESTs are they are too examination-oriented; they over-correct students' work; some of them have limited use of English ability.

## 4. Private Online Synchronous One-on-one English Lessons as for NESTs and NNESTs

On the Internet, there are now a variety of synchronous one-on-one English lessons from which to choose and purchase, as it is a newly growing and prosperous business. Prices of lessons conducted by different teachers in terms of their experiences and backgrounds are diverse. Based on a simple overview, English teachers whose online profiles are American or British are the most expensive, having English as their first language; comparatively, English teachers from the Philippines or other Asian regions such as China, Korea, Japan are comparatively cheaper, having



English as their second language. Regardless of whether their level of experience with English affects the price, nationality seems to be prioritized. The difference in cost may lead to assumption that NESTs are better in teaching English. This is similar to the conditions of the traditional physical in-person English tutorial. For example, a study<sup>[16]</sup> illustrated that NESTs are paid more than NNESTs, when two of the groups have similar qualifications in China. Besides payment, it also appears that NESTs are respected more highly by students and parents<sup>[17]</sup>.

## Research questions

(1) Before you purchased the online synchronous one-on-one English lessons for your children, what considerations for the selection between NESTs and NNESTs did you take into account?

(2) After you observed the lessons with your children's feedback, were there any part of the selected online teacher (NNESTs or NNESTs) which satisfied or dissatisfied you?

2 interviewees were selected and interviewed via a semi-structure interview. The first interviewee (Interviewee 1) is a mother aged 43. She helped purchase a large number of online synchronous one-on-one English lessons for her daughter. This mother has a secondary school degree in Macao then without furthering her higher education, having worked as a tour guide in the tourism industry and is now a housewife. She describes her English ability as "so-so" or even less than intermediate. The second interviewee (Interviewee 2) is a mother 1 year younger than the interviewee 1, having bought a series of online lessons for her son. For educational and working experiences, she did not attend higher education after she graduated from high school in Macao. She worked as casino manager and is also now a housewife. She describes her English level as around intermediate.

## 5. Analysis and Results

### Price

Interviewee 1 (excerpt): I didn't put fees into consideration when it came to choosing an online English teacher. I believe that NESTs are the better choice.

Interviewee 2 (excerpt): Although the fees for NESTs' lessons is higher, I still chose NESTs for my son as long as I could afford it.

From both of the interviewees, they were both willing to purchase the most appropriate lessons for their children as they saw fit. Hence, prices were not in their consideration for choosing English online teachers. It can be inferred that their responses imply the fees going along

with NESTs' online lesson seems reasonable, which is also leading to another unfair condition in the market. It was mentioned that in recent years a major challenge for employment for NNESTs has been the import of NESTs to high income Asian countries such as Japan, Hong Kong and Korea<sup>[18]</sup>. The thought is that NESTs are the better ideal models<sup>[19]</sup>. The sweep could gradually seep into the online English learning market. Hence, compared with NESTs, NNESTs may not have the ability to bargain as for receiving higher fees due to the stereotype that NESTs are better teachers.

### Factors to choose NESTs rather than NNESTs

Interviewee 1 (excerpt): I think NESTs have better pronunciation. Pronunciation is important. I want my kid to learn better pronunciation from them. Furthermore, NESTs can share the cultures of their countries with my kid.

Interviewee 2 (excerpt): A good and native pronunciation is what I value the most. NESTs are born and raised in their English-speaking countries. They have been exposed to the most authentic English language. I believe they are more able to provide my son with the appropriate speaking lessons with authentic pronunciation. No matter how hard NNESTs learn pronunciation, their accents are still different from those of NESTs. Where one is born and grows up matters with respect to accent and pronunciation.

From interviewee 1's response, it is also noticed that culture learning with English learning is important. The inferior understanding of NNESTs about foreign cultures were mentioned in certain studies<sup>[20]</sup>. Oppositely, NESTs were familiar with their own culture of their English-speaking countries<sup>[21]</sup>. In Chinese lessons in Macao, not only do students need to study Chinese language but also Chinese literature. The combination of both literature and linguistics aspects of a certain language helps the growth of learners' targeted language. That can also be applied in English lessons, either traditional or virtual classroom.

Similarly, pronunciation is what the interviewees focus mostly. They expect NESTs to have native English pronunciation. Due to numerous previous studies, pronunciation is the primary advantage for NESTs<sup>[22]</sup>. The two interviewees left their education a long time ago and they may not be able to best judge if a certain NNESTs can produce pronunciation with a pure authentic English accent. The most direct way to ensure a teacher who has an authentic English accent is to choose those who are American or British.

## Level of Satisfaction

Interviewee 1 (excerpt): I think the online NEST I chose for my daughter is good as she helps my daughter with improving her English, especially listening. I found the teaching approach of NESTs is very interactive, which made my kid be in love of English. Based on what I know, NESTs tend to use more lively or interactive methods in their lessons, while NNESTs often use traditional models with less interaction.

Interviewee 2 (excerpt): However, coins have two sides. I did try to find two NESTs to teach my son. The first one's teaching approach is very active and my son likes her a lot. I feel my son learned a lot from her. However, the second NEST is very quiet. He doesn't make my son feel as interested in learning English. These examples let me know that not all of the NESTs excel in teaching even if they both are NESTs. The approach they used is still also important. I am generally okay with the performance of NESTs.

In addition to pronunciation, it is crucial to also examine if the approach used in the online lessons for children is suitable. For example, storytelling in a second language classroom is known to be an understandable method of learning as it creates a pleasant learning environment. Stories ensure language is assimilated by children easily while holding their attention, and they are then able to apply language elements from the stories themselves<sup>[23]</sup>. Children's attention of certain topics may not be as high as others so it is encouraged to use more interactive and interesting ways to attract their attention and further engage them.

It was found that NNESTs do not have innovative teaching styles<sup>[24]</sup> while from another study<sup>[25]</sup>, it is found that NNESTs tend to be less interactive. From these two examples, it can imply that to some extent NESTs excel in using interactive approaches rather than NNESTs do in English teaching. As we may know, kids are easily distracted generally. Therefore, more in-depth interactive methods should be encouraged especially in a virtual lesson.

## 6. Conclusions

The two interviewees had no experience of, and did not even consider, having NNESTs teach their children English. The assumption that NESTs are better English teachers in online lessons is very present in their minds. From their comments, price is not a priority they put into account; instead, they care most for the accent and pronunciation NESTs have, and NESTs are guaranteed to have authentic accent. Regardless of the interviewees'

educational backgrounds, they still believe that choosing NESTs is a direct and ideal way of having their children follow for learning authentic pronunciation. As for the teaching style of NESTs, both interviewees find them to be generally okay. However, it is worthwhile to also pay attention to the teaching approach in online lessons. An interactive and interesting approach is still considered useful and applicable in online lessons especially for children, who may require further engagement in class. The limitation for this research is that only having two parents as interviewees may not be reliable to generalize all of the ideas and conditions. If there is further research, it is encouraged to have large-scale questionnaire responses and in-depth interviews. It would also be reasonable to choose parents of different educational and occupational backgrounds as well as financial conditions for interview for the potential difference existed.

## References

- [1] Oblinger, D.G. and Hawkins, B.L. (2005) The Myth about E-Learning. *Educause Review*.
- [2] Navarro, P., & Shoemaker, J. (2000). Performance and perceptions of distance learners in cyberspace. *American Journal of Distance Education*, 14(2), 15-35.
- [3] Hsboula, H. (2009). E-learning adoption: The role of relative advantages, trialability and academic specialization. *Campus-Wide Information Systems*. 26(1):54-70 <https://doi.org/10.1108/10650740910921564>.
- [4] Evans, C. and Fan, J.P., (2002) Lifelong Learning through the Virtual University. *Campus-Wide Information Systems*, 19, 127-134. <http://dx.doi.org/10.1108/10650740210438810>.
- [5] Zimmerman, B. J. (2002). Becoming a Self-Regulated Learner: An Overview. *Theory into Practice*, 41, 64-70. [http://dx.doi.org/10.1207/s15430421tip4102\\_2](http://dx.doi.org/10.1207/s15430421tip4102_2).
- [6] Traxler, J. (2018). Distance Learning—Predictions and Possibilities. *Education Sciences*, 8, 35. <http://www.Mdpi.com/journal/education>. <https://doi.org/10.3390/educsci8010035>.
- [7] Dillenbourg, P. (2000). Workshop on Virtual Learning Environments. EUN Conference 2000: Learning in the new Millennium: Building new education strategies for schools. Retrieved 5 November 2012 from <http://tecfa.unige.ch/tecfa/publicat/dil-papers-2/Dil.7.5.18.pdf>.
- [8] Bijesh, N. A. (2017). Advantages and disadvantages of distance learning. Retrieved from <http://www.indiaeducation.net/online-education/articles/advantag>

- es-and-disadvantages-of-distancelearning.html.
- [9] Ruecker, T., & Ives, L. (2015). White native English speakers needed: The rhetorical construction of privilege in online teacher recruitment spaces. *TESOL Quarterly*, 49(4), 733- 756. <https://doi.org/10.1002/tesq.195>.
- [10] Crystal, D. (1995). *The Cambridge encyclopedia of the English language*. Cambridge: Cambridge University Press, 1995.
- [11] Moussu, L. & Llurda E. (2008). Non-native English-speaking English language teachers: History and research. *Language Teaching*. 41.
- [12] Reves, T. & P. Medgyes (1994). The non-native English speaking EFL/ESL teacher's self image: An international survey. *System* 22.3, 353-357.
- [13] Dornyei, Z. (2001). *Motivational strategies in the classroom*. Cambridge: UK. Cambridge University Press.
- [14] Lippi-Green, R. (1997): *English With an Accent: Language, Ideology, and Discrimination in the United States*. London; New York: Routledge, 1997.
- [15] Chang, F.R. (2016). Taiwanese University Students' Attitudes' to Non-native Speakers English Teachers, *TEFLIN Journal*, Volume 27, Number 1.
- [16] Jeon, M., & Lee, J. (2006). Hiring native-speaking English teachers in East Asian countries.
- [17] Wu, K. H., & Ke, C. (2009). Haunting Native Speakerism? Students' Perceptions toward Native Speaking English Teachers in Taiwan. *English Language Teaching*, 2(3), 44-52.
- [18] Wahyudi, R. (2012), Native Speaker versus Non-Native Speaker Teachers in TESOL.
- [19] Walkinshaw, I., & Oanh, D. H. (2014). Native and non-native English language teachers: Student perceptions in Vietnam and Japan. *Sage Open*, 4(2), 2158244014534451.
- [20] Mahboob, A., Uhrig, K., Newman, K. L., & Hartford, B. S. (2004). Children of a Lesser English: Status of Nonnative English Speakers as College-Level English as a Second Language Teachers in the United States. In L. D. Kamhi-Stein (Ed.), *Learning and Teaching from Experience: Perspectives on Nonnative English-Speaking Professionals* (pp. 100-120). Ann Arbor: The University of Michigan Press.
- [21] Lasagabaster, D. & Sierra, J. M. (2005). What do students think about the pros and cons of having a native speaker teacher? In E. Llurda (Ed.), *Non-native English teachers: Perceptions, challenges and contributions to the profession* (pp. 217-241). New York: Springer.
- [22] Qian, Y., & Jingxia, L. (2016). Chinese College Students' Views on Native English and Non-Native English in EFL Classrooms. *Advances in Language and Literary Studies*, 7(4), 84-94.
- [23] Krashen, S.D. (1981) *Second Language Acquisition and Second Language Learning*. Pergamon Press Inc., Oxford.
- [24] Jieyin, L., & Gajaseni, C. (2018). A Study of Students' Preferences towards Native and Non-Native English Teachers at Guangxi University of Finance and Economics, China. *LEARN Journal: Language Education and Acquisition Research Network*, 11(2), 134-147.
- [25] Wang, L. & Fang, F. (2020). Native-speakerism policy in English language teaching revisited: Chinese university teachers' and students' attitudes towards native and non-native English-speaking teachers, *Cogent Education*, 7:1, 1778374.

# Applying Constructivism in Neurodiverse Classrooms

**Seoyoon Eunie Choi Sun Lee\***

CRG-NJ, Cresskill, New Jersey, 07627, USA

## ARTICLE INFO

### *Article history*

Received: 14 September 2021

Revised: 25 September 2021

Accepted: 15 October 2021

Published Online: 30 October 2021

### *Keywords:*

Learning

Constructivism

Cognitive load theory

Zone of proximal development

Assistive technology

## ABSTRACT

Cognitive development theories differ on how young students can meaningfully process new information and retain that information for future knowledge-building through scaffolding within their zone of proximal development. More traditional theories like the cognitive load theory adhere to the rote memorization approach by categorizing students as passive learners and the teachers as initiators who provide information in a structured, often rigid format, to be stored and retrieved for future application using their working memory. In contrast, the more progressive theories, like constructivism, are premised on the belief that students should proactively initiate their own learning while teachers act more as facilitators. The current trend in government policy under ESSA is to embrace the latter approach in the classroom, which is also more inclusive of all types of students, especially neurodiverse students. Moreover, teachers can utilize the wider range of assistive technology tools to accommodate and support their students' unique learning styles.

## 1. Introduction

When children struggle academically in the classroom, the traditional recourse may have been to address their needs for support by classifying them as limited in intelligence and capability before placing them in special education classrooms under the presumption that they would hold back the rest of the class in a regular classroom setting <sup>[1]</sup>. However, the more progressive pedagogical approach is to integrate these students, recognizing them as equally valuable and beneficial to a dynamic classroom environment. They may have different methods of learning, as well as their own challenges, but their unique set of circumstances can be overcome with the right accommodations and support.

Constructivism is a theory that allows these types of students flexibility in their mode of learning rather than forcing them to abide by a rigid set of expectations which

may not be effective or in alignment with their learning style <sup>[2]</sup>. This theory, along with the more traditional teaching theory known as cognitive load theory, will be explained and discussed in detail in this paper. In addition, the paper will delineate how educators can implement effective teaching strategies in their classrooms, especially with the increasing availability of more advanced assistive technology to support students with varying academic and intellectual needs.

## 2. Constructivism, Cognitive Load Theory, and the Zone of Proximal Development

To implement a more effective instructional design in alignment with the cognitive development of young students, one must consider the leading theories on how they process new information. Cognitive Load Theory asserts that cognitive functions, such as short-term and long-

*\*Corresponding Author:*

*Sun Lee,*

*CRG-NJ, Cresskill, New Jersey, 07627, USA;*

*Email: [Sun\\_Lee@ChoiceRG.com](mailto:Sun_Lee@ChoiceRG.com)*



term memory, are essential considerations of instructional design <sup>[2]</sup>. The theory is, in part, based on evolutionary educational psychology which posits that processing biologically secondary knowledge mimics the architecture of biological evolution <sup>[3]</sup>. Specifically, while biological primary knowledge such as language skills are naturally acquired, biological secondary knowledge is acquired through problem-solving, reading, listening, and researching in a more structured educational setting. Writing, science, and math also fall within this latter category <sup>[2]</sup>.

Before secondary knowledge can become part of one's general knowledge base, the information must first be organized in the working memory, also known as 'short-term' memory, which is limited in capacity and duration. Once the information is acquired and interpreted, it can be stored in the long-term memory, which has much greater capacity <sup>[4]</sup>. For example, in the process of reading, knowledge stored in the long-term memory region can be retrieved as working memory in order to generate an action. In other words, the knowledge of how to read, which is stored in the long-term memory of a literate individual, may be brought back as working memory to function together with the new information to facilitate learning <sup>[4]</sup>. Moreover, although working memory is limited when working with new information, it is not when working with information previously learned and processed before being stored in one's long-term memory <sup>[4]</sup>.

Based on cognitive load theory, building a breadth of information stored in long-term memory can be efficiently achieved through a commonly practiced teaching method called the "worked example effect" <sup>[2]</sup>. This approach encourages showing a learner an example of the completed work before asking them to perform the task. Studies have proven this method to be effective in improving student performance <sup>[2]</sup>. The rationale for this method is that a "worked example" reduces the workload of the working memory, because it eliminates possible alternative actions. With more "worked examples" stored in the long-term memory, students can learn to develop solutions based on previous "worked examples" and think deeper by themselves. Essentially, to formulate better solutions while processing new information, general knowledge acquired from previous learning, including worked examples, must be stored in the long-term memory <sup>[2]</sup>.

Over the years, cognitive load-based approaches have been criticized as ineffective in teaching students to self-monitor or self-regulate <sup>[5]</sup>. Specifically, some cognitive development theorists believe that self-regulation should be cultivated in a learning environment in which students have more autonomy and are encouraged to be proactive in acquiring knowledge. They argue that

self-generated thoughts, feelings, and behaviors can be channeled to attain desired goals, thereby increasing self-satisfaction and sustained motivation <sup>[5]</sup>.

Applying this cognitive development theory to the classroom setting, constructivists advocate that teachers should foster a deep and meaningful learning environment in which the students develop their critical thinking skills <sup>[6]</sup>. Constructivist approaches, which recognize the interplay of individuals with their environments, were first applied in classrooms as early as the 1960s <sup>[7]</sup>. Jean Piaget, a Swiss psychologist, was one of the first people to develop the idea of constructivism <sup>[7]</sup>. Piaget's theories, especially those related to the early years of development, are still used today, such as the idea that as neurotypical children (children without clear developmental disorders or drawbacks) grow, they reach milestones at certain ages <sup>[7]</sup>. These approaches are used in teaching institutions across the world in a wide range of subjects such as math, science, and humanities.

### 3. Methods

The constructivist method usually calls for more group work, as students are encouraged to critique each others' ideas and answers while working together to solve problems in experiments and projects <sup>[6]</sup>. Allowing students to work at their own pace and learn with their own understanding of things creates a more flexible learning curriculum than would be likely if all subjects were taught through a single method from one teacher. Research shows that constructivism promotes creativity and engagement in students, although many different contextual factors and individual personality traits, as well as learning abilities, must also be considered <sup>[8]</sup>.

Lev Vygotsky, a psychologist from the same era as Jean Piaget, posited a similar theory about the cognitive development of children. Vygotsky, however, placed greater emphasis on the importance of societal and cultural impacts. He argued that social interaction is the most essential component of learning and development and that biological development and environmental factors jointly affect learning outcomes. His social theory consists of three principles: (1) social interaction plays a key role in the acquisition of knowledge, (2) some aspects of cognitive development are limited to a specific developmental periods, and (3) that the process rather than the product of learning must be assessed for humans to fully learn and understand <sup>[7,9]</sup>.

Vygotsky furthered Piaget's theory by classifying all tasks into three categories: (1) those we can do by ourselves, (2) those we can do with guidance, and (3) those we cannot do at all <sup>[9]</sup>. The first and third categories are

not particularly helpful to learning, as doing something one is already good at does not help them develop, and attempting something that is too advanced or unfamiliar for a particular age will be too frustrating to facilitate learning<sup>[9]</sup>. For example, assigning basic addition tasks to an average high schooler would be pointless, just as a kindergartener should not be attempting calculus without having first mastered basic addition. Instead, the focus of learning should fall within the second category wherein students attempt things that they can do with some guidance.

In developmental psychology, the second category, where most learning occurs, is called the zone of proximal development<sup>[4,9]</sup>. This zone can be applied in a wide range of subjects, from mathematical calculations to daily problem solving, to aid a child's cognitive development. The zone itself is essentially the gap between a learner's task completion level and their potential for task completion under guidance. Vygotsky contention was that the potential for future development, and not a simple evaluation of task completion, is crucial for assessing and promoting cognitive development<sup>[7,9]</sup>.

Similar to Vygotsky's zone of proximal development, scaffolding refers to interactive instructional relationships between teachers and their students that enables students to solve problems beyond their unassisted efforts<sup>[4,10]</sup>. Scaffolding involves providing assistance to students only upon reaching the upper threshold of their respective zones of proximal development. Through scaffolding, students learn new skills or concepts, which culminates in completing a task successfully, ultimately reaching autonomy via a gradual transfer of knowledge or learning strategies from the teacher to the student<sup>[10]</sup>.

## 4. Results

### 4.1 Constructivism in the Neurodiverse Classroom

Over the years, constructivism has moved from research into classroom application. Traditionally, too much emphasis was placed on curriculum and not on student thinking, which discouraged viewing students as original thinkers with opinions about the emerging world around them<sup>[11]</sup>. While some may argue that explicit instructions better serve neurodivergent students, others have promoted constructivist strategies that encourage students to develop ideas by collaborating with their teachers and peers<sup>[6]</sup>. Constructivism has also helped bridge the learning gap in inclusive classrooms by assisting a student with special needs with active participation and learning tailored to the student's own learning characteristics, the task at hand, and contents that are already familiar to the student<sup>[12]</sup>.

Since constructivism is based on the notion that people

acquire knowledge by constructing their own understanding of the world around them, it prioritizes student-dominated learning and interaction<sup>[4]</sup>. However, teachers in the classroom still play a critical role as facilitators rather than information conduits. As facilitators, teachers must show students scaffolding techniques through which they can connect their past experiences to new information, thereby enhancing their knowledge<sup>[6]</sup>. Moreover, with careful design appropriate technology tools can provide additional assistance in supporting the students' learning especially in neurodiverse classroom settings<sup>[6]</sup>.

Constructivist classrooms emphasize real-life problem-solving, problem-based learning (PBL), independent investigation, the pursuit of personal interests, simulation, discussion-collaborative learning, think-pair-share, and the utilization of higher-order thinking skills<sup>[14]</sup>. Constructivism is based on the idea that everyone, whether neurotypical or with special needs, learns differently. Therefore, student-centric learning can allow all students to build their own ideas and learn in their own ways. Others believe that constructivism can help students with neurological conditions such as ADHD, bipolar disorder, or fetal alcohol spectrum disorder because it allows them to pace the lessons themselves and still learn alongside their peers<sup>[12]</sup>.

In this spirit, the Every Student Succeeds Act (ESSA) replaced No Child Left Behind as the national educational policy in 2015. ESSA states that the Individualized Educational Plan (IEP) team determines when a student with a significant cognitive disability should be evaluated under an alternative assessment standard so long as the determination is consistent with guidelines established by the state (Section 1111 (b)(2)(D)(ii)(I)). ESSA applies more constructivist approaches to both assessment and instructional design, even permitting the use of assistive technology when appropriate, especially for students experiencing learning disabilities or neurodivergence. Despite these potential benefits, some argue against constructivist approaches in teaching because tailoring lessons to accommodate each student may be time-consuming and inefficient<sup>[13]</sup>.

### 4.2 Working Memory of Neurodivergent Students

Working memory is a basic mental skill which allows the brain to hold information in the short term, thereby facilitating learning and completion of tasks. Moreover, new information once acquired can be stored in long term memory but potentially retrieved as working memory when the need arises again in the future<sup>[2,3]</sup>. Children with learning difficulties such as ADHD or those with other executive function disorders who are neurodivergent

may struggle to utilize this brain function and to perform everyday tasks<sup>[17]</sup>.

One challenge that neurodiversity presents when being applied to autism is the fact that autism encompasses a wide range of learning disabilities that presents a multitude of different circumstances and challenges<sup>[18]</sup>. Further exploration is needed regarding how to address some of these learning challenges such as assisting in developing one's working memory in the classroom and beyond.

The ability to use working memory is especially important for young children in school because working memory is needed when performing tasks such as mental math, including helping children to visualize numbers and to apply mathematical functions in their heads<sup>[17]</sup>. Children working memory deficits have difficulty picturing numbers and holding them in their working memory order mentally manipulate them and produce correct answers. Working memory deficits may also hinder children's performance of physical tasks, as they may not remember in which order the tasks must be completed, or they may not be able to make sense of the instructions they are provided<sup>[19]</sup>.

Children who appear to have working memory deficits may instead have attentional deficits<sup>[20]</sup>. In other words, rather than having difficulty holding the information in mind, the child may have initial difficulty paying attention to the instructions provided. It is worth noting that in the past few decades, studies indicate that many disorders of the brain or mind are not without benefits. For example, those diagnosed with autism spectrum disorder (ASD) appear to have strengths working with systems and identifying tiny details in complex patterns just as those with dyslexia seem to perceive peripheral or diffused visual information more quickly than neurotypical individuals<sup>[15]</sup>. Given such varied presentations and capacities, a full evaluation of a child's cognitive abilities may help uncover the factors involved in their academic difficulties<sup>[21]</sup>. This improved understanding may help assist educators in determining what, if any, assistive technologies may be effective in addressing the student's individual learning style.

### 4.3 Importance of Assistive Technology in New Education Policy

Assistive technology refers to any technological device, item, piece of equipment, or product system that improves the functional capabilities of individuals with disabilities in bolstering their cognitive skills as well as in maximizing their attention span and time management<sup>[22]</sup>. Assistive technology may be viewed as more appropriate for low-functioning students, especially when main-

streaming them for social reasons, but high-functioning, learning-disabled students may benefit from such academic support as well<sup>[22]</sup>.

To manage tasks and succeed in goal-directed activities, students need to have a wide range of executive skills, which consist of metacognition, appropriate behavior and actions, mental shifting, and sustained attention. When these executive functions are weak or lacking, the student can be hindered academically<sup>[23]</sup>. In order to reduce such obstacles, various assistive technologies may be employed to help meet each student's individualized needs. For example, for students who struggle with self-control, Book Creator, a software application, helps students with self-management in social situations<sup>[24]</sup>. In addition, the Self-Management Checklist Maker is a website that teachers can use to monitor their students, and which, in turn, can aid the student<sup>[24]</sup>.

Low-tech prioritizing strategies, reflective journaling, and capturing thinking can help students develop their metacognition skills. Capturing thinking can be done through the utilization of technologies such as the SmartPen or AudioNote app, both of which record students as they talk themselves through an activity or assignment<sup>[25]</sup>.

Cognitive flexibility, shifting, and organization manifest in the student's ability to follow a schedule and make connections across situations. These skills can be aided with technology such as Choiceworks, First-Then Visual Schedule, Time-Timer, and Wunderlist to help students manage time and make sure not to get lost throughout the day. Similar to scheduling, goal-directed persistence--the students' ability to maintain their focus to accomplish a goal--can be extremely difficult for some, especially if they struggle to follow a schedule<sup>[24]</sup>. Goal-directed persistence can be aided with simple things such as calendars, checklists, and data chart organizers<sup>[24]</sup>.

One effective strategy teachers use to jog students' working memory is the KWL (Know Want Learn) activity before introducing new but related information<sup>[25]</sup>. Another form of assistive technology can be software applications like graphic organizers or other visual aids like slides and flashcards used to further support learning. Moreover, websites like Khan Academy provide user-friendly tutorials online about multiple subjects.

While these learning tools assist students in the classroom, neurodiverse students also need social and emotional support. Despite the wide range of assistive technology available today, one of the most important factors in the successful mainstreaming of neurodiverse students is dependent on the positive attitude projected by the classroom teacher<sup>[28]</sup>. Hence, the teacher still plays a significant role by reinforcing the belief that the neurodiverse



students are actually adding value to the classroom.

## 5. Conclusions

In recent years, appreciation for active learning through constructivism, wherein students acquire and process new information, has drawn attention to the importance of including and embracing neurodiverse students in the classroom. In the past, learning processes such as cognitive load theory expected students to simply absorb information instead of taking a more proactive role. Constructivism's broader acceptance has encouraged children to take greater initiative in the learning process, while teachers serve as facilitators rather than rote pedagogues. This approach can be more beneficial to neurodiverse students because students can tailor their learning experience to what fits them, rather than attempting to learn through a more rigidly structured methods. This cultural shift in learning may fundamentally change the structure of classrooms in the future.

More traditional, rigid learning models required students to absorb information as passive learners. Those who could not process the information readily were often placed in special education classes, in part because classroom teachers could not accommodate the unique learning styles of every student in their class. However, with the growing acceptance of constructivism, more educators are implementing student-led learning while utilizing advances in assistive technology. While educators recognize the importance of mainstreaming some neurodiverse students, teachers continue to play a critical role in supporting students socially and academically regardless of neurocognitive status. Teachers are indisputably vital to the learning process, even in constructivist classrooms.

## Conflict of Interest

There is conflict of interest.

## References

- [1] Lipsky, D. K., & Gartner, A. (1996). Inclusion, school restructuring, and the remaking of American society. *Harvard Educational Review*, 66(4), 762-797.
- [2] Sweller, J., van Merriënboer, J.J.G. & Paas, F. (2019). Cognitive architecture and instructional design: 20 Years Later. *Educ Psychol Rev* 31, 261-292. <https://doi.org/10.1007/s10648-019-09465-5>.
- [3] Geary, D. (2002). Principles of evolutionary educational psychology. *Learning and Individual Differences*. 12. 317-345.
- [4] Schunk, D. H. (2012). *Learning theories an educational perspective* sixth edition. Pearson.
- [5] Zimmerman, B. (2002) *Becoming a Self-Regulated Learner: An Overview*, *Theory Into Practice*, 41:2, 64-70. DOI: 10.1207/s15430421tip4102\_2.
- [6] Upu, H. (2014). Constructivism versus cognitive load theory: In search for an effective mathematics teaching [submitted]. *Proceeding of International Conference On Research, Implementation And Education Of Mathematics And Sciences 2014*. <http://eprints.uny.ac.id/id/eprint/11559>.
- [7] Lutz, S., & Huitt, W. (2004). Connecting cognitive development and constructivism: Implications from theory for instruction and assessment. *Constructivism in the Human Sciences*, 9(1), 67-90.
- [8] Esquivel, G. B., & Hodes, T. G. (2003). Creativity, development, and personality. J. Houtz (Ed.), *Perspectives on creativity. The educational psychology of creativity* (p. 135-165). Hampton Press.
- [9] Wertsch, J. V., & Sohmer, R. (1995). Vygotsky on learning and development. *Human development*, 38(6), 332-337.
- [10] Mahan, K. (2020). The comprehending teacher: Scaffolding in content and language integrated learning (CLIL). *The Language Learning Journal*. DOI:10.1080/09571736.2019.1705879.
- [11] Le Cornu, R., & Peters, J. (2005). Towards constructivist classrooms: the role of the reflective teacher. *The Journal of Educational Enquiry*, 6(1).
- [12] Steele, M. M. (2005). Teaching students with learning disabilities: Constructivism or behaviorism? *Current Issues in Education*, 8. <https://cie.asu.edu/ojs/index.php/cieatasu/article/download/1607/650>.
- [13] Kirschner, P. A., Sweller, J. & Clark, R. E. (2006). Why Minimal Guidance During Instruction Does Not Work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist*, 41:2, 75-86. DOI: 10.1207/s15326985ep4102\_1.
- [14] Akpan, J., & Beard, L. (2016). Using Constructivist teaching strategies to enhance academic outcomes of students with special needs. *Universal Journal of Educational Research*, 4(2), 392-398.
- [15] Armstrong, T. (2015, April). The myth of the normal brain: Embracing neurodiversity. *Journal of Ethics*. <https://journalofethics.ama-assn.org/article/myth-normal-brain-embracing-neurodiversity/2015-04>.
- [16] The understood team. (2020, November 19). Four benefits of inclusive classrooms. <https://www.understood.org/en/learning-thinking-differences/>

- treatments-approaches/educational-strategies/4-benefits-of-inclusive-classrooms.
- [17] Fosco, W. D., Kofler, M. J., Groves, N. B., Chan, E. S., & Raiker, J. S. (2020). Which 'working' components of working memory aren't working in youth with ADHD?. *Journal of abnormal child psychology*, 48(5), 647-660. Hughes, J. A. (2020).
- [18] Does the heterogeneity of autism undermine the neurodiversity paradigm? *Bioethics*, 00, 1-14. <https://doi.org/10.1111/bioe.12780>.
- [19] Rosen, P. (2020, Oct. 22). Working memory: What it is and how it works. <https://www.understood.org/en/learning-thinking-differences/child-learning-disabilities/executive-functioning-issues/working-memory-what-it-is-and-how-it-works>.
- [20] Awh, E., Vogel, E. K., & Oh, S. H. (2006). Interactions between attention and working memory. *Neuroscience*, 139(1), 201-208.
- [21] Swanson, H. & Siegel, L. (2001). Learning disabilities as a working memory deficit. *Issues in Education*. 7. 1-48.
- [22] Forgrave, K. E. (2002). Assistive technology: Empowering students with learning disabilities. *The Clearing House*, 75(3), 122-126.
- [23] Diamond, A. D. E. L. E. (2016). Why improving and assessing executive functions early in life is critical.
- [24] Fairfax County Public Schools. (n.d.). <https://www.fcps.edu/academics/academic-overview/special-education-instruction/assistive-technology-services-ats-3>.
- [25] Phromphithak, C. (2015). The Effect of Using Know-Want-Learn Strategy on Students 'Achievement and Attitude in Learning Mathematics of 10th Grade Students. *The International Conference on Language, Education, Humanities & Innovation*, 21-22.
- [26] LibGuides: Attention Deficit Hyperactivity Disorder/ Attention Deficit Disorder (ADHD/ADD): Home. <https://guides.library.illinois.edu/c.php?g=490037>.
- [27] Brown, E. (2017, June 19). Fifteen assistive technologies for ADHD in HS/college and workplace. <https://edielovesmath.net/assistive-technology/>.
- [28] Rentenbach, B., Prislovsky, L., & Gabriel, R. (2017, May 1). Valuing differences: Neurodiversity in the classroom. <https://kappanonline.org/rentenbach-prislovsky-gabriel-valuing-differences-neurodiversity-classroom/>.

# Building a Sustainable Learning Cycle: The Role of ‘the Formative Use of Summative Tests’ (FUST) in Promoting Students’ Developments

Jingjing Fu \*

Beijing Royal School (Yuncheng), Beijing, 044031, China

## ARTICLE INFO

### Article history

Received: 18 June 2021

Revised: 25 June 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### Keywords:

Summative assessment (SA)

Formative assessment (FA)

Formative use of summative tests (FUST)

## ABSTRACT

The study employed a descriptive mixed-methods qualitative case study approach. Material and interview-based data were collected from two EFL classes in a private international school in central China. Findings from RQ1 suggest that teacher-made summative tests were largely dependable to the extent that the tests reflect the syllabus-based construct and address students’ affective factors. Findings from RQ2 suggest that facilitating factors including in-school continuous professional development (CPD) and teacher collegiality practices may enhance FUST’s prospective role.

## 1. Literature Review

### 1.1 The Emergence of FUST

FUST is emerged from King’s Medway Oxford Formative Assessment Project (KMOFAP) <sup>[1]</sup>. In their seminal work, they realise that in classroom settings, it is unrealistic to separate SA and FA because teachers’ reality is that FA has to work alongside with SA since doing marking or grading is part of their responsibility. FUST seems also meet teachers’ another reality because it is more of a natural strategy that most teachers have probably used summative tests to help students improve intentionally or unintentionally <sup>[2]</sup>.

### 1.2 FUST Development: Theoretical Underpinnings

As a key concept emerged from empirical studies, FUST in classroom pedagogy, has a number of important

characteristics:

1 It allows SA to be seen as a positive part of the learning process.

1 It allows FA to perform actively because it keeps the learners engaged with both pre-test (i.e. reflection-based review, generating and answering their own questions) and post-test stages through effective formative strategies (i.e. test analysis, feedback, peer-and self-assessment).

1 It helps raise teachers’ awareness that learning potential can be derived from test.

1 It has the potential to shift responsibility from teachers to students to aid learning to a more self-regulatory direction so that students can become the owners of their own learning.

### 1.3 The Emergence of Research Questions

**RQ1:** Whether teacher-made summative tests are dependable in promoting a positive effect on teaching and

\*Corresponding Author:

Jingjing Fu,

Beijing Royal School (Yuncheng), Beijing, 044031, China;

Email: 13520759397@163.com

learning?

**RQ2:** Whether FUST can play a prospective role in promoting students' development in the feed forward summative tests?

## 2. Methodology

### 2.1 Participants

**Table 1.** Participant profiles (9 participants in total)

Participating classes	1	2	3
<b>Teacher participants</b>	Tracy_C_1	Tim_A_1	
<b>Teachers' experiences</b>	10 Years	10 years	
<b>Teachers' position</b>	Head EFL teacher CE	Language teacher OE	
<b>Students focus group interviewees</b>	Sally_1	Samuel_2	Simon_3
(Group 1, students' age: 13)			
<b>Students focus group interviewees</b>	Sara_1	Scott_2	Shane_3
(Group 2, students' age: 11)			
<b>School leader participant</b>	Tessa_C_1		

Notes: Pseudonymised names with 'T' indicate teachers; with 'S' indicate students; 'C' indicates Chinese and 'A' indicates Australian; 'CE' represents Comprehensive English and 'OE' represents Oral English.

### 2.2 Data Collection

Two phases of paper-based material data were collected to address RQ1 and RQ2 electronically. This involved ELT syllabus, mid-term and final-term test paper, students' test results and teachers' post-test analysis report from both Grade 5 and Grade 7. Three sets of semi-structured and structured Wechat-based (similar to Skype) teacher interview data were collected. Each set of interview lasted approximately 30 minutes and was audiotaped with participants' consent.

### 2.3 Data Analysis

Codes were analysed three times by the researcher in order to categorise data into different themes. Codes related to FUST were firstly developed to identify whether they confirm or disconfirm with theoretical underpinnings and empirical study findings exemplified in the literature review. Codes then were also categorised in order to compare or integrate with material data. Codes were developed at the final stage to address the broader discussion related to various learning theories and approaches, with reference to the 'restricted' or 'extended' FA model in an ELT context.

All teacher, student participants and parents to student

participants read a full disclosure documents, introducing the purpose and the procedures for participating the research for meeting ethical considerations.

## 3. Findings and Discussions

### 3.1 RQ1 Findings and Discussions

RQ1 was whether the teacher-made summative tests were effective in promoting a positive teaching and learning. The findings suggest that the dependability lies in its syllabus-based construct validity to the extent that it enables teachers to use accumulated information to guide student learning. These findings are consistent with literature similarly including components such as the validity of teacher-made tests<sup>[3,4]</sup> in general education context. However, empirical studies, including ELT studies, have raised their concerns on the dependability of teacher-made tests to the extent whether they are primarily designed to make orientation on students' performance or learning.

In a general education context, more recent studies conducted by<sup>[5]</sup> suggesting that teacher-made tests tend to assess students' lower-level recall of declarative knowledge rather than critical thinking or ability skills. Similarly in an ELT context, McMillan<sup>[6]</sup> suggests that English teachers used objective tests much more frequently than subjective tests. The associated washback include reducing the opportunity for a broad range of learning outcomes to be included<sup>[7]</sup> and using of lower-level questions in evaluation that hinge learners to develop higher-order knowledge such as metacognitive knowledge<sup>[8]</sup>. Subsequently, this may lead to a focus on performance goals rather than learning or mastery goals<sup>[9]</sup>.

### 3.2 RQ2 Discussion

RQ2 was about on whether FUST can play a role in promoting students learning test follow-up stages. Three main facilitating factors are outlined: active engagement, reflective review and responsibility shifting, which are consistently applied from teachers to students. Findings also suggest facilitating indicators, namely, in-school teacher continuous professional development practices and teacher collegiality could extend FUST's potential to promote students' development as an extended FA in the given context.

In ELT literature, when linking with literature in assessment, many pedagogical studies suggest that feedback should be less focused on correcting errors than on raising questions that enable students to understand standards or criteria and develop their own ways forward in collaboration with the teacher and more able peers<sup>[10]</sup>. Therefore, it seems to suggest that feedback can only become exten-

sively formative when students have the capacity to internalise teacher feedback, thus building their own self-feedback autonomy<sup>[11]</sup>.

One area of development is that the school provides continuous professional development opportunities through CELTA-S<sup>1</sup>, which includes trainings on assessment. When being asked about the effectiveness of the training program, one teacher noted:

*'it is good although has a lot of homework. It is mainly online. We have 4-day off-line face-to-face training. For module two, we learn how to ask questions and the homework is how do we use questions to teach vocabulary.'*

The aforementioned training programme seems like a development to enhance teachers' general assessment knowledge. But it is also important to note that foundational changes in teachers' working theories can only occur over time and with collaboration, commitment, and support. Therefore, the introduction of an external training programme does not necessarily guarantee a sustainable improvement.

#### 4. Conclusions

Key findings are outlined in addressing the role of

1 CELT-S is an online teaching qualification with teaching practice, for secondary school EFL teachers working with learners aged 11-18 years (Cambridge Assessment English).

FUST related to the two research questions. Firstly, the findings reinforce those reported positively in previous studies<sup>[12-14]</sup> such as active engagement, reflective review and responsibility shifting from both teachers and students. The findings also enrich the previous studies of FUST by looking into its prospective role. Positive indicators such as the role of CPD and teacher collegiality may bring FUST more potential to play a prospective role in promoting students' development.

The present study is expected to have substantial implications for research of FUST, in a Mainland Chinese context. To begin with, the study to my knowledge most likely marks the beginning at exploring the role FUST can play in schools at the private sectors in a Chinese context. The present study employed opinions from all the four prerequisite factors: teacher, student, assessment and context, as a contextual-bound theoretical concept suggested. Therefore, the main findings may provide valuable references to future studies in a similar context.

In view of these limitations, future research studies are suggested to look into the role of FUST by employing possible quantitative data. Future studies are also suggested to employ a longitudinal approach to allow the potential prospective role of FUST to be understood from a long-term perspective. Future study could also explore effectiveness of teacher feedback in an intercultural context.

**Table 2.** pedagogical suggestions on teacher feedback<sup>[12]</sup>

Comprehensive English Class (Written feedback)				
Task level	Effective feedback	Details (s)	Present study	FUST
<b>1. Task level</b>	<b>1.Feed Up</b>	<b>Provision (teacher)</b>	<b>Mid-term test</b>	<b>Restricted FA</b>
How well task are understood/performed	Where am I going Provision	The provision of challenge assignments: i.e. test	(Diagnose purpose)	
<b>2. Process level</b>	<b>2. Feed Back</b>	<b>FUST</b>	<b>Written CF Exemplar</b>	<b>Restricted FA</b>
The main process needed to understand	How am I going	(teacher, peer, task, self) (Providing information relative to a task or performance goal, in relation to expected standard)	(Close discrepancy to expected standard)	<b>Extended FA</b>
<b>3. Self-regulation level</b>	<b>3. Feed Forward</b>	<b>FUST follow-up strategies</b>	Teacher on-going scaffolding	<b>Extended FA</b>
Self-monitoring directing, and regulating of actions	What to next	(teacher, peer, Task, self) (Reflection-based planning, correcting mistakes, and peer- and self-assessment)	Peer-assessment Self-assessment	

**Table 3.** Pedagogical suggestions on teacher professional development

Factors	Area				
<b>Inhibiting factors</b> <b>'Restricted'</b> <b>Factors</b>	<b>Teachers' understanding of SA and FA</b>		<b>Teachers' Pedagogical content knowledge</b>		
	Misconception	Concerns on FA	Language Testing design Score inflation	Lack knowledge in EFL Learning theory	FA pedagogy (feedback, peer-assessment)
<b>Facilitating factors</b>	<b>School In-service CPD</b>		<b>Teacher collegiality</b>		
<b>Extended FA</b> <b>CONTEXT</b>	1. School leadership and culture		2. Supporting teacher professional development		
	<b>For Students</b>		2.1 Teacher knowledge and skill		
			2.2 Teacher attitude and belief		



## References

- [1] Black, P. and Wiliam, D. (2003) 'In praise of educational research: formative assessment', *British Educational Research Journal*, V29.
- [2] Hamp-Lyons, L. (1997) 'Washback, impact and validity: Ethical concerns', *Language Testing*.
- [3] Harlen, W. (2004) 'A systematic review of the evidence of reliability and validity of assessment by teachers used for summative purposes', *Research Evidence in Education*.
- [4] Black, P., Harrison, C., Hodgen, J., Marshall, B., and Serret, N. (2010) 'Validity in teachers' summative assessments, *Assessment in Education: Principles, Policy & Practice*, 17:2, pp. 215-232.
- [5] McMillan J. (2003) 'Understanding and Improving Teachers' Classroom Assessment Decision Making: Implications for theory and Practice', *Educational Measurement: Issues and Practice*.
- [6] Harlen, W. (2004) 'Teachers' summative practices and assessment for learning - tensions and synergies', *Curriculum Journal*, 16:2, pp. 207-223.
- [7] Dunlosky, J., Rawson, A., and Middleton, E. (2005) 'What constrains the accuracy of metacomprehension judgments? Testing the transfer-appropriate-monitoring and accessibility hypotheses', *Journal of Memory and Language*, 52, pp. 551-565.
- [8] Dweck, S. (2002) 'Messages that motivate: How praise molds students' beliefs, motivation, and performance (in surprising ways).' In J. Aronson (Ed.), *Improving academic achievement: Impact of psychological factors on education*, pp. 37-60.
- [9] McMunn, N., McColskey, W. and Butler, S. (2004) 'Building Teacher Capacity in Classroom Assessment To Improve Student Learning', *International Journal of Educational Policy, Research, & Practice*, Volume 4, ISSN 1528-3534.
- [10] Sadler, R. (1989) 'Formative assessment and the design of instructional system', *Instructional Science* 18: 119-144, Dordrecht: Kluwer Academic Publishers.
- [11] Hattie, J. and Timperley, H. (2007) 'The Power of Feedback', *Review of Educational Research*, Vol. 77, No. 1, pp. 81-112.
- [12] Carless, D. (2011) *From Testing to Productive Student learning: Implementing Formative Assessment in Confucian-Heritage settings*, NY: Routledge.
- [13] Lam, R. (2013) 'Formative Use of Summative Tests: Using Test Preparation to Promote Performance and Self-Regulation', *Asia-Pacific Edu Res*, Springer.
- [14] Xiao, Y. Y. (2017) 'Formative Assessment in a Test-Dominated Context: How Test Practice Can Become More Productive', *Language Assessment Quarterly*.

# Analysis on the Status Quo and Paths of Informatization Teaching Ability of Teachers in Rural Primary and Middle Schools in Hotan Area

**Yongtang Chen\***

Hotan Normal College, Hotan, Xinjiang, 848000, China

## ARTICLE INFO

### *Article history*

Received: 18 June 2021

Revised: 25 June 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### *Keywords:*

Information-based teaching

Rural elementary and middle school teachers

Problems

Strategies

## ABSTRACT

This study conducted an in-depth analysis of the informatization teaching ability of teachers in rural primary and secondary schools in Hotan area through the literature method and questionnaire survey method. The investigation is mainly conducted in the aspects of teachers' informatization awareness, teachers' informatization ability, informatization application status, and existing problems, etc., analyzing the constraints existing in the informatization teaching of rural elementary and middle schools teachers, and making targeted improvements Strategies for teachers' informatization teaching ability in rural elementary and middle schools: raising awareness of informatization teaching; informatization teaching training; informatization evaluation system; establishing a systematic and complete management system.

## 1. Raising the Problem

### (1) Research background

Teacher information ability has become an important part of teacher quality structure. However, in the process of education informatization in our country, too much attention is paid to the construction of infrastructure and other hardware, and the training and improvement of teachers' information capabilities are ignored<sup>[1]</sup>. In order to promote the process of education informatization, teachers' information awareness needs to be changed and teachers' information capabilities and information must be continuously improved. Knowledge, especially in rural areas where the economy is relatively backward, comprehensively improving teachers' information literacy has become an urgent task facing educational informatization. This research takes the rural primary and middle school

teachers in Hotan area as an example, and proposes relevant countermeasures based on the investigation of the status quo of teachers' informatization teaching ability.

### (2) Research methods

This research was carried out through the literature method and questionnaire survey method, inquired about the abundant books and network resources of the school library, and read the literature about the use of informatization by teachers in elementary and middle schools in recent years and the research materials on the development of teacher information skills. And on this basis, I have done a sorting and analysis to understand the status and trends of the research in this field, and use it as an important basis for this research in order to carry out in-depth research. In addition, a questionnaire survey was conducted on the use of information-based teaching by teachers in rural primary and secondary schools in Hotan City and

*\*Corresponding Author:*

*Yongtang Chen,*

*Hetian Teachers College, Hotan, Xinjiang, 848000, China;*

*Email: 2451098715@qq.com*



Hotan County, and on this basis, they were compiled and sorted out. A total of 120 questionnaires were distributed in this survey, 110 questionnaires were returned, with a response rate of 91.7%, and 110 valid questionnaires with an effective rate of 100%.

## 2. Survey Object

In this study, the SPSS11.5 system software was used to make statistics on the survey data, as follows:

(1) From the perspective of gender, among the 110 teachers surveyed, 49 are male teachers and 61 are female teachers. The gender structure is basically balanced.

(2) Among the selected teachers, the number of teachers with less than 5 years of teaching accounted for 25% of the total, and the number of teachers with 5-10 years of teaching accounted for 35% of the total, making it the largest group of teachers with 11-20 years of teaching experience. The number of teachers accounted for 23% of the total number of teachers, the number of teachers with a teaching experience of 21-30 years accounted for 12% of the total number of teachers, and the number of teachers with more than 30 years of teaching accounted for only 5% of the total number. It can be seen that the proportion of young teachers is relatively large, and the number of old teachers is gradually decreasing.

(3) In the survey respondents, teachers with intermediate professional titles account for the majority, and the distribution of the number of junior professional titles and the number of senior professional titles is the same. From the perspective of the proportion of professional titles, teachers with intermediate professional titles have become the backbone teachers of each school. In terms of utilization, it has its own advantages in terms of consciousness and skills.

(4) Among the selected subjects, 35% have a bachelor degree, and 65% have a bachelor degree or less. It can be found that the current educational level of teachers in rural primary and secondary schools in Hotan is mainly junior college, and the undergraduate rate is not high. The distribution of educational background structure has a substantial influence on mastering informatization teaching resources and informatization concepts.

## 3. Analysis of the Status Quo of Informatization Teaching in Rural Primary and Secondary Schools

### (1) Insufficient understanding and outdated concepts

In the survey, it was found that 76% of rural primary and secondary school teachers believe that informatization teaching is better used in curriculum teaching in primary

and secondary schools, 20% of teachers lack the concept of informatization teaching, and only 4% of teachers think it is not suitable. It can be seen that some elementary and middle school teachers in remote rural areas have insufficient understanding of the concept, function, and technology of informatization teaching, and have insufficient subjective initiative in the use of new teaching equipment and resources.

(2) The active consciousness is not strong, and the cognition is biased

4% of teachers have never used information-based teaching, and 36% of teachers often use information-based teaching in teaching, and the largest 60% are teachers who rarely use information-based teaching in teaching; in primary and secondary schools. In the teaching process, teachers' initiative in using information-based teaching is not high. After using informatization teaching, most teachers think it is very helpful and the effect is very good, but there are also a small number of teachers think it is not helpful and the effect is not obvious. It can be seen that some teachers have insufficient cognition on the evaluation of information teaching effect.

(3) Coping attitude is greater than attentiveness

The survey shows that in the courseware production survey of the teaching process in elementary and middle schools, only 19% of teachers can make their own courseware according to the students' cognition, the difficulty of the content, and the teaching environment, so that they can truly prepare for their studies and prepare for teaching methods. Thereby improving classroom efficiency; 31% of teachers download them online and integrate them with their own teaching content. 48% of teachers basically rely on online downloads for direct use, and 2% of teachers hope that the school can provide it. The survey found that most teachers use information-based teaching mainly to cope with the inspection of superiors, and they did not really consider the problem in terms of classroom effectiveness and student acceptance. The information resources used are mainly pictures and videos.

(4) Low utilization of information resources

Teachers make full and reasonable use and selection of teaching resources are also the key to information technology teaching. From the statistical data of the question "What is your main purpose of using the Internet", it can be seen that 52% of teachers search for information on the Internet, and teachers who use the Internet to watch news. Accounted for 26%, and 10% engaged in games and chat. It can be seen that teachers spend very little time on the use of the Internet for professional development. Regarding the question of which software teachers choose to develop courseware, 72% of teachers usually use Pow-

erpoint to make courseware, because these teachers think that Powerpoint is convenient, fast, and relatively simple to make, and 10% of teachers are more interested in Flash. It is believed that the use of flash to make courseware is more attractive to students and the teaching effect is better. 14% of teachers do not use software. This shows that teachers in rural primary and secondary schools are still lacking in information-based teaching.

(5) The training is not paid enough attention to, and the form is single

Due to the remote location of the school and the low level of economic development in rural areas, school leaders believe that teaching is the key, neglecting the training of teachers' information literacy, and not encouraging and supporting the training of teachers. When an old teacher has been trained, he said: "Information technology teaching is popular now. Originally, we should learn the new teaching model. However, the current teacher training is basically a formality, and there is no careful and serious teaching at all. The effect after the training is no different from the previous one. Actually, there is no difference. How much help is it? Basically every year, the higher education leadership department organizes relevant business training for primary and secondary school teachers. The concept is good, but in the process of implementation, the taste has changed. The hired lecturer will indoctrinate, and the teacher will passively accept it. In addition to the organization and management issues, most of the training teachers drifted away from the classroom, blindly in close contact with mobile phones, the stage of the main teacher became a one-man show, the effect can be imagined.

#### 4. Suggestion

With the deepening of informatization teaching in the field of education, countries all over the world attach great importance to the information skills of teachers. In this regard, a series of teacher informatization teaching training plans have been proposed.

(1) Improve the understanding of information teaching

Strengthen the awareness of the leaders of the education administration department. As the instructor and leader of education and teaching, the leaders of the education administration department should not blindly pay attention to the rate of achievement and the rate of enrollment in the evaluation of education and teaching<sup>[2]</sup>. The evaluation should be diversified, and the corresponding evaluation index system should be formulated, and the ability of informatization teaching should be included in the scope of various monitoring and supervision of education. When evaluating the quality of classroom teaching, education leaders should look at whether the corresponding class-

room teaching is helpful to "burden reduction and quality improvement", whether it is beneficial to the implementation of quality education, and whether it is beneficial to cultivate students' innovative spirit and practical ability<sup>[3]</sup>.

Improve teachers' awareness in teaching. First of all, grassroots teachers are the main force in the implementation of informatization teaching. Improve the informatization concept of grassroots teachers, fully understand the role of informatization in classroom teaching, encourage the use of information resources in normal classroom teaching, increase the interest and vividness of the classroom, and stimulate students' interest in learning. Subjective initiative. Secondly, it is necessary to guide teachers not to be vassals of informatization teaching. They must actively integrate courses and informatization, develop informatization education resource packages, and develop targeted electronic resources based on students' differences to teach students in accordance with their aptitude. Finally, one-to-many and one-to-one transmissions can be used. Young backbone teachers can provide professional training on informatization teaching to older teachers to further improve the informatization ability of old teachers, thereby improving the school as a whole. The utilization rate of informatization teaching, and timely teaching and research activities, discover problems, rectify and reform in time, and make progress together.

(2) Strengthen the training of teachers' information teaching

Strengthen the training of information teaching skills for normal students. Normal school students are the new force before teachers<sup>[4]</sup>. All universities and colleges should increase the training of informatization skills teaching for normal students during their school period, so that they can master basic informatization software, informatization resources and informatization awareness. It will help to better carry out education and teaching in the future as a teacher.

Transform training methods and establish assessment mechanisms. Traditional training concepts, methods and methods can no longer better meet the needs of the rapid development of informatization. The educational administration level should pay more attention to the requirements of informatization in the field of education in the new era, formulate targeted training programs, and carry out informatization training for rural and urban teachers in different ways. Platforms such as China MOOC and Intel Future Education can be used to improve teachers' informatization ability and teacher quality. Adopting the principle of proximity and selecting local colleges and universities to train grassroots teachers is conducive to the grounding of the training content, and the training results

can truly be implemented. In addition, the supervision and assessment of the training process should not be ignored, and an effective mechanism should be established to ensure that all aspects of the training are effective.

From the research results of the above researchers, it can be seen that the training of teachers using informatization teaching ability is diverse, such as pre-service and on-the-job training, which provides a theoretical basis for the training strategy of teachers in this research.

(3) Establish a systematic and complete management system

A sound education and teaching management system can greatly promote the improvement of teachers' teaching ability. The following two measures can be adopted to encourage teachers to use informatization teaching.

Increase investment in education funds. Improving modern teaching facilities and equipment conditions school hardware facilities are the basis for applying modern educational technology in classroom teaching. On the basis of making full use of existing modern teaching facilities and equipment, we must further do a good job in the planning and addition of modern teaching facilities and equipment, increase funding, and build campus networks, multimedia classrooms and other modern educational technology facilities and facilities. Places to ensure the basic conditions for modern educational technology training and the use of modern educational technology methods. At the same time, we should also pay attention to the construction of teachers' electronic reading room, implement electronic lesson preparation, and encourage teachers to use multimedia courseware for teaching.

Establish a reward mechanism for teachers. A set of scientific evaluation standards for informatization teaching quality should be formulated as soon as possible, which can reasonably evaluate the degree of teacher's investment in the work, and the implementation of teacher learning and application of informatization in the classroom should be included in the assessment content, and formulated accordingly Policy rewards, punishments and support programs to encourage teachers to take the initiative to create a good environment for multimedia teaching.

(4) Establish a contract construction model for urban and rural schools

Educational administrative departments should actively start from the situation of local educational resources, establish a one-to-one contract construction model for urban and rural schools, and implement in-depth exchanges between the two schools in terms of student exchanges, teacher exchanges, and teaching reforms to implement specific contract construction measures<sup>[5,6]</sup>. The training

plan for outstanding cadres can be implemented. Select relevant leaders and excellent teachers in charge of teaching and personnel to study, train, and exercise in the contracted school, and learn the advanced concepts of education management, education and teaching, talent training, scientific research projects and other aspects of the contracted school.

In short, through the basic information of teachers in rural primary and secondary schools, the use of information for teaching by teachers, the mastery of information knowledge and information skills, and the participation of teachers in information technology training, the problems existing in teaching and the solutions to them However, because the application of informatization teaching in education and teaching is a very practical topic, it is necessary to find, analyze and solve problems in actual operation. The author has theoretical knowledge and practicality in the application of informatization teaching Limited, so it is very challenging for me. Therefore, the topic of informatization teaching application still needs further improvement and perfection, needs in-depth investigation and analysis, and needs to continue thinking and research.

## Funding

Hotan Teachers College's school-level project "Research on the Dilemma and Path of the Development of County-level High School Education Quality in Hotan Prefecture under the Background of Rural Revitalization", (Project Number: 10765020269). Phased research results.

## References

- [1] Sun Yanyan, Wu Xueqi, Wang Chao, Gu Xiaoqing. Investigation on the information teaching ability of primary and middle school teachers[J]. Open Education Research, 2021, 27(01): 84-93.
- [2] Kong Zhen. The status quo and improvement strategies of teachers' informatization teaching literacy in elementary and middle schools [J]. Education Observation, 2020, 9(31): 42-43+87.
- [3] Zhang Maocong, Liu Kaiyue. Research on the Informatization Teaching Ability of Primary and Secondary School Teachers——Taking 1579 Primary School Teachers in a City as an Example [J]. China Education Informatization, 2020, (16): 63-69.
- [4] Zhang Minjie. A case study on the improvement strategy of primary school Chinese teachers' information teaching ability under the mobile Internet environment [D]. Inner Mongolia Normal University, 2020.
- [5] Wang Keqing. Investigation on the status quo of

information teaching ability of junior high school teachers in Dongxiang Autonomous County, Linxia Prefecture, Gansu Province [D]. Northwest Normal University, 2020.

[6] Zhang Zhenkang. Research on the development of informatization teaching ability of young teachers in rural primary schools[D]. Northwest Normal University, 2020.

# Research on Nie Weigu's Art Education Thought and Creative Practice

**Qiang Hao\***

Culture and Tourism Bureau of Wuchang District, Wuhan, Hubei, 430060, China

## ARTICLE INFO

### *Article history*

Received: 18 July 2021

Revised: 25 July 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### *Keywords:*

Nie Weigu

Painting aesthetics

Aesthetic education

Integration of Chinese and Western

Innovate

## ABSTRACT

Nie Weigu is a great master with great attainments in higher art education and painting practice. He is familiar with the psychology of art education and the principles of education and teaching, and has a strong interest in exploring a new way of integration between China and the West. He embraces both Chinese and Western heuristic teaching, focuses on shaping students' sound personality, and carefully cultivates students' noble quality. Facing nature and reality, he took the lead in setting an example and kept writing. He widely absorbed nutrition from other categories and foreign art, expressed his true feelings, made personalized creation, pointed to Western architecture with a Chinese brush, talked with the incarnation of the Holy Spirit, and displayed the second nature - Architecture created by mankind in an unprecedented artistic way, Creatively opening up the art category of "freehand painting" is of milestone significance in the history of contemporary Chinese art.

## 1. Introduction

"His art has the power of noble morality and personality." Leonardo Venturi's remark is most appropriate to evaluate nieweigu's painting! -- A profound and gentle University Professor, an artist who loves ponds and churches and is obsessed with color. His enthusiasm for the ideal and the eulogy of life has many similarities with Monet. They are similar in different ways, different in style, the same in different ways, and fragrant for a long time.

## 2. Impression of Dangerous Valley

Born in Yangzhou, Jiangsu Province in 1957, he graduated from Nanjing Normal University, China Academy of Art and Nanjing Academy of Art successively. He is a doctor of fine arts, a professor and master supervisor of Nanjing University, and the former vice president of the

Academy of fine arts of Nanjing University; Member of China Artists Association, director of Chinese painting society, vice president of Jiangsu Chinese painting society, executive director of Jiangsu Artists Association and vice president of Nanjing Artists Association. He has held solo exhibitions and participated in exhibitions at home and abroad for many times: he participated in Beijing International Art Biennale twice in 2008 and 2012; In December 2015, the "dangerous valley painting exhibition" titled by master Xingyun was held at the Foguangyuan Art Museum in FoGuangShan, Taiwan; In May 2015, the world outlook - Nie Weigu Chinese painting exhibition, sponsored by the Chinese Artists Association, was held in the China Art Museum; In June 2016, a solo exhibition of the same name was held at the National Academy of Arts and Sciences of Ukraine and at the conference center of Florence cathedral in Italy in November of the same year; In

*\*Corresponding Author:*

*Qiang Hao,*

*Culture and Tourism Bureau of Wuchang District, Wuhan, Hubei, 430060, China;*

*Email: 5162089@163.com*



September of the same year, he participated in the "save the earth" exhibition held by the green group at the United Nations headquarters in New York; In October 2018, he participated in the collection and creation activities of the Silk Road Chinese painting scroll at home and abroad hosted by the Chinese painting society; In November of the same year, the unbounded Nie Weigu painting exhibition sponsored by the "famous works project" of Jiangsu Federation of literary and art circles was held in Jiangsu Modern Art Museum; In 2019, he participated in the "Asian Art Exhibition" hosted by the China Art Museum.

### 3. Nie Weigu's Aesthetic Education Thought

Nie Weigu's aesthetic education thought has experienced the baptism of the "85 new trend" and has been strongly infected by the return to the traditional "aura". Like many artists of his age, he once had a tangle and game between "modern" and "tradition" in his heart, but after thinking and exploration, he finally found a balance between the two and found the foothold of his artistic creation<sup>[1]</sup>. He gradually realized that ancient and modern, China and the west, realism and freehand brushwork, inheritance and innovation are dialectical relations of opposition and unity, which can be integrated into each other, and each artist's distinctive personality in his works will make their artistic appearance unique<sup>[2]</sup>. Nie Weigu established his aesthetic education road of eclectic and academic freedom very early. He devoted his life to harmonizing Chinese and Western art, creating contemporary art, promoting the revival of national art, advocating extensive academic research and encouraging a hundred flowers to bloom. Nie Weigu always adheres to heuristic teaching, pays attention to cultivating students' independent thinking, opposes the neat and uniform teaching method, teaches students according to their aptitude, focuses on innovation, and advocates the pursuit of personality development and free creation on the basis of solid basic skills. Strive to shape students' sound personality, carefully cultivate students' noble quality and cultivate students' noble sentiment, so as to improve students' artistic quality and cultural cultivation<sup>[3]</sup>. Taking the lead in setting an example, he has made a double breakthrough in the field of higher art education and color ink painting. In terms of creative guidance to students, Nie Weigu adheres to the essence of traditional art education and the internal spirit of Oriental pen and ink, does not stick to stereotypes and enlightens innovation and breakthrough. Learning from the integration of ink and wash in Western painting, he helped students create their own aesthetic education style and artistic language system. He advocated the compatibility between China and the west, not superficial mixing,

but deep combination. He boldly integrated Chinese pen and ink, western color, folk form and modern composition, which greatly improved the interpretation space of his works.

### 4. Nie Weigu's Innovation of Color and Ink Painting

Spengler once said, "world history is the history of cities." Architecture is the medium of communication between people and the city, the memory of the city, and the crystallization of solidified history and eternal beauty. During his sketching abroad, Nie Weigu had a whim and creatively tried to combine the description of architecture with the techniques of freehand brushwork, and achieved unexpected results. This harvest is the birth of "freehand painting"! In the history of painting, the meaning of painting by Nie Chun is comparable to that of painting by Chen Kai. Anyone who has seen Nie Weigu's "freehand world painting" is amazed: no imaginative architect can match his uncanny workmanship. He is devoted to architecture, the second nature created by mankind. Even the federal square in Melbourne, which is rated as the ugliest building, has become shining under his brush. Only art can have such magic to turn corruption into magic. Speaking of Nie Weigu's "freehand painting", I have to mention the colored ink lotus on which he started. The color and line training in the early Lotus creation contributed greatly to the architectural theme. Nie Weigu is famous for his love of Lotus! If we say "the Seven Sages love bamboo, Tao Qian picks chrysanthemums and Si Xiao Xi Lan", then I think we should add a sentence, "chanting the lotus in dangerous valley". The long-term practice of color ink lotus creation has not only improved Nie Weigu's sense of color, but also made his collocation and use of acrylic and traditional Chinese painting pigments to a state of ease and freedom. In addition to lotus's exploration of lines and calligraphy pens in the freehand world, Nie Weigu keenly found that the most suitable feature of Western architecture is the concentration of outline lines and structural lines, especially western churches, which is very suitable for the expression of group lines, which is conducive to the development of cursive brushwork. He found a new way, acted rashly, replaced noodles with lines, did not apply smears, simple, sparse and bright, and full of fun. Nie Weigu draws lessons from Van Gogh's linear expression, but breaks up Van Gogh's usual ordered group lines and reconstructs them" Qi but not Qi, chaos but not chaos ", local deconstruction, overall isomorphism, so as to achieve the harmony of the picture. The gap between lines is filled by the halo dyeing of color ink. Su ink not only retains pen marks, but also has the characteristics of ink rhyme, which is incisively and vividly applied by him.

The occasional white space, hidden and visible, solves the problem of air permeability in the painting. The overlapping and dense lines in the picture are full of uncertainty and visual impact. The lines are vertical and horizontal, and the color and ink flow brilliantly, with both structure and expression <sup>[4]</sup>. Another difference is that his paintings often use gold and silver powder to form a skeleton. This advantage is that it not only highlights elegance, but also increases the level of the picture. It can definitely be called a masterstroke. This brick, stone, door and window reflect the creator's subjective state of mind and rich passion, which can be called a real "emotional building". In Nie Weigu's "freehand paintings", churches and pagodas are the two most painted themes. The towering churches and towering ancient towers all reflect the lofty pursuit of human spirit in the vertical direction. Looking at his church series, crisscross and row upon row, the group lines of cursive brushwork and the form of chaos and return to the whole, people can't help but think of Beethoven's solemn mass variation or Berlioz's chant of fantasy symphony "The seemingly neat lines are harmonious but different, and the chaotic appearance implies order" seems careless, but it is a surprise victory. When the elegant leaning tower of Pisa and the dignified ancient tower of Huqiu in the painting nod their heads, we understand Nie's good intentions - since the two ancient civilizations can have an artistic "marriage", why can't the exploration of the integration of China and the West blossom and bear fruit? Nie Weigu's color ink painting has evolved from modern ink painting to color ink painting, strengthened the texture expression of mutual infiltration between color and ink, and emphasized the multi-dimensional and open writing. Its wanton brushwork and dripping ink splashing color are due to the internal quality of the traditional freehand context. The topic of Nie Weigu's paintings is to surpass the traditional theme. His works with the theme of East and west architecture place the feelings of Humanities and history, reach the grand realm and have a great international vision. Beyond the object structure, highlighting the spiritual life symbol. Nie Weigu's meditation on history and life, nature and society, time and space and culture is not achieved overnight, but out of an artist's cultural consciousness <sup>[5]</sup>.

## 5. Conclusions

An important inspiration from Nie Weigu's teaching exploration and artistic practice is that the road of innovation of Chinese painting is infinite and broad. It is not advisable to stick to tradition and stick to stereotypes. It is also impossible to be obsessed with foreign law and forget our ancestors <sup>[6]</sup>. Although the black-and-white language of Chinese painting has infinite charm, the rich and brilliant colors can also add different expressiveness to the

freehand brushwork vocabulary, so as to expand the innovative ways of traditional Chinese painting. Nie Weigu is an artist full of innovative spirit and constantly moving forward. In his wisdom and the image painting style he created, there are great potential and new possibilities. His paintings are full of great visual tension, full of the appeal of language and the enlightenment of ideas. He endowed the traditional literati painting with the concept of how to create an atmosphere, and also introduced the idea of western composition to show the internal relationship in the form factors <sup>[7]</sup>. He is boldly absorbed and learned from the rich color theory and expression techniques of Western painting, and interpreted his beautiful dream with a pen like a rafter, hazy, secluded, dreamy and modern <sup>[8]</sup>!

Nie Weigu's aesthetic thoughts and colorful ink paintings enable our souls to live poetically, listen to his teachings and inspire wisdom, like a spring breeze; wandering in the group paintings, the feeling is Sonata and symphonic poetry! The church cleanses the beauty of the soul, and the lotus pond reflects the brilliance of life. Walking in the painting Hall of Danggu, I feel Mr. Nie's tireless pursuit and enjoy the endless contradiction and transcendence between infinite artistic conception and limited means! The sky symphony, the holy city's expression, eternal gaze and eternal watch. Leave a lotus pond of the soul, rest restlessness, iron sadness, take pictures into your arms, and your soul will be soaked with fragrance.

## References

- [1] Nie Weigu. Yidao Hongwei [M] Jiangsu literature and Art Publishing House. 2010,11.
- [2] Comment on the painting art of fandean Nie Weigu [J] . Chinese art time and space. 2016,9.
- [3] Nie Weigu. Professor Nie Weigu answers questions [J] . Calligraphy and painting art. 2012, 4.
- [4] Dai Zehua. Development and times of color ink painting [J]. Journal of Huzhou Normal University. 2004, 10.
- [5] Huang Kaiyu. The importance of artists to the artistry and scientificity of paintings [J]. Research on art education. 2019,12.
- [6] Mao Guxi. Discussion on the constituent elements and formula rules of contemporary painting [J] . Beauty and the times (middle) . 2017,10.
- [7] On the construction of diversified mode of traditional Chinese painting education in Colleges and universities [J]. Research on art education. 2020,8.
- [8] Deng Wanrong. Multidimensional thinking on traditional Chinese painting education in Colleges and universities [J]. Beauty and the times (middle). 2017,10.



# On the Instruction Design of the Course *Business English Writing* Based on Blended Learning Model

Qian Liu \*

School of Foreign Languages, Shandong University of Technology, Zibo, Shandong, 255049, China

## ARTICLE INFO

### *Article history*

Received: 3 August 2021

Revised: 10 August 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### *Keywords:*

Blended learning

Business English writing

Instruction design

Autonomous learning

Cooperative learning

## ABSTRACT

Blended learning based on information technology, emphasizes students' central position and teachers' leading role in teaching and learning. In view of this, the author attempts to apply the model to the instruction of the course *Business English Writing*. In the instructional design, the author navigates students to enhance the input of sample texts on the basis of web-based autonomous learning and organizes cooperative learning so as to increase students' writing practice, thus improving their research ability and communicative skills. Consequently, the two major problems—deficiency in language input because of limited class hours and lack of interaction owing to the large size of classes can be effectively solved.

## 1. Introduction

Business English writing belongs to ESP writing, which is the creation of written business discourse to meet the needs of business communication. It is not only the extension of traditional English writing, but also the application process of business knowledge and business language.

In 2014, China became the world's largest trading country in goods. With the rapid development of China's foreign trade and the increasing frequency of international business exchanges, business English writing, as one of the main ways of communication in international business activities, has become one of the core skills of international business practitioners. Therefore, it is of increasing significance to enhance business English writing teaching

with the aim to cultivate students' business English writing ability.

Undoubtedly the cultivation and improvement of writing skills requires a lot of writing practice, but in reality the class hours of business English writing are very limited. In the limited class hours, what methods can teachers adopt to ensure that students get sufficient input of sample texts and effectively implement writing practice? What can teachers do to review more than 60 students' essays in time and give a comprehensive feedback of students' performance in writing? In consideration of all these problems to be solved, the author tries to use the "blended learning" model in teaching practice, take students as the center, fully mobilize students' enthusiasm and creativity, guide and supervise them to read more, analyze more, write more and communicate more, and realize the mutual

*\*Corresponding Author:*

Qian Liu,

School of Foreign Languages, Shandong University of Technology, Zibo, Shandong, 255049, China;

Email: alex\_sv@126.com

promotion of "input" and "output", so as to effectively improve students' ability to use English language to engage in foreign-related business writing.

## 2. About Blended Learning

Blended learning is a concept under continuous development and has long existed in traditional teaching<sup>[6]</sup>. However, it was not until 2001 when e-learning abroad reached a plateau that people began to reflect on the pure technology environment, and the discussion on "blended learning" gradually increased. In the 1990s, with the rapid development of network and information technology, e-learning flourished and has the potential to replace the traditional classroom. However, after less than a decade of practice, people gradually find that it is impossible to completely replace classroom teaching with digital/e-learning<sup>[1]</sup>. In digital/e-learning, learners encounter such problems as lack of human-computer interaction, proneness to boredom, limited personal learning ability and high dropout rate, so the learning effect is not guaranteed. In view of this, researchers try to combine traditional classroom teaching with digital / e-learning and make full use of their advantages, so "blended learning" came into being. This model makes full use of constructivism theory, in which students are emphasized as the centre of learning activities and expected to change from passively receiving external stimulation and instilled knowledge to actively processing information and constructing knowledge<sup>[2]</sup>. In the meantime, the model does not ignore the leading role of teachers.

The meaning of the word "blended" is mixed or combined, and the meaning of "blended learning" is the combination of various learning methods. For example, the learning method of using audio-visual media (slide projection, audio and video recording) is combined with the traditional learning method of using chalk and blackboard; The combination of computer-aided learning and traditional learning; The combination of autonomous learning and cooperative learning.

Based on the review of relevant literature at home and abroad, the author believes that the "blended learning" model can be summarized as follows.

First, the advantages of teachers' leading role and students' initiative complement each other. The theoretical basis of "blended learning" is inseparable from constructivism, that is, it emphasizes the role of learners' independent discovery, independent exploration and independent construction in the cognitive process, and highlights the central position of students in the learning process. At the same time, "blended learning" also reflects the importance of traditional classroom teaching. Because the advantage

of traditional classroom is that teachers can play a leading role, the "efficiency" of collective teaching is high, and it also has great advantages in sociability and interaction.

Second, face-to-face teaching and e-learning complement each other. From the perspective of teachers, "blended learning" means not only making full use of rich and convenient network resources, but also giving full play to teachers' leading role in guiding, enlightening and monitoring the teaching process. Consequently, in this model, the advantages of classroom teaching and e-learning complement each other with equal attention paid to learning and teaching and the teaching effect is optimized.

Third, "autonomous" and "cooperative" learning methods complement each other.

Autonomous learning refers to learning that is completely based on individual learning needs and self-control of learning pace. Cooperative learning is a learning method with cooperative learning group as the basic organizational form. In this method, group members share the same goal, jointly set certain reward mechanism and collaborate to obtain the best learning results through cooperation, discussion, communication, mutual help and other interactive ways. Cooperative learning can effectively promote the development of students' cognitive ability and language skills.

Autonomous learning is the basis of cooperative learning, and cooperative learning is an effective way to cultivate autonomous learning ability. The rational use of cooperative learning can extend English learning from in class to out of class, mobilize students' enthusiasm and initiative, stimulate their personal potential, and effectively enhance their internal motivation of autonomous learning. Moreover, students are able to perceive their own internal cognitive gaps through the collision of different views among group members, and the perception of such cognitive gaps will promote the reconstruction of students' individual knowledge and contribute to the development of their cognitive ability in autonomous learning.

## 3. Necessity of Blended Learning Model in the Course *Business English Writing*

First, cooperative learning is in line with the business attribute that can not be ignored in the instruction of business English writing. The business characteristics of the course require the cultivation of students' communication and cooperation ability. After all, transnational business is conducted by people and its success largely depends on the relationship and cooperation between people from different cultural backgrounds. This makes it necessary to carry out cooperative learning. On the one hand, the organizational form of cooperative learning is conducive

to carry out business simulation practice, so as to improve students' perceptual understanding of business activities and stimulate their innovation ability; On the other hand, cooperative learning is not only a cognitive process, but also a rewarding occasion for interpersonal communication, which is beneficial to the training of team spirit and communication skills.

Second, the stylized language characteristics of business English make autonomous learning possible. Business English writing is less difficult than literary creation and other types of writing, because it basically follows a certain paradigm. Specifically, there are many stylized expressions and sentence patterns in content structure and language use. If students can have a good command of these expressions and sentence patterns, business English writing will become relatively handy. Such expressions and sentence patterns can be analyzed and summarized by students themselves after reading and assimilating a certain quantity of sample texts, which is in line with the "Zone of Proximal Development". Rather than students being the passive recipient of the knowledge instilled by teachers, it is better to "take students as the center" and guide students to collect and analyze sample texts, give play to their inquiry and analysis ability, and cultivate their autonomous learning ability. As Dewey, an American educator, said, learning is a process of finding and solving problems and there is no real learning without the learner's personal experience of this process.

Thirdly, time-sensitiveness is one striking feature of business English and this feature requires that reference materials and information provided should keep pace with the times. Moreover, Business English writing is closely related to practical work. Therefore, students should be required to make more use of the Internet to obtain the latest information and materials to ensure that the acquired knowledge is currently in use and practical. After assigning the writing tasks and providing relevant network resources for students' reference, teachers should hand over such tasks of collecting sample texts and relevant materials, analyzing and summarizing the characteristics of sample texts to students to complete independently. In completing these tasks, students can obtain the most recent information and update their knowledge. In doing so their skills to retrieve data online and their ability to analyze, judge and explore data can also be cultivated. Both the data-retrieving skill and critical thinking ability are what students urgently need.

Fourth, the cultivation of language output capacity requires highlighting the central position of students in the learning process. Writing itself is the process for language output, and business English writing is no exception. The cultivation and improvement of language output capacity

can only be realized through a large number of writing practice on the basis of a large number of understandable language input. In other words, the improvement of writing ability largely depends on students' individual autonomous learning, such as the quantity and quality of language input, the amount of writing practice, learning strategies and so on. Therefore, teachers should go out of the old classroom teaching mode of "emphasizing knowledge instillation and neglecting skill training". Instead, they should truly take students as the center in the teaching process, pay attention to the inspiration, guidance, supervision and evaluation of students, provide necessary information resources and organize cooperative learning, and change from the feeder of knowledge to the helper and promoter of students' independent construction of knowledge<sup>[5]</sup>.

In addition, the course is normally taught to a class of 60-70 students. With such a large number of students in each class, each teacher often has to undertake the workload of teaching such four large classes. So it is difficult and almost impossible for teachers to carefully review and check each student's writing task from beginning to end. In view of this, it is advisable to entrust the task of supervision and inspection to the cooperative learning group. Such a pattern not only promotes the mutual supervision, inspection, encouragement and help between members of the group but also gives teachers time to review and comment on the representative works submitted by each cooperative learning group in a complete and detailed manner. Thus timely feedback from teachers and positive demonstrations by students can be achieved.

#### **4. Application of Blended Learning Model in the Instruction Design of the Course *Business English Writing***

The guiding concept of using "blended learning" model in the course Business English Writing can be summarized as "dual drives", "dual leading positions" and multiple evaluation system. The so-called "dual drives" means "task-driven" and "language output-driven". Tasks assigned by teachers drive students to continue their learning from in class to after class and the requirement for language output drives students to unite learning and use as well as reading and writing<sup>[4]</sup>. "Dual leading positions" means the change from "teacher-centered" to "teacher-led" and the corresponding change from passively receiving knowledge to actively acquiring knowledge on the part of students. Multiple evaluation system refers to the diverse formative assessment methods such as students' self-evaluation, peer evaluation with the learning group, peer evaluation between learning groups and teacher's evaluation.

According to the teaching plan of the course Business English Writing each genre of business writing is allocated 4 class sessions on average. Teachers can increase or decrease 2-4 class sessions depending on the difficulty of the genre. The instruction design of each genre is generally divided into two stages - language input and language output. Each stage includes two sections—before and during class, and involves two forms of learning—autonomous learning and cooperative learning. Cooperative learning is carried out in groups. Because it is taught in large classes of about 60 students, each group usually has 6 members and grouping is completed on a voluntary basis at the beginning of the course. The teacher sometimes needs to make adjustment to the grouping based on the students' English level, personality and gender so that group members complement each other in ability, personality, etc and all groups are comparable with each other in ability and English level.

### Stage One: Language Input

#### (1) Before class - collection and study of sample texts

Before class, teachers assign tasks for autonomous learning and cooperative learning according to the teaching plan and teaching content, and provide network resources for students' reference. The task of autonomous learning is to take the textbook sample text as an example, use the Internet to search for at least three sample texts of the same genre, study and summarize the common structure of such writing genre, commonly used phrases, chunks of words and sentence patterns as well as the language features, etc. After that, students share the collected sample texts in the group via QQ group or other online social tools<sup>[8]</sup>. The task of cooperative learning for group members is to have a face-to-face discussion of the summaries on learning sample texts prepared by each group member and select 6 sample texts which are approved by group members to be the best for the whole class to learn from. Each time, one delegate from each group is responsible for recording the main discussed ideas, summarizing and reporting to other groups their discussion in the form of PPT in class. Group members take turns to perform such tasks in the process of cooperative learning to ensure the full participation of each student.

(2) In class - share and comment on the summaries on learning sample texts

In class, first, each group will report and share the summary on learning sample texts. In order to guide students to provide the key points and improve classroom inefficiency, teachers should specify in advance the key points to be included in the summary, such as sources of the sample texts, common structure of the writing genre, language features, list of business terms, etc. At the end

of each group's report, other groups give oral evaluation, followed by teachers' comments. The teachers' comments are expected to fulfil two purposes—recognizing the advantages of each report so as to protect students' enthusiasm in participation and pointing out the problems in the report so as to effectively grab students' attention to the problems. After all groups make reports and comments, each group will score the reports prepared by other groups and the average score is recorded as peer evaluation between learning groups, which forms part of the formative evaluation. Then, the teacher makes the final summary, highlight the essential knowledge and key language points that students are expected to gain from preparing the summary and then assign the corresponding writing tasks.

### Stage Two: Language Output

(1) Before class - individual writing practice and mutual evaluation of group works

Before class, individuals should complete the writing task independently, and then members of the group should review and correct each other's written text. On this basis, the best written text is then selected as the representative work and submitted to the teacher for review by e-mail. The teacher will upload all these best written texts submitted by all groups to the class QQ group for all students to read and comment.

(2) In class -- Comment on representative works and complete the reflective report

In class, the teacher prints all these best written works together with the review, distributes them to each group, comments on each representative work and explains the typical mistakes spotted in the work. Each student modifies his/her written text according to the teacher's comments and explanation. Finally, each student spends 15 minutes independently writing a reflective report on the learning process of the writing genre<sup>[3]</sup>. In order to guide students to complete the construction of knowledge and the cultivation of meta-cognitive strategies, teachers should specify in advance the main content of the reflective report, which is usually required to include three parts: writing skills, business knowledge and learning methods and habits to be improved.

## 5. Conclusions

In the first stage, both autonomous learning tasks for individuals and cooperative learning tasks for groups effectively urge students to search network resources and read a certain number of English sample texts after class, virtually guiding students to extend English learning from in class to after class, enhance language input and expand their knowledge. A large number of language input is the



basis of language output. Moreover, to performs the tasks assigned by teachers, students are steered into the rewarding habit of paying attention to the form and features of the language, which helps students overcome the weakness of only focusing on ideas, enhance their attention and sensitivity to the language itself, and improve the quality of language input. However, even if the quantity and quality of language input are guaranteed, all information is just stored in the memory. To turn such information stored in the memory into knowledge students can assimilate and ability students can acquire, language output through writing practice is inevitable and crucial.

In the second stage, that is, the language output stage, whether completing the writing task or reviewing others' written texts, students should rely on what they have learned in the first stage, thus putting what they have learned into practice and realizing the combination of learning and application. In order to complete the writing task, students also need to constantly re-read the sample texts so as to "borrow" language and in this process the aim of "promoting reading by writing" is attained.

Of course, the effective implementation of teaching activities also needs the stimulation and guarantee of evaluation mechanism. Teachers should adopt multiple formative evaluation in teaching activities inside and outside the classroom and make sure that the evaluation runs through the students' whole learning process through students' self-evaluation, peer evaluation with the learning group, peer evaluation between learning groups and teachers' evaluation. Timely evaluation can stimulate students' learning, motivate students to effectively adapt their learning process and promote their continuous development of comprehensive language skills. Self evaluation helps students to effectively monitor and adjust their learning plans and learning processes. The peer evaluation between students plays an important role in setting examples and promoting their learning from each other. In short, teachers should give full play to the positive backwash effect of multiple formative evaluation on individual learning and cooperative learning and promote the improvement of students' learning effect and learning ability.

Applying the blended learning model to the teaching of business English writing not only highlights the central position of students in the teaching process but also emphasizes the leading role of teachers, which is conducive to the cultivation and improvement of students' autonomous learning ability, inquiry ability, cooperative learning ability and data-retrieving skill. The instruction design of the course is task oriented and aimed to realize the zero distance and seamless integration between learning and application, input and output. In the future practical teaching work, the author will put the design into practice, and

continuously improve the instruction combined with empirical research and data feedback.

## References

- [1] Aspire Public Schools. (2013). Blended learning 101 handbook. Retrieved from [http://aspirepublicschools.org/media/filer\\_public/2013/07/22/aspire-blended-learning-handbook-2013.pdf](http://aspirepublicschools.org/media/filer_public/2013/07/22/aspire-blended-learning-handbook-2013.pdf).
- [2] Bailey, J., Duty, L., Ellis, S., Martin, N., Mohammed, S., Owens, D., Wolfe, J. (2015). Blended learning implementation guide 3.0. version 3.0. Retrieved from <http://digitallearningnow.com/site/uploads/2013/09/BLIG-3.0-FINAL.pdf>.
- [3] Boelens, R., Van Laer, S., De Wever, B., & Eelen, J. (2015). Blended learning in adult education: Towards a definition of blended learning. Project report. Adult Learners Online. Retrieved August, 2015, from <http://www.iwt-alo.be/wp-content/uploads/2015/08/01-Project-report-Blended-learning-in-adult-education-towards-a-definition-of-blended-learning.pdf>.
- [4] Boelens, R., Voet, M., & De Wever, B. (2018). The design of blended learning in response to student diversity in higher education: Instructors' views and use of differentiated instruction in blended learning. *Computers&Education*, 120, 197-212.
- [5] Comas-Quinn, A. (2011). Learning to teach online or learning to become an online teacher: An exploration of teachers' experiences in a blended learning course. *ReCALL*, 23(3), 218-232. DOI: <https://doi.org/10.1017/S0958344011000152>.
- [6] Graham, C. R., Henrie, C. R., & Gibbons, A. S. (2014). Developing models and theory for blended learning research. In A. G. Picciano, C. D. Dziuban, & C. R. Graham (Eds.), *Blended learning: Research perspectives* (Vol. 2, pp. 13-33). New York: Routledge.
- [7] Molnar, A., Miron, G., Gulosino, C., Shank, C., Davidson, C., Barbour, M.K., Huerta, L., Shafter, S.R., Rice, J.K., & Nitkin, D. (2017). *Virtual Schools Report 2017*. Boulder, CO: National Education Policy Center. Retrieved [date] from <http://nepc.colorado.edu/publication/virtualschoolsannual-2017>.
- [8] Picciano, A. G. (2016). Research in online and blended learning: New challenges, new opportunities. In C. Dziuban, A. Picciano, C. Graham, & P. Moskal (Eds.), *Conducting research in online and blended learning environments: New pedagogical frontiers* (pp. 1-11). New York: Routledge.
- [9] Trust, T., Krutka, D. G., & Carpenter, J. P. (2016). "Together we are better": Professional learning networks for teachers. *Computers & Education*, 102, 15-34.

# Understanding the Process of Second Language Acquisition

**Yixu Ding\***

University of Bath, Bath, UK

## ARTICLE INFO

### *Article history*

Received: 3 August 2021

Revised: 10 August 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### *Keywords:*

Acculturation model

Krashen's theory

Natural order hypothesis

The monitor hypothesis

The Input hypothesis

Affective filter hypothesis

Reading hypothesis

## ABSTRACT

As the world is becoming more and more connected, the education system needs to provide each learner with an equal opportunity for success. Measures should put in place to ensure that obtaining an education is made possible for all students, including foreign students, such as English speakers in China and Chinese speakers in the United Kingdom. The biggest obstacle to making this dream a reality is that very few educators are sufficiently equipped to understand the foundational knowledge with regards to teaching learners of speaking a different language from the regional language, raising the need for target language acquisition. This paper will look into the Acculturation model of second language acquisition and Stephen Krashen's theory of second language acquisition. Since educators are increasingly being forced to teach students speaking foreign languages understanding second language acquisition is very important. Understanding the process of second language acquisition may be important to educators and enable students in second language acquisition.

## 1. Acculturation Model

Social-psychological factors such as proximity to target language, the desire to assimilate, attitude, time spent in the target language, and congruence of the two cultures are used to predict the levels of acquiring a second language in the acculturation model<sup>[3]</sup>. The acculturation model was developed by John Schumann in 1973 after studying six migrant language learners for a period of 10 months. In his study Schumann focused on their language acquisition level and employed the use of questionnaires in data collection. Schumann noted that one male did not show significant increase in his language acquisition for the 10-month period, and he credited this to the individual's failure to engage in conversations occurring among native English speakers. Schumann argues that the accul-

turation model is the beginning process of a second language acquisition which is nonlinear.

To determine the validity of the acculturation model, Schmidt conducted a research on Japanese artists Wes, who relocated to Hawaii at 33 years of age. In his study, Schmidt followed Wes for 3 years without formal instructions examining the English language acquisition. It was discovered that due to the proximity to the social and psychological components of English, Wes acquired communication competence but failed in mastering English linguistics<sup>[7]</sup>. This validates the acculturation model as shows that Wes mastered the English language in areas he was engulfed in while staying in a foreign country. Wes failed to master linguistics due to the social and psychological factors failing to relate to the literacy of the Eng-

*\*Corresponding Author:*

Yixu Ding,

University of Bath, Bath, UK;

Email: [jessicayixu@qq.com](mailto:jessicayixu@qq.com)

lish language.

The degree of a learner's success in learning a foreign language greatly depends on contact the learner has with the speakers of the second language, keeping the company of the second language culture gives the learner a better chance to learn the second language. A study conducted by Schuman showed that identification with the community of the acquired language as a basic requirement for second language acquisition. Schuman continues by saying that the individual learning can be placed along a continuum that ranges from proximity to the second language speakers to social psychological distance. Two main variables main variables that cause difference in the way a second language are social factors and psychological factors. The degree of social distance is accounted for by social variables while the individual's response to the second language learning conditions is accounted for by psychological variables<sup>[5]</sup>.

According to the acculturation model, a learner's position or perceived position to the language that is to be acquired is the social distance. Shuman also considers social distance as a primary factor to gauge acculturation and the effectiveness of a learner in picking up a second language. In the acculturation model, social and psychological factors on the same scales by Schuman, making the assumption an individual's success in learning depends on his or her acculturation; the level of the reduction of the social and psychological distance. Other studies have also confirmed the positive relationship between the depth of social distance between two cultures and the learning difficulty of the second language. The language acquisition degree based on the acculturation model correlates with the learner's proximity to the target group. This correlates with the socio-educational model that says, the psych to acquire a new language comes second to the "want" to be accepted as a part of that community.

There are a number of factors that guide social distance determining how close a person will be to the speakers of the second language. Such as

(1) Subordination: that can be linked to a particular status of the community as compared to a different group.

(2) Pattern of integration: The possibility of learner giving up his or her own culture to pick up that of a different group. The degree to which an individual holds on to their culture.

(3) Enclosure degree of both groups: Do the two cultural communities share their social amenities such as stadiums or have separate social amenities?

(4) Cohesiveness degree of target culture learning group: Intra group contacts are termed cohesive, inter group contacts are termed non-cohesive

(5) Second language learning group's size.

(6) Congruence degree of the second language learning group: the second language group's culture can be similar to the target group or completely unrelated to the target group.

(7) Inter-group attitudinal evaluation: attitude of one group towards the other.

Psychological distance is determined by how the measure of the learners comfort in relation to the social factors surrounding the learning of the second language. Having too much psychological distance deters learning by building resistance in taking full advantage of the situation.

There exist five factors that may increase the psychological distance which are

(1) Language shock: New linguistic system learning disorientation;

(2) Culture shock: The fear, anxiety, and stress of entering a new culture;

(3) Culture stress: Culture shock such as home sickness;

(4) Motivation;

(5) Ego permeability: The willingness or lack of willingness to give up ones differences and favor the target language group.

## Types of Acculturation

There are two types of acculturation distinguished by the Schumann's model. In Type 1, social contacts with the second language speakers are developed by the learner through social integration. The second language speakers provide the learner with input while the learner maintains the lifestyle and values of his or her native culture. In Type 2 social contacts in target culture are developed by the learner. The learner also moves towards adopting the target group's values and lifestyle. By encompassing type 1 and type 2 acculturation definitions, it implies that one can succeed in acquiring the target language whether the norms of the target culture are adopted or not.

There are four stages in the process of acculturation;

(1) Euphoria: At this stage, the newness of the surrounding excites the learner.

(2) Culture-shock: The cultural differences feel as an intrusion to their image of self-security.

(3) Progressive recovery and Cultural stress: some challenges brought by acculturation are solved. The learner begins to accept the difference in thinking.

(4) Full-recovery: Assimilation of the second language culture. The learner develops a new identity and adopts the new culture.

## Acculturation and Motivation

The foundation for the acculturation model was laid



down by Gardner on his work on integrative and instrumental motivation. The need to interact opens up opportunities for interaction and reduces the social distance separating the individual learning and the culture of the acquired language. Individuals with a more instrumental motivation more often find the educational setting enough to achieve their goals of learning the second language. Such people may have little motivation to interact with individuals of the second language cultural group but still acquire the second language. On the other hand, integrative motivation pushes learners by inspiring extensive motivation to form bonds with individuals of different cultures when the chance arises. Creating cultural bonds enables such individuals to learn the linguistic and cultural knowledge required to have sociocultural competence.

### Limitations of the Acculturation Model

As a major criticism opposing the significance of cultural factors in the acquisition of a second language, scholars argue that most of the time cultural factors are not very prominent and people may do well in second language acquisition in different social conditions. Other studies have also shown that some individuals are motivated and work to succeed in second language acquisition irrespective of the unfavorable social conditions and there are those that fail to succeed with favorable social conditions. This shows that personal differences of learners such as styles of learning and affective state are more prominent factors that attribute to the second language acquisition as compared to the social conditions a learner is presented with. Therefore, generalizations on the importance of cultural factors should be avoided.

The acculturation model has also faced criticism for not using other significant variables, like instructional and cognitive factors in second language acquisition. According to the acculturation model, all other variable not related to acculturation are considered of less importance to second language acquisition. For a case, no explanation is provided on the internal process responsible for second language acquisition. The acculturation model does not provide an explanation for the developmental sequences and acquisition orders and their causes<sup>[7]</sup>. This model was also faulted for arguing that instruction lacks major importance in second language acquisition.

The acculturation model was also criticized for overlooking the fact that social factors directly impact the acquisition of a second language while scholars believe they have a direct impact. Pidginization is also a collectivist phenomenon, while the acquisition of language is an individual phenomenon. The acculturation model does not explain how the quality of contact experienced by learners is

influenced by social factors. This has led some scholars to be cautious in placing social factors in as a separate entity in the forefront.

There are also some unanswered questions with regards to the model. Schuman personally claims that the acculturation model only provides answers for acquisition of the second language when the individuals involved are immigrants. He also tells the reader to be cautious about variables other than acculturation that may influence second language acquisition. Schuman believes that variable typology development is of great importance and should be encouraged. How long the continuation and necessity of such typologies is not clear.

Research has also argued that acculturation should be clearly classified with means of measuring the level acculturation needed for the success of second language acquisition for it to be considered an aspect of second language acquisition<sup>[5]</sup>. The acculturation model has been found problematic in that the acculturation concept and what it entails is complex to be tested and defined operationally. The model does not also provide a means of measuring the social distance it claims can affect second language acquisition. The model is not also useful for accounting for individual differences as it deals with cultural groups and not individual learners.

## 2. Krashen's Theory

Stephen Krashen's theory of second language acquisition.

Stephen Krashen is an expert from University of California and has specialization in linguistics especially in the theory of language acquisitions. Most of his research revolved around study of other languages apart from the acquisition of English.

Several books have been published by Krashen since 1980. Krashen's theory has been widely accepted and is being used in various or has impacted widely in many aspects of the acquisition of second language, research and teaching.

Stephen Krashen's theory has impacted second language acquisition since he researched and studied it for several years. His theory is formed on the basis of Five different hypotheses which are; acquisition or the hypothesis of learning, monitoring hypothesis, hypothesis of natural order, hypothesis of input, and the affective filter hypothesis<sup>[1]</sup>. Krashen's theory has faced criticism, Gitsaki<sup>[4]</sup> and Menezes<sup>[6]</sup> pointed out that his theory is not clearly defined and it is not verifiable through research. Even after critics Krashen's theory has had a massive impact and its significant in the record language acquisition field and it allows time in understanding the model wholly.

Hypothesis Krashen used in his model.

## The acquisition learning hypothesis

The acquisition learning hypothesis is a part of Stephen's model <sup>[1]</sup>. In this hypothesis Krashen illustrates that learning requires individual's consciousness and effort to learn language or focus on the structure and he also illustrates that acquisition happens when subconscious activity is issued to enhance internalization of the language in an individual mind, this hence forth makes it natural for an individual to use. This acquisition learning hypothesis is popular among many linguistics and teachers of language. It meant that we have two forms of acquisition of any foreign language which include the "acquired" and the "learned" system. Acquired part requires a lot of interaction which is meaningful with the language that is targeted and natural communication in which people speaking concentrate not only by utterances but the communicative act. Learning part is done by formal instructions. It involves consciousness of an individual and its product is conscious knowledge. For instance, grammar rules knowledge.

The deductive approach is a fundamental form of learning in a teacher centered situation, while a student-centered situation employs the inductive approach to ensure language acquisition. Krashen also adds that acquisition has greater importance compared learning.

## The Monitor Hypothesis

Krashen clarifies the impact and relationship, that learning and acquisition has on each other. The monitor withholds the information until when the learner is ready to use the learnt language <sup>[2]</sup>. The person holding learned information is used properly when there is adequate and sufficient time for an individual to think about what has been learned. The ultimate goal is to use the language form correctly and the learner already knows the rules that apply when trying to use in the production. According to Abukhattala <sup>[1]</sup> there is probability for a learner to underuse, overuse, or use the monitor correctly depending with their acquisition confidence. The importance of conscious learning is limited in second language learning. The monitors role is to correct a speech and give it a perfect appearance. Nce is often associated with overusing the monitor.

## The Input hypothesis

Krashen in this model illustrates how a second language is acquired by an individual. This paper, focuses on acquisition and not learning. Krashen illustrates that

the progress of learners in line with natural order, after he or she acquires the input of the target language, that is a progress in addition to the current state of competence in linguistics. Since all learners cannot march in their state of linguistic confidence at a go, Krashen illustrates a natural communicative input is important in making a syllabus ensuring that every individual receives at least 'I + 1' input that is required for his or her current level competence in linguistics. This is the most influential and important hypothesis by Krashen. Abukhattalan <sup>[1]</sup> illustrates that the speaking and writing skills progress and mature when the giving of comprehensive input is continuous. Krashen insists that the silent stage is important to make an individual learner competent and confident to use the learned language even if it will not sound competent to others.

## The affective filter hypothesis

Krashen in this theory explains that a learner or individual has to be open and have the will to receive information in a language that he or she targets to learn in order to reach the language acquisition device and henceforth getting the information that he requires he requires completely. This is influenced by the mood which revolves around; motivation, self-confidence, self-image, and anxiety. These are factors that could possibly lower or raise the affective filter. The higher the affective filter goes the more the input would not be understood would not be understood due to a "mental block" that is put in an individual's mind <sup>[2]</sup>. The affective variable plays the role of facilitation in the acquisition of the target language, learners who believe in themselves, good self-image, and high motivation are more affiliated to success. Low motivation, introversion, and anxiety prevents comprehensible input from being used in second language acquisition. In addition, Krashen illustrates role of positive affect in language acquisition.

## Natural Order Hypothesis

It is less important and it's associated with research findings. Scholars suggest that getting or acquiring of a language grammatical structure follows a natural order which can be predicted. Grammatical structure acquiring time tend to differ for different languages. Some could be gotten in a short time span while take very long to learn. This natural order does not depend on the age of the learner or the individuals background of first language exposure. Krashen illustrates that the natural order hypothesis implication is not that a language program syllabus could be made on the basis of the order found in the study and research. Krashen rejects grammatical sequencing when

the ultimate objective is language acquisition.

Krashen insists that errors are made while using language are due to not fully acquiring the language skill, but learning some skills that may help when an individual tries to use the skills of production. Planning of a teaching order is not necessary as one will get more of language by using it in situations and not based on the exact teaching structure.

### **The Role of Grammar in Krashen's View**

Krashen illustrates the importance of study of language structure and impact and general educational advantages. Most high schools and colleges may want to include in their language programs. Benefits largely depend with the learner's ability to understand a language. It should be noted that language analysis, making rules, setting irregularities apart and teaching lots of complex facts is not language teaching but language appreciation.

The only time grammar teaching could lead to language acquisition is when the learners have a particular interest in the target language and it is used communication and instruction giving. This occurs when there is concern with students and teachers that studying formal grammar is vital. The teacher should have enough skills and meet the language requirements. For comprehensible output and with adequate learner participation that makes the classroom a good environment for second language acquisition [2].

After the filter is low concerning language explanation; the students' conscious efforts are usually on the subject matter, what they are talking about and not the medium. In this case, the teacher and student are lying to themselves. They tend to believe that their progress is depended on the subject matter but it's due to the study of grammar. The progress is due to the medium and necessarily the message. But in the case the subject matter they are interested it would do just as well.

### **3. Krashen Hypothesis and Application to Teaching**

#### **In acquisition planning hypothesis**

The optimal method language skills are acquired is by natural communication. A second language teacher is supposed to create a state in which a language is used in order to fulfill its objective purpose and goal. This method helps learners acquire a language as opposed to just learning it.

#### **According to Mentor Hypothesis**

As a second language teacher, it is always difficult to

create a balance between encouraging accuracy on learners and fluency in them [1]. These balances will depend on various factors which include the language level of your individual learners' context of the language use and individual goal of every student. This balance could be called communicative balances.

#### **According to Natural Order Hypothesis**

Teachers are supposed to have awareness that some aspects of language are easier to apply and acquire than others. This should be taught in a certain order conducive for the learner's acquisition. Teachers should first introduce the language concepts that are easier for learners to acquire. Then they should apply scaffolding to introduce the concepts that are difficult.

#### **According to the Input Hypothesis**

Input hypothesis highlights the importance of using the second language in a classroom setting. The ultimate objective of any language program is to help individual learners to communicate. It is the duty of the teacher to create a suitable environment for the acquisition of language by providing as much input as possible.

#### **According to the Affective Filter Hypothesis**

Creating a safe environment that is accommodative to students is vital for acquiring language. This is very important in language acquisition since in order to take input and produce language individuals have to be comfortable with making mistakes and risk taking.

#### **According to Reading Hypothesis**

It is very important to include reading in the language and the way it should be used in real life situations so as to effectively acquire the second language.

### **4. Limitations of Stephen Krashen's Theory of Second Language Acquisition**

First Krashen's theory of second language acquisition has been scrutinized and widely criticized as it happens with any other conspicuous theories. Critics of the theory began as soon as the theory was developed with McLaughlin being its greatest critic. Saying that it has not been defined well and that his claim on this research cannot be proved. McLaughlin also has several critics on comprehensible input and input hypothesis.

The effective filter hypothesis is termed as vague and that it has no ability to predict any linguistic development. McLaughlin insists that the monitor does not function

as Krashen illustrates and that the natural order is not as comprehensive as Krashen puts it because of method logical considerations. McLaughlin insists that nothing works in Krashen's theories as he claims. Krashen's theory arises a lot of hostility which is so unusual. Other scholars termed Krashen's claims as feeble, sloppy, profound misunderstanding and illegitimate.

According to Krashen's theory, Language acquisition does not require too much use of complex grammatical rules and does not require tiresome efforts. Second language acquisition requires a very meaningful interaction in the target language natural communication where the people speaking the language have no concern for their utterances but with the information they are passing and internalizing. Comprehensive input is very vital and is needed for language acquisition. The best techniques hence forth are those that produce comprehensible input and contain the information that students really want to hear. These methods and techniques do not force early progress and early production but progress comes from supply of communication and comprehensible input.

In the actual setting or real world, communicating with willing sympathetic native speakers helps a learner understand more hence very helpful.

## 5. Conclusions

Foreign students speaking foreign languages are becoming more and more common in our learning institutions. Educators have the responsibility to provide such students with high-quality education as deserved by all students. Reviewing second language acquisition theories is beneficial to trainers and learners as it provides teacher

practices and learning practices for second language acquisition. From the Acculturation and Krashen's theory, second language acquisition is a social and cognitive learning experience that requires peer to peer experience.

## References

- [1] Abukhattala, I. (2013). Krashen's Five Proposals on Language Learning: Are They Valid in Libyan EFL Classes. *English Language Teaching*, 128-131.
- [2] Bahrani, T., & Vaseghi, R. (2012). Acculturation model for L2 acquisition: Review and evaluation. *Advances in Asian Social Science*, 579-584.
- [3] Friedrichsen, A. (2020). Second Language Acquisition Theories and What It Means For Teacher Instruction. Northwestern College.
- [4] Gitsaki, C. (1998). Second language acquisition theories: Overview and evaluation. *Journal of Communication and International Studies*, 89-98.
- [5] Graham, C. R., & Brown, C. (2010). THE EFFECTS OF ACCULTURATION ON SECOND LANGUAGE PROFICIENCY IN A COMMUNITY WITH A TWO-WAY BILINGUAL PROGRAM. *THE BILINGUAL RESEARCH JOURNAL*, 235-260.
- [6] Menezes, V. (2013). Second Language Acquisition: Reconciling Theories. *Open Journal of Applied Sciences*, 404-412.
- [7] Zaker, A. (2016). THE ACCULTURATION MODEL OF SECOND LANGUAGE ACQUISITION: INSPECTING WEAKNESSES AND STRENGTHS . Tehran: Islamic Azad University, Science and Research Branch.

# Teachers are Deprofessionalized when Control of the Curriculum is Taken away from them: Discuss in Relation to High School Teachers in China

**Dan Cheng\***

Beijing Royal School, Beijing, 102209, China

## ARTICLE INFO

### *Article history*

Received: 3 August 2021

Revised: 10 August 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### *Keywords:*

Teacher autonomy

Professionalism

Decentralized curriculum

Centralized curriculum

## ABSTRACT

In this paper, the writer will use a literature analysis approach to explore the issue of teacher autonomy and professionalism in both centralized and decentralized curriculum models. Through literature analysis, the paper argues that centralized and decentralized curricula each have their own positive and negative effects on teachers' autonomy and professional development. Under the current curriculum model in China, teachers' autonomy and professionalism in curriculum development are both enhanced and limited to some extent. Based on the analysis of the literature, this paper will propose recommendations for enhancing Chinese high school teachers' autonomy and professionalism in curriculum development.

## 1. Introduction

In this essay, the writer will explore teachers' autonomy and professionalism in curriculum development. In China, there appears to be a process of change from a mainly centralized curriculum to a decentralized curriculum, and the writer will refer to this process as a way of highlighting issues in teachers' autonomy and professionalism. The writer will argue that only the teacher has the authority of curriculum development, their autonomy and professionalism will be promoted; otherwise, it will cause teacher de-professionalism. In the first section, the advantages and problems of a centralized and decentralized curriculum will be presented. First of all, the advantages of a centralized curriculum will be presented, including the argument that all children must have access to the same curriculum

<sup>[1]</sup>. Following this, the problems of a centralized curriculum will be examined, including the impact on teacher autonomy and professionalism. This is closely followed by an analysis of the strengths of the decentralized curriculum; the ability to meet the diverse needs of students and to improve the quality of the curriculum is an excellent strength. However, a decentralized curriculum also has its problems, including widening the gap between regional education and the difficulty of achieving education equity. In the second section of the article, the writer will introduce definitions of teacher autonomy and teacher professionalism; although they are difficult to define clearly, this paper gives a unified understanding of them in the education context. Then, an overview of their importance and the centralized curriculum's impact on teacher autonomy and teacher professionalism will also be explored in this

*\*Corresponding Author:*

Dan Cheng,

Beijing Royal School, Beijing, 102209, China;

Email: 2768916351@qq.com



section. Section three of this essay will explore the trend towards a decentralized curriculum in China. The current Chinese curriculum system will be analyzed to see how it supports and limits teachers' autonomy and professionalism in curriculum development. Finally, the writer will suggest some ways to strengthen Chinese high school teachers' autonomy and professionalism in curriculum development.

## 2. Centralized and Decentralized Curriculum

### 2.1 Centralized Curriculum

A centralized curriculum is one in which the administrative authority of a state assumes responsibility for curriculum planning, and all curriculum resources, including funding, information, personnel, and technology, have full control<sup>[2]</sup>. Usually, the local area or school, as the provider of education, is responsible only for implementing the existing curriculum. However, the manifestation of a centralized curriculum may vary from country to country. Sometimes, there are more rigorous centralized curricula that set out every aspect of education so that every child gets the same learning resources. In some countries, centralized curricula are looser; for example, only learning objectives are set, and teachers are responsible for planning how to achieve them.

#### Advantages

Firstly, the centralized curriculum provides a field of study arrangement for all students regardless of differences in social background, culture, gender, ability, and disability, promoting equity in education<sup>[1,3]</sup>. The centralized curriculum provides a framework for all schools to ensure that teaching and learning are balanced and consistent. It includes goals to be achieved, subjects to be taught, and ensures that every student develops the knowledge, understanding, skills, and attitudes necessary to self-realization and development into an active and responsible citizen. As such, it is seen as a means of 'improving the overall quality of education for all children'<sup>[4]</sup>.

Secondly, it strengthens the accreditation of teaching standards. Since the knowledge and skills required to implement the centralized curriculum are almost identical, the requirements for teaching standards also have converged<sup>[5]</sup>. Uniform requirements for teaching standards contribute to teachers' professional growth in disadvantaged areas and ensure the quality of local education delivery.

#### Problems

The planning of a highly concentrated national cur-

riculum is generally based on the knowledge-based curriculum concept rather than a process-driven concept, and most of the key points of knowledge delivered are instrumental knowledge and knowledge with commercial use. Because of this, Kelly believes that a highly centralized national curriculum means 'a progressive loss of freedom- the professional freedom of teacher and, most importantly of all, the intellectual freedom of the pupil'<sup>[6]</sup>. The highly concentrated curriculum view believes that teachers should not make any judgments when formulating education policies and designing curriculum. Teachers should be operators or passive agents, technicians, and not experts, the only focus for teachers is how to teach<sup>[7]</sup>.

At the same time, the centralized national curriculum has also harmed student development. One of the purposes of a centralized national curriculum is to allow every student to receive the same education. However, to truly implement individual rights and to make everyone accept a common course, it is also necessary to consider the differences of students so that everyone can accept the course that suits them. The consequences of providing all students with the same course are apparent. For example, after the promulgation of the Education Reform Act of 1988 in the U.K., the rate of student absenteeism has increased significantly, and the overall development trend of student behavior has also deteriorated significantly<sup>[6]</sup>.

Furthermore, the centralized curriculum will inevitably lead to standardized assessments. Because the highly centralized curriculum adopts the 'aims-and-objectives' mode, the academic results of students are only determined by exams, such as the A level exam in the United Kingdom. In countries that adopt a centralized curriculum, teachers' classroom practices are increasingly standardized by these high-stakes testings; they use prepackaged, scripted curricula explicitly aimed at increasing the test scores of standardized tests pupils<sup>[8]</sup>, rather than focus on students personalized growth. Standardized tests have had even worse consequences.

*'Standardized tests thus literally objectify students by reducing them into decontextualized numerical objects for comparison. ....By reducing students to numbers, standardized testing creates the capacity to view students as things, as quantities apart from their human qualities' (8, p.38).*

### 2.2 Decentralized Curriculum

Comparative education scholar Mark Hanson argues that in the decentralized curriculum, 'responsibility and tasks are transferred from the central body to the local unites or school level'<sup>[9]</sup>. Thus, Hanson<sup>[10]</sup> and Bray<sup>[11]</sup> identify three basic kinds of decentralization in terms of

the degree to which the central state disperses its governing authority.

(1) Deconcentration (transfer of tasks and work but not authority).

(2) Delegation (transfer of decision-making authority from a superior to a subordinate level, but authority can be withdrawn by the center).

(3) Devolution (transfer of authority to an autonomous unit that can act independently without permission from the center).

## Advantages

It is believed that a degree of decentralization would enable schools to adapt to changes in their external environment and be more responsive to the needs of students and communities <sup>[12]</sup>.

Decentralization allows teachers to be involved in the curriculum development process, which allows for greater flexibility and better decision making, as teachers are more closely aligned with the issues in the current curriculum implementation process <sup>[13]</sup>. Teachers will put in more effort because it will be how their curriculum and strategic plans for curriculum development are implemented. From this perspective, a decentralized curriculum will promote teacher autonomy and contribute to professional development.

The decentralization view holds that by giving schools a certain amount of authority, teachers will, in turn, have corresponding rights to the curriculum <sup>[14]</sup>. They can develop curriculum adaption and school-based curriculum according to students' needs to help them achieve individualized growth. This is precisely in line with Kelly's view that education should be a process of individual development, which can only be facilitated by the provision of a curriculum tailored to the needs of each student, rather than by the planned imposition of the same program on all <sup>[6]</sup>.

## Problems

McGinn and Welsh <sup>[15]</sup> mentioned that successful implementation of curriculum decentralization requires both political support for the decentralization and the capability of those involved in the reform to carry it out. If either of these two conditions is not met, the implementation of curriculum decentralization will not achieve its best results. One aspect of the curriculum decentralization policy that has been widely questioned is that the central government has shifted responsibility to local governments and communities without giving adequate targeted support. In deprived areas, if the central government does not pro-

vide sufficient policy, financial and teacher development support, then local governments and schools would not have the resources and capacity to exercise their authority for curriculum development, the achievement of quality improvement and equity in education will be a mere empty phrase. According to the survey conducted by the World Bank in 2013 <sup>[16]</sup>, the decentralization of the curriculum has increased the overall enrollment in Brazil and Chile. However, it has not by itself eliminated inequalities between different income areas, and the quality of poor communities remains backward.

## 3. Teacher Professionalism and Teacher Autonomy

### 3.1 Definitions of Teacher Professionalism and Teacher Autonomy

In the educational context, definitions of teacher professionalism focus on teachers' professional qualifications such as 'being good at his/her job' <sup>[17,18]</sup>, 'fulfilling the highest standards' <sup>[19]</sup>, and 'achieving excellence' <sup>[20]</sup>. These dominant discourses in the field of education indicate that teacher professionalism is associated with improving the quality and standards of teachers' work. Phelps <sup>[21]</sup> believes professionalism is enhanced when teachers use excellence as a critical criterion for judging their actions and attitudes. However, there are still arguments about teaching is a semi-professional occupation because their autonomy is often under organizational control <sup>[22,23,20]</sup>.

Autonomy is one of the main focuses of professionalism's identity. Lieberman <sup>[24]</sup> state that the tasks of professionals are important, exclusive, and complex; therefore, professionals should have the freedom from external pressure for autonomy in decision making. Willner <sup>[25]</sup> argues that teachers' autonomy is based on collaborative decision-making and the freedom to make prescriptive professional choices about the services rendered to students. Fay <sup>[26]</sup> and Hanson <sup>[9]</sup> believe that teachers are qualified authorities in the teaching process and they have the autonomy to organize learning process as they choose.

### 3.2 Importance of Teacher Autonomy and Teacher Professionalism

The curriculum autonomy factor is logically consistent with teachers' identification with their profession <sup>[27,28]</sup>, particularly in relation to the authority in the selection of activities and materials, in making decisions about instructional planning and sequencing, and in reducing job stress. Teachers who perceive themselves as having control over the curriculum are less stressed <sup>[28]</sup>. Pearson and

Moomaw's <sup>[29]</sup> study also shows that as teacher autonomy increases, so does teacher empowerment and professional improvement.

The professional development of teachers is of vital importance to the improvement of the curriculum. According to Xu <sup>[30]</sup>, curriculum improvement, and improvement, to a certain extent, require internal support from teachers' continuous professional development. In curriculum practice, by participating in curriculum decision-making, teachers can not only re-examine their teaching practice from the perspective of student learning needs and their professional development, but also better understand and design educational objectives from the perspective of a coordinator, and gradually enhance their professionalism. In turn, the development of the teacher's internal professional structure and the enrichment of their professional knowledge will help them to better participate in curriculum decision-making and contribute to curriculum development.

### 3.3 Impacts of Centralization on Teacher Autonomy and Teacher Professionalism

Under a centralized curriculum system, the central government manages through hierarchical decision-making and control, with schools as agents of the government. Under this hierarchical model, teachers are dependent on the principal and the principal is dependent on the superintendents, teachers have no autonomy, let alone professional development.

Curriculum planning is done by administrators and specialists; teachers do not plan or evaluate their work, they simply execute it. In a centralized system of curriculum planning, teachers are not required to have high levels of knowledge and skills in learning theory and pedagogy, cognitive science and child development, curriculum, and assessment, as they may not make major decisions about these issues.

Centralized testing means a reduction in the professional status of teachers. Rather than adapting the provincial curriculum to local conditions or the needs of individual students, teachers are constrained by accurately covering the curriculum material that appears on the test. In a child-centered system, teachers must have considerable expertise and autonomy to diagnose and respond to individual needs. However, content-centered systems require only technical training to implement decisions already made by the central bureaucracy. The greater the degree of curriculum specificity imposed by external examinations, the more limited the teachers' need and demand for professional autonomy <sup>[31]</sup>.

## 4. Curriculum Development in China

### 4.1 Current Curriculum System in High School of China

Chinese current curriculum system consists of a national curriculum, local curriculum, and school-based curriculum. Based on guaranteeing and implementing the national curriculum, the state encourages localities to develop local curricula suitable for their regions and schools to develop school-based curricula that meet students' needs.

The National Curriculum is a centralized reflection of the nation's will and is a major factor in determining the quality of basic education in a country <sup>[30]</sup>. Thus, the national curriculum is uniform and compulsory. The implementation of China's national curriculum is carried out by the Chinese Ministry of Education (MoE), which formulates and promulgates curriculum management and development policies and curricular programs, the proportion and scope of various types of curricula, the system for the preparation, review and selection of teaching materials, and the development of curriculum standards or syllabi for compulsory basic education courses or core courses. The National Curriculum is nationally oriented, ensuring that it is accessible to all students, with an emphasis on universality. The MoE <sup>[31]</sup> specifies that the national curriculum should account for 80 to 84 percent of all school hours for students in high school and it covers only the main subjects and sets minimum standards as well as basic requirements <sup>[32]</sup>. In order to fill the gap, content not covered by the national curriculum is included in the local curriculum or school-based curriculum.

The local curriculum is tightly integrated with the local social, economic, social, and cultural development. The current local curriculum development emphasizes the use of local resources. At present, all provinces and autonomous regions offer local courses, most of which are designed to strengthen students' social, economic, and cultural understanding of their regions. School-based curriculum development is based on school resources and meets the individual development needs of students <sup>[30]</sup>. There are two forms of school-based curricula. One is the adaptation and innovation of the national and local curricula. The other is the school-designed curriculum, which is a distinctive new curriculum developed by the school.

Under such a curriculum, students will have a more abundant and more varied curriculum. For example, there may be various kinds of history courses in a high school in Changping District of Beijing. According to the MoE <sup>[31]</sup>, modern Chinese history is required as a compulsory course for students in Grade 10, with a minimum of two

classes per week and a total of at least 36 class hours. The Changping District Education Commission in Beijing has developed a compulsory Changping history course as one of the local curricula, which is taught for 20 hours per term. In the school-based curriculum, students also can take courses based on foreign textbooks such as American history, European history, world history, and historical and cultural courses, such as Beijing History Story, developed by teachers.

## 4.2 Decentralization in a Centralized Curriculum System

The authority of the central government continues to dominate the entire education system. However, China's education policy is also partially decentralized in a fully centralized curriculum system, as reflected in the following aspect.

Decentralization of education administration. Since 1995, the central government and the MoE began to allow their subordinate education authorities to delegate the management of education. The MoE is responsible for coordinating the management and development of education in China and formulating the general framework and master plan for curriculum development, personnel management, and resource coordination. Local governments and the education department manage regional school systems to implement national policies based on local conditions. At the same time, principals have been given more autonomy in school matters, such as teacher recruitment and training, coordination of school resources, and the management of schools assessment, maintenance of school-community relations. The organization of educational administration has given localities and schools some flexibility in tailoring schools to local conditions.

Some regions are allowed to develop their compulsory curricula and teaching materials. Due to their developed economies and strong traditions of education and research, provinces of Zhejiang, Shanghai, Guangdong and Sichuan are allowed to develop their curricula and textbooks. However, the autonomy of local curriculum and textbook design is limited by a rigorous review process. All locally designed curricula and teaching materials can only be put into use after the MoE has confirmed their conceptual content, academic quality, and suitability for classroom teaching<sup>[33]</sup>.

Since 2000, the MoE has authorized 16 provinces and cities to design their own College Entrance Examination(Gaokao) papers based on local curriculum content and actual teaching conditions<sup>[34]</sup>. Nationally administered tests are argued to be insensitive to most students' achievement and drag the curriculum down to the lowest

common denominator of basic skills<sup>[4]</sup>. Locally-designed papers provide greater consistency in the local teaching content, and the questions not only focus on the accumulation of knowledge but also pay more attention to the students' competency assessment. However, the questions in local-designed papers must conform to the national examination framework established by the MoE.

A school-based curriculum is also considered one of the hallmarks of a decentralized curriculum. The school-based curricula are developed by teachers and approved by the local education department. It seems as if the local education departments have real authority at the level of the school-based curriculum. In reality, however, local education department, schools and teachers must work within the policy framework set up by the central authority and subject to inspection by the Central Education Supervisory Group.

In general, all major policy decisions continue to be made centrally, but education services are provided locally. This arrangement simply meant shifting the workload of central officials to bureaucratic officials and teachers in the local level, and the local agents are not empowered to decide what to do and how to do it. In this sense, the decentralization in China's curriculum reform remains superficial. Measured against Hanson's<sup>[10]</sup> conceptual framework, decentralization in China's curriculum has only taken the form of deconcentration that does not involve any real transfer of power to the intermediate and basic levels.

## 5. Teacher Autonomy and Professionalism in the Current Curriculum System

From the above analysis, it is clear that schools and teachers are not given real curriculum power, and the overall improvement of teachers' autonomy and professional capacity is very limited. In provinces where they can design their curricula, the college entrance exams pay more attention to assessing students' comprehensive abilities, and teachers have more space to delve into teaching and curriculum design. Their autonomy and professionalism have developed to a certain extent. In most areas, however, teachers do not have the time or resources for curriculum development, and they end up de-professionalizing.

### 5.1 Improvement and Problems Regarding Teacher Professionalism and Teacher Autonomy

#### Improvement

Teacher autonomy in curriculum development is of great value. Kelly<sup>[6]</sup> argues that the most positive educa-



tional purpose is to increase teacher autonomy in curriculum development and to design the most effective curriculum; through these curricula, all children's capabilities and potential will be developed.

The current education policy gives teachers the right to exercise their autonomy as educators in curriculum implementation, curriculum reconstruction, and curriculum development. In the implementation of the national and local curricula, teachers can make full use of the local natural, social and human resources and perform various teaching activities creatively. In the development and implementation of the school-based curriculum, teachers can decide independently on the setting of curriculum objectives, the selection of curriculum resources, and curriculum arrangements; moreover, teachers also have the autonomy to evaluate the school-based curriculum<sup>[14]</sup>.

The increased autonomy of teachers will correspondingly contribute to their professional development. The process of redesigning the implementation of the national and local curricula is a process of inquiry. To expose teachers to new ideas is to give them new perspectives<sup>[35]</sup>. The results of the new curriculum and peer research can be used as teacher education elements for teacher growth. The exploration of new curriculum programs, syllabi, teaching materials, and research findings can be turned into opportunities for deeper teacher growth.

Besides, participation in the development of school-designed curricula can provide teachers with opportunities for enriching professional experiences that can contribute to their professional development. Firstly, participation in school-designed curriculum development can facilitate a change in teachers' roles and attitudes. In school-designed curriculum development, the role of teachers is not only as curriculum implementers but also as learners, curriculum designers, collaborators, and educators—a complex mix of teachers<sup>[36]</sup>. Secondly, involvement in curriculum development can help teachers improve their professional competencies. In participating in the process of designing curriculum development in schools, teachers must understand how the curriculum works and have the ability to develop curriculum resources, design curriculum, evaluate the quality of curriculum design in schools, and teach<sup>[37]</sup>.

## Problems

Studies show that the primary goal of decentralization in most areas of China has not been promoting teachers' autonomy and professional development<sup>[38]</sup>. This is due to several reasons. Firstly, some places do not have the conditions to develop a school-based curriculum. In schools in remote areas, it is impossible to develop a school-based curriculum due to their teachers, equipment, and other

limitations, and the creative implementation of national and local curricula is extremely strict<sup>[14]</sup>. Secondly, teachers lack professional knowledge of curriculum development and professional guidance, leading to a deadlock in curriculum development<sup>[39]</sup>. Finally, the main problem is that the standardized assessment has not changed and will not change shortly. Almost half of the provinces still focus mainly on examining students' knowledge rather than their overall ability, with nationally standardized question papers. As a result, most teachers' educational activities are still limited to teaching students the content of examinations. The authority that these teachers have been given to develop school-based curricula is not being realized<sup>[14]</sup>. There are even less autonomy and professionalism for teachers in terms of curriculum development.

## 5.2 Suggestions on Improving Teacher Autonomy and Professionalism

The writer suggests that teachers' autonomy and professional competence in curriculum development can be enhanced by increasing investment in education, increasing teachers' participation, and providing them with specific professional support, thereby improving the quality of education.

### Increasing educational investment

China's investment in education mainly relies on the financial support of local governments, compared to economically developed regions, the local fiscal revenue of economically less developed regions is relatively small, their investment in education is bound to be relatively inadequate, so this has led to some schools do not have sufficient teachers and teaching resources to ensure the curriculum development<sup>[14]</sup>. In order to ensure teachers' autonomy in curriculum development and to improve their professional competence, it is necessary to increase investment in education in high schools in economically less developed regions, optimize teacher allocation and ensure adequate teaching resources and teaching equipment. The development of the curriculum, the development of teachers, and the individual development of students can only be achieved if the school is given adequate external resources.

### Increasing teachers' participation in curriculum development

In the current curriculum system, teachers have a certain degree of autonomy in the creative implementation of the national and local curricula, as well as in the development of school-based curricula. With this in mind,



it is crucial to increase teachers' motivation to participate in curriculum development<sup>[40]</sup>. Teachers play a vital role in every aspect of the process, from the establishment of the curriculum team to the evaluation and revision of the curriculum, and the quality of the curriculum is ensured if they are able to participate deeply and actively. Schools should respect and recognize the main role of teachers in curriculum development, provide teachers with adequate curriculum resources, and encourage teachers to participate in curriculum exploration in a variety of ways actively.

## Providing teachers with professional support

Teacher training and mentoring by external experts are considered to be effective ways to enhance the professional competence of teachers and promote curriculum development. On the one hand, initial training courses should be provided to prepare teachers to take on the central role of curriculum development and, more importantly, they should be given adequate opportunities for in-service education so that they can acquire the new skills needed to innovate and gain a deeper understanding of broader educational issues<sup>[6]</sup>. On the other hand, teachers should be assisted by a wandering expert to develop the skills and techniques needed for proper and effective evaluation for curriculum development<sup>[6]</sup>. The expert's role is to provide teachers with expert advice and the detached appraisal they cannot provide themselves.

## Ongoing reform of the Gaokao

Since 2002, China has been working on the reform from the unified Gaokao to a comprehensive quality assessment in an attempt to incorporate the assessment of students' abilities into the university admission criteria<sup>[21]</sup>.

However, until today, the score-based approach to university admissions has remained unchanged<sup>[41]</sup>. Only by changing the criteria for university admissions from a score-only form of assessment to a comprehensive aptitude assessment, it is possible to fundamentally stimulate educational vitality, teachers' curriculum authority can be truly implemented, and teachers' professional capacity can be developed in the long run.

## References

- [1] Young, Michael F. D.. Knowledge and Control: New Directions for the Sociology of Education[M]. London: Collier-Macmillan, 1971.
- [2] Bray, M.. Centralization Versus Decentralization in Educational Administration: Regional Issues[J], Educational Policy, 1991, 5(4): 371-385.
- [3] Duhou, A.. School-Based Management[M]. United Nations Educational, Scientific and Cultural Organization. France,1999.
- [4] O'Day, A., Smith, S.. Systemic Reform and Educational Opportunity. In S. Fuhrman (Ed.), Designing coherent education policy: Improving the system[M]. San Francisco: Jossey-Bass,1993:250-312.
- [5] Kusumaningrum, E., Triwiyanto, T.. Review of centralization and decentralization approaches to curriculum development in Indonesia[J], International Journal of Academic Research, 2015.
- [6] Kelly, A.. The Curriculum: Theory and Practice[M]. London: SAGE Publications, 2009.
- [7] Holt, M. Judgment, Planning and Education Change[M], London: Paul Chapman Publishing,1987a.
- [8] Au, W.. Teaching under the New Taylorism: High-stakes Testing and the Standardization of the 21st Century Curriculum[J]. Journal of Curriculum Studies, 2011,43(1) : 25-45.
- [9] Hanson, M.. Decentralization and regionalization in educational administration: Comparisons of Venezuela, Colombia and Spain[J]. Comparative Education, 1998a, 25(1).
- [10] Hanson, M.. Strategies of Educational Decentralization: Key Questions and Core Issues. In C. Bjork (Ed.) Educational decentralization: Asian experience and conceptual contributions[M], New York, NY: Routledge, 2006:9-25.
- [11] Bray, M., 1999, 'Control of Education: Issues and Tensions in Centralization and Decentralization', in Arnone, R.F. and Torres, C.A. (Eds), Comparative Education: The Dialectic of the Global and the Local, Rowman & Littlefield, Lanham, MD.
- [12] Brennen, M. A. 2002. Centralization Versus Decentralization <http://www.soencouragement.org/centralizationvsdecentralization.html>.
- [13] Tan, C.. Dynamics of Change: Decentralized Centralism of Education in Singapore. Education Change, 2007, No. 8: 155-168.
- [14] Guan, C.. Factor Analysis of the Realization of Teachers' Professional Rights under school-based curriculum development[J], Journal of Educational Development, 2015, No.7.
- [15] McGinn, N. and Welsh, T., 1999. Decentralization of Education: Why, When, What and How[M]? Paris: UNESCO, IIEP.
- [16] World Bank 2013 Decentralization in education <http://www.ciesin.columbia.edu/decentralization/English/Issues/Education.html>.
- [17] Hoyle, E.. Teaching: Prestige, Status and Esteem[J]. Educational Management Administration and Lead-

- ership, 2001,29(2): 141.
- [18] Kennedy, A., 2007. Continuing Professional Development (CPD) Policy and the Discourse of Teacher Professionalism in Scotland[J]. *Research papers in Education*, 2009, 22(1).
- [19] Boyt, T., Lusch, R. F. ve Naylor, G.. The Role of Professionalism in Determining Job Satisfaction in professional Services: a Study of Marketing Researchers[J], *Journal of Service Research*, 2001, 3(4): 321-330.
- [20] David, C.. Professionalism and Ethics in Teaching[M]. London: Taylor & Francis Books Ltd, 2000.
- [21] MoE. 2002. Circular of the Ministry of Education on Actively Promoting the Reform of the Evaluation and Examination Systems in Primary and Secondary Schools. [http://www.moe.gov.cn/srcsite/A26/s7054/200212/t20021218\\_78509.html](http://www.moe.gov.cn/srcsite/A26/s7054/200212/t20021218_78509.html).
- [22] Etzioni, A.. The Semi-Professions and Their Organization[M]. New York: Free Press,1969.
- [23] Leiter, J.. The effects of school control structures on teacher perceptions of autonomy[M]. ERIC,1978.
- [24] Lieberman, M.. Education as a Profession[M], Englewood Cliffs, N.J.: Prentice Hall,1956.
- [25] Willner, G.. Images of the Future now: Autonomy, Professionalism, and Efficacy[D]. Fordham University,1990.
- [26] Fay, C., 1990. Teaching and Leading: the Teacher's Voice. Boston, MA: Annual Meeting of the American Education Research Association. (ERIC Document Reproduction Services No. ED 206 096).
- [27] Ingersoll, R.M.. The Status of Teaching as a Profession: 1990-91, Washington, DC: U.S. Department of Education, NCES 1997:97-104.
- [28] Khmelkov, V. T.. Developing professionalism: Effects of school workplace organization on novice teachers' sense of responsibility and efficacy. Dissertation Abstracts International[C], University of Notre Dame, 2000: 61 (04):1639.
- [29] Pearson, C., Moomaw, W.. The Relationship between Teacher Autonomy and Stress, Work Satisfaction, Empowerment, and Professionalism[J]. *Educational Research Quarterly*, 2005, 29(1).
- [30] Xu, J.. National curriculum, Local curriculum and School-based Curriculum: Meanings, Aims and Positions[J]. *Educational Research*, 2005, No.8. Skilbeck, M.. Readings in School-Based Curriculum Development[M]. London: P. Chapman, 1988.
- [31] MoE. 2001. General High School Curriculum Plan. <https://www.docin.com/p-90569267.html>
- [32] Li, H.. Different Functions of National Curriculum, Local Curriculum and School-Based Curriculum in Education[J]. *New Campus*, 2011, No. 9.
- [33] Cheng, Y.. School Effectiveness and School-Based Management[M]. Bristol. PA: Falmer Press,1996.
- [34] MoE. 2008. Autonomous examination paper design for Gaokao. <https://learning.sohu.com/20081028/n260296530.shtml>.
- [35] Cox, H., Wood, R.. Organizational Structure and Professional Alienation: The Case of Public School Teachers[J]. *Peabody Journal of Education*, 1980, No. 1:1-6.
- [36] Slavit, D., Nelson, T., and Lesseig, K.. The Teachers' Role in Developing, opening, and Nurturing an Inclusive STEM-focused School[J]. *International Journal of STEM Education*, 2016, 3(1).
- [37] Cui, Y., Xia, Y.. School-based Curriculum Development in China[J]. *Peking University Education Review*, 2004:2 (3): 34.
- [38] Gouya, Z., Ghadaksaz L.. New Interpretation of Centralization and Decentralization in Iran[J]. *Curriculum Studies Quarterly*, 2008:1 (4).
- [39] Ren, J.. Critique and Transcendence of Models of Primary and Secondary school-based curriculum development[J]. *Basic Education Curriculum*,2020, No.2.
- [40] Qi, T.. Between Centralization and Decentralization: Changed Curriculum Governance in Chinese Education after 1986[D]. Unpublished Doctoral Dissertation , University of Tennessee, 2011.
- [41] Zhang, X..Research on the Comprehensive Quality Evaluation of Students in General High Schools under the Background of New Curriculum[J]. *Education and Culture Forum*, 2013, No. 2.

# Research Progress of College Students' Learning Burnout

**Yongmei Hou\***

Department of Psychology, School of Humanities and Management, Guangdong Medical University, Dongguan, Guangdong, 523808, China

## ARTICLE INFO

### Article history

Received: 3 August 2021

Revised: 10 August 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### Keywords:

College students

Learning burnout

Influencing factors

## ABSTRACT

Learning burnout is a common psychological problem of college students, which seriously affects college students' academic achievement and physical and mental health, wastes educational resources, and brings various hidden dangers to talent growth and social development. Starting from the definition of the concept of learning burnout, this paper introduces the dimension composition and measurement tools of college students' learning burnout, analyzes the influencing factors of college students' learning burnout, and puts forward the corresponding research prospects in view of the shortcomings of previous research.

## 1. Overview of Learning Burnout

### 1.1 Concept of Learning Burnout

The concept of “burnout” originated from the research on personnel (occupation) burnout carried out by clinical psychologist Freudenberger<sup>[1]</sup> in 1974, which refers to the phenomena of fatigue, boredom, job involvement and low sense of achievement. Maslach<sup>[2]</sup> further defined job burnout as an attitude of alienation, ridicule or negation, which is a comprehensive expression of exhaustion, depersonalization and negative view of oneself. Some scholars define burnout from three aspects such as cognition, behavior and emotion and believe that due to the lack of value reinforcement, result control or personal ability, individuals do not get the expected reward and corresponding punishment. Such a state is job burnout.

The definition of learning burnout is derived from

job burnout, also known as academic burnout. Pines and Katry (1981) found that the learning burnout of college students was higher than the job burnout of helpers, and put forward the concept of “Student Burnout” for the first time, which refers to the energy consumption of students due to long-term academic pressure, the gradual disappearance of enthusiasm for learning and school activities, the indifference and alienation from others, as well as such a phenomenon that students have a negative attitude towards leaning because academic performances are not as good as expected<sup>[3]</sup>. Schaufeli et al. (2002) defined learning burnout as students' emotional exhaustion, alienation from their studies and low sense of achievement due to excessive learning needs<sup>[4]</sup>. Zhang Zhiyao<sup>[5]</sup>, a Taiwanese scholar, defined learning burnout as the phenomenon of emotional exhaustion, depersonalization and low sense of personal achievement caused by academic pressure, academic load or other personal psychological factors in

*\*Corresponding Author:*

Yongmei Hou,

Department of Psychology, School of Humanities and Management, Guangdong Medical University, Dongguan, Guangdong, 523808, China;

Email: 2184456621@qq.com

the learning process. Yang Huizhen, another Taiwanese scholar, believes that “learning scorching” can better express the original meaning of “burnout”<sup>[6]</sup>, that is, the obvious decline of mental status in the learning process. Lian Rong, a Chinese scholar, believes that learning burnout reflects the negative learning psychological phenomenon of college students, which means that when students have no interest in learning or lack motivation but have to study, they will feel tired, bored, depressed and frustrated, resulting in a series of inappropriate behaviors of avoiding learning<sup>[7]</sup>.

To sum up, although there is no final conclusion, many scholars agree that learning burnout refers to the negative state of cognitive, emotional and behavioral deviation in students’ learning due to various factors (especially learning pressure) in long-term learning.

## 1.2 Structure of Learning Burnout

### 1.2.1 Three-dimensional Theory

This is a theoretical conception advocated by most scholars, among which Lian Rong’s three-dimensional theory<sup>[7]</sup> is the most commonly used in China, that is, learning burnout is composed of the following three aspects (dimensions): (1) **Emotional exhaustion**. This is a symptom at the psychological level. Due to some exaggerated requirements in learning, students show an overload and exhausted mood, and have a strong sense of boredom and exclusion from learning. They are easy to be nervous, tired and inattentive during learning, and may drop out of school in serious cases. (2) **Depersonalization**. Individuals respond to learning and others in a cynical and unemotional way and attitude, which is manifested in perfunctory learning, avoidance of learning and withdrawal behavior. (3) **Low sense of achievement**. Because students can’t correctly deal with and alleviate the pressure of learning, they experience continuous frustration and depression, question their ability, reduce self-evaluation, and even deny themselves completely.

### 1.2.2 Two-dimensional Theory

Wei Ting<sup>[8]</sup> believes that burnout mainly has two components: natural dimension (physical exhaustion) and social dimension (spiritual exhaustion), and also believes that compulsory learning can better summarize the origin of learning burnout.

### 1.2.3 Single-dimensional Theory

Some scholars believe that among the “so-called” three dimensions of learning burnout, only “emotional exhaus-

tion” is necessary, and the other two dimensions are incidental: De-personalization is an individual’s way to deal with emotional exhaustion; Low sense of achievement is the consequence of emotional exhaustion<sup>[3]</sup>. The representative of single-dimensional theory is the research of Pines<sup>[3]</sup> and Shirom<sup>[9]</sup>.

## 2. Measurement of Learning Burnout

Over the years, most studies on learning burnout have been carried out based on the theoretical basis of job burnout. Most of the scales used to evaluate learning burnout are the revised version of MBI, such as MBI - Form ED. (Maslach Burnout Inventory - Educators Survey), the originally used in learning environment burnout scale and MBI-SS (Maslach Burnout Inventory-Student Survey) developed by Schaufeli et al. They only slightly change the words about the research object, working environment and background in MBI, does not significantly change the definition of the structure and dimensions of MBI, does not consider enough students’ learning situation, and there is also some problems of cultural universality. Gold et al. Revised MBI and developed MBI-CSS (Maslach Burnout Inventory-College Student Survey) for normal students<sup>[10]</sup>. Yang Huizhen (1998) revised MBI-GS to measure the learning burnout of college students in Taiwan by changing its location, object and nature of work<sup>[6]</sup>. Lian Rong modified Maslach’s three-dimensional theory according to China’s national conditions, and defined the structural dimension of learning burnout as low mood, improper behavior and low sense of achievement. On this basis, the “Learning Burnout Questionnaire for College Students (LBQCS)” is developed and widely used in China. Lian Rong’s research provides a measurement tool in line with national conditions for the study of learning burnout in China. However, Lian Rong’s definition of “learning burnout” is biased, and the validity of the questionnaire is still in doubt.

Pines’ BM (Burnout Measure) can be said to be a unique burnout scale. According to his single-dimensional theory, Pines retained the dimension of emotional exhaustion and combined the other two dimensions of depersonalization and low sense of achievement to obtain BM. BM is a diagnostic tool for the degree of self-burnout including 21 items. The scores of 21 items in BM are accumulated to obtain a simple total burnout score. However, Pines also assumes that BM can measure three different types of exhaustion (physical exhaustion, emotional exhaustion and psychological exhaustion), and the 21 items are allocated to these three types of exhaustion according to their definition. In this way, BM is also like a multidimensional questionnaire. Pines believes that burnout can



occur in any occupation and any population, so BM is not designed for any specific occupational group such as helper with the meaning of 21 items very broad<sup>[3]</sup>. In other words, BM can also be used to evaluate learning burnout. However, there is still a lack of research on verifying the factor structure of BM.

### 3. The Harm of Learning Burnout

Learning burnout is a negative learning phenomenon, which will cause losses to students themselves, families, society and other aspects: From the perspective of students themselves, learning burnout makes them reduce learning investment<sup>[11]</sup>, waste great learning opportunities, and affect their academic development<sup>[12]</sup> and physical and mental health<sup>[13]</sup>. For schools, if students' learning burnout is widespread, it will inevitably lead to the deterioration of study style and the decline of teaching quality<sup>[14]</sup>. From the perspective of social employment, if employees bring burnout to work, it is easy to lead to loose discipline, slow work and low production efficiency<sup>[15]</sup>.

### 4. The Incidence of College Students' Learning Burnout

The incidence of learning burnout of foreign and Chinese college students are 9.9-40.3%<sup>[16,17]</sup> and 24.8-89.3%<sup>[18-21]</sup>, respectively, and the incidence of medium and high learning burnout is 25-50%<sup>[16-21]</sup>. Poor students, normal college students, medical students, junior college students and independent-college students are more prone to learning burnout<sup>[18-21]</sup>. In recent years, with the promotion of college enrollment expansion in China, higher education gradually tends to be popular, the competitive pressure faced by college students is significantly increased. With the learning motivation, major interest and learning enthusiasm significantly reduced, the incidence of learning burnout is increasing year by year, and the degree of learning burnout is becoming more and more serious<sup>[22]</sup>.

### 5. Influencing Factors of College Students' Learning Burnout

#### 5.1 Social and Environmental Factors

##### 5.1.1 Background of Times

With the deepening of market economy and the rapid development of science and technology, economic globalization has become an inevitable trend in the development of today's world. It not only brings many opportunities to higher education, but also makes higher education face many shocks and challenges<sup>[23]</sup>. On one hand, with the global flow of economic factors, people have improved

their cultural cultivation and updated their backward ideas and technologies in the increasingly expanding and frequent ideological and cultural exchanges. On the other hand, economic globalization has also brought bad foreign ideas and values. At present, many college students regard the pursuit of Western lifestyle and cultural ideas as a symbol of fashion and avant-garde. Money supremacy, money worship, hedonism and extreme individualism are spreading among them. In particular, China is still in the process of social transformation, people's values, ideals and beliefs are in the process of blind and fickle, and negative attitudes such as impetuosity and hesitation are common among students. At the same time, the spiritual power of Chinese traditional virtues such as hard work, diligence and progress has been weakened or even abandoned indiscriminately<sup>[24]</sup>.

##### 5.1.2 Bad Social Atmosphere

A good atmosphere of respecting knowledge and intellectuals has not really formed in the whole society, and the social status and economic treatment of intellectuals still need to be improved. As the job selection mechanism of college students is not perfect, unreasonable and unfair phenomena often occur in employment. These phenomena lead to the idea of "learning is useless" for many college students<sup>[25,26]</sup>, and then make them treat learning negatively.

#### 5.2 School Factors

First, due to the influence of enrollment expansion, the teaching resources of many colleges and universities can not be updated and increased in time to meet the needs of students. Students have fewer opportunities to participate in experiments and skill operations, fewer channels to participate in academic activities, less satisfaction of the thirst for knowledge and less full play of creative potential, resulting in weak interest in learning<sup>[14]</sup>. Second, the learning adaptability of college students is insufficient. The expansion of enrollment has significantly reduced the quality of college students, while college learning is becoming more and more modern in terms of content, methods and means, and the difficulty is gradually increasing, so it is difficult for students to adapt; At the same time, the tuition and living expenses of the university have caused great pressure on many students. In addition, the employment competition has intensified year by year, and employers pay more and more attention to the practical ability of candidates. Therefore, college students tend to believe that the value of theoretical learning in university is not great<sup>[25]</sup>. Third, the management system of Chinese universities restricts students' learning freedom. It is main-



ly reflected in the lack of autonomy in curriculum learning, the difficulty for students to participate in the teaching process, and the lack of opportunities to participate in the formulation of teaching plans and decisions. Previous studies have showed that the lack of learning autonomy is one of the direct causes of college students' learning burnout<sup>[27]</sup>. Fourth, the specialty setting of some schools is divorced from social needs, the curriculum setting is not reasonable, the teaching are boring and monotonous, the teaching content is old and disconnected from the discipline development, which affects the learning interest<sup>[28]</sup>. Fifth, the way to investigate the learning effect is single and the means are rigid: They only pay attention to the memory of knowledge and ignore the mastery and application of skills, which makes students happy to "cram for the Buddha's feet temporarily". They usually don't need to study hard and can pass the exam by memorizing their notes one week before the exam<sup>[28]</sup>. Sixth, the campus culture is monotonous<sup>[29]</sup>, and students' body and emotion can not be effectively adjusted, which is easy to produce psychological fatigue. Seventh, teachers rarely have direct contact with and understanding of college students, and rarely motivate and praise them. Over time, those students with poor foundation are easy to lose interest in learning because of "insufficient reward"<sup>[30]</sup>, and even have a sense of fear of learning because of poor performance, resulting in burnout. Eighth, there is an interaction between teachers' job burnout and students' learning burnout, and the two strengthen each other<sup>[31]</sup>.

### 5.3 Family Factors

The factors of father's and mother's emotional warmth of the Parental Rearing Style Questionnaire (EMBU) are significantly negatively correlated with the total score of Learning Burnout Questionnaire for College Students (LBQCS), and the factors of father's and mother's rejection, as well as the factor of mother overprotection of EMBU are significantly positively correlated with the total score of LBQCS<sup>[32]</sup>. The reason may be: If parents set learning goals for their children that are divorced from reality or against their children's wishes, they will increase their children's pressure and make children hate learning; On the contrary, if parents are indifferent to their children's learning, or their requirements are too low, their children's learning motivation will be frustrated.

### 5.4 Social Support

There is a significant negative correlation between the level of social support and learning burnout. The more social support students get, the less emotional exhaustion

and dehumanization they experience, and the higher their sense of personal achievement. The social support related to college students mainly comes from school, family and society. The relationships between social support from different sources and the three dimensions of Learning Burnout Scale are different, and there are still some debates on the impact mechanism of social support on learning burnout<sup>[5,33-35]</sup>.

## 5.5 Individual Factors

### 5.5.1 Demographic Variables

Demographic variables commonly include gender, grade, self-rated academic achievement, physical activity, only child or not, major, school type, origin, family economic status, stressful life events, etc.<sup>[14,16,25,26,28,36-39]</sup>. No unanimous conclusion has been reached on the role of many of the above factors (such as gender, grade, only child or not, origin, etc.), but it is generally believed that there are complex interactions between them<sup>[28,36]</sup>.

### 5.5.2 Individual Psychosocial Factors

#### (1) Personality and behavior characteristics

Personality and behavior characteristics are the most important internal causes of learning burnout. Students who are more prone to learning burnout usually have following factors such as external control belief<sup>[5]</sup>, incorrect attribution style<sup>[23]</sup>, low self-esteem<sup>[35]</sup>, low psychological resilience<sup>[20,39]</sup>, low optimism<sup>[12]</sup>, low core self-evaluation<sup>[40]</sup>, low psychological capital<sup>[41,42]</sup>, low achievement motivation<sup>[42]</sup>, low personal growth initiative<sup>[43]</sup>, low emotional regulation ability<sup>[38]</sup>, poor time management<sup>[20]</sup>, low academic self-efficacy<sup>[20,35]</sup>, low self differentiation<sup>[44]</sup>, high self handicapping<sup>[44]</sup>, non-adaptive perfectionism<sup>[45]</sup> and non controlled coping style<sup>[12,18,20]</sup>.

#### (2) Interpersonal disorder

Interpersonal conflict will affect personal self-evaluation and learning attitude. At the same time, people often experience bad emotions such as frustration and disappointment in interpersonal conflict. Poor interpersonal relationship will even reduce social support. All the above situations may lead to the parties' behavior of avoiding learning. Previous studies have shown that self-rated teacher-student relationship negatively predicts learning burnout<sup>[37]</sup>, and the total explanation rate of self-esteem, conflict, intimacy and avoidance in the Teacher-Student Relationship Questionnaire to learning burnout is 41.6%<sup>[46]</sup>.

### (3) Bad mood

Anxiety has a significant positive predictive effect on the total score and the scores of all dimensions of the Learning Burnout Scale <sup>[27]</sup>. Happiness is a negative predictor of the total score and each dimension score of Learning Burnout Scale <sup>[13]</sup>.

### (4) Learning psychological factors

It can be divided into two categories: **Risk factors.** Among them, learning load is the most important teaching variable. The results of most studies show that there is a high positive correlation between task volume and duration and burnout. Task overload will lead to individual burnout <sup>[16,23,34,47]</sup>, which has a particularly significant impact on the two dimensions of emotional exhaustion and dehumanization. Academic pressure related to teaching style is another positive predictor of learning burnout: Academic pressure related to teaching attitude positively predicts emotional exhaustion, and academic pressure related to teaching behavior positively predicts emotional exhaustion, depersonalization and low sense of achievement <sup>[48]</sup>; Achievement motivation to avoid failure <sup>[49]</sup> positively predicts learning burnout: College students who tend to use achievement motivation to avoid failure are more likely to feel depressed and afraid because of some inevitable failures in learning, resulting in learning burnout. **Protective factors.** Professional commitment <sup>[7]</sup>, learning adaptability <sup>[39]</sup>, classroom psychological contract <sup>[50]</sup>, professional satisfaction <sup>[50]</sup>, achievement motivation for success <sup>[49]</sup>, learning self-control <sup>[47]</sup>, learning strategies <sup>[51]</sup>, fitness between major and professional preference <sup>[52]</sup>, learning flexibility and involvement <sup>[53]</sup>, meta-cognitive ability <sup>[28]</sup> and other factors negatively predict and inhibit the generation of learning burnout.

## 6. Research Prospect

### 6.1 Weak Basic Theoretical Research

Most of the learning burnout theories involved in the previous research are derived from Western research results before 1980 and there are few original and localized research results, which can't meet the current situation. There are still many disputes on the concept, characteristics and dimension composition of learning burnout.

### 6.2 Measuring Tools to be Improved

At present, the scales for evaluating learning burnout (including foreign and domestic) have various deficiencies such as simply applying the content or method of the job burnout scale, defining dimensions unclearly and unre-

sonably, as well as low reliability or validity.

### 6.3 Insufficient Attention to the Role of Group Motivation

Previous studies involved a wide range of influencing factors, including external factors (including social, school and family factors) and personal factors (such as demographic factors, personality and behavior characteristics, emotional state, learning psychological and interpersonal relationship factors). However, they all ignore the role of college students' peer groups. Peers and peer groups are extremely important to the psychological and social development of college students, and their importance even exceeds that of parents, families and teachers.

### 6.4 Insufficient Attention to Comprehensive Effect of Multiple Influencing Factors

Previous studies focused on the analysis of the role of a single variable or a limited number of variables (such as demographic, psychosocial and teaching variables), mainly on the main effect of a variable or the interaction effect of two or three variables, which make the conclusions scattered and one-sided, and fail to integrate many variables to reveal the internal mechanism of learning burnout from an overall perspective. So they have little significance in the diagnosis and intervention of learning burnout.

### 6.5 There are Few Studies on Intervention Methods and Effect Evaluation

Previous studies mostly focus on the causes, structure and influencing factors of learning burnout, and there are few studies on the intervention means. On the other hand, studies on the countermeasures are mostly limited to theoretical analysis, less in-depth and practical empirical intervention studies, and less evaluation studies of the intervention effect.

## References

- [1] Freudenber HJ, Richelson G. Burnout: The-high cost of & high achievement [M]. Garden City, NY: Doubleday, 1980.
- [2] Maslach C, Leiter MP. The truth about Burnout [M]. San Francisco, CA: Jossey-Bass Publishers, 1997.
- [3] Pines A, Kafry D. ERIC Document Reproduction Service No. ED192210 [R]. Honolulu, Hawaii: Tedium in College, Paper Presented at the Western Psychological Association Meeting, 1980.
- [4] Schaufeli WB, Martinez IM, Pinto AM, et al. Burnout and engagement in university students: A

- cross-national study [J]. *Journal of Cross - Cultural Psychology*, 2002, 33: 464-481.
- [5] Zhang Zhiyao. Study on the relationship between college students' internal and external control beliefs, social support and learning burnout [D]. Counseling Institute of Zhanghua Normal University, 1989, 07.
- [6] Yang Huizhen. Research on the influencing factors of learning burnout and computer learning effectiveness among students majoring in asset-management [D]. National Central University of Taiwan, 1998, 06.
- [7] Lian Rong, Yang Lixian, Wu Lanhua. The relationship between college students' professional commitment and learning burnout, and develop scale [J]. *Acta Psychologica Sinica*, 2005, 37(5): 632-636.
- [8] Wei Ting. Preliminary study on learning burnout among college students [D]. Hefei University of Technology, 2007, 06.
- [9] Shirom A, Ezrachi Y. On the discriminant validity of burnout, depression and anxiety: A re-examination of the burnout measure [J]. *Anxiety, stress & coping*, 2003, 16(1): 83-97.
- [10] Gold Y, Bachelor P, Michael WB. The dimensionality of a modified form of the Maslach Burnout Inventory for university students in a teacher- training program [J]. *Educational and Psychological Measurement*, 1989, 49: 549.
- [11] Dyrbe LN, Massie FS, Eacker A, et al. Relationship between burnout and professional conduct and attitudes among USA medical students. *JAMA*, 2010, 304: 1173-1180.
- [12] Carmen Vizoso, Olga Arias-Gundin, Celestino Rodriguez. Exploring coping and optimism as predictors of academic burnout and performance among university students [J]. *Educational Psychology*, 2019, 39(6): 768-783.
- [13] Zhang Fengmei, Ma Cuili, Wang Shuyun. Effects of learning burnout and well-being on smartphone addiction among college students in the era of mobile Internet [J]. *Journal of Shandong University of Technology (SOCIAL SCIENCE EDITION)*, 2020, 36(6): 102-106.
- [14] Sun Jianrong. Analysis of college students' learning burnout from the perspective of educational psychology [J]. *Shanxi Education (Higher Education)*, 2018, (5): 74-76.
- [15] Zhou Jianming. Research on the relationship between knowledge learning burnout, entrepreneurial vigilance and entrepreneurial performance [J]. *Journal of Hubei University of Economics (HUMANITIES AND SOCIAL SCIENCES EDITION)*, 2014, 11(8): 174- 178.
- [16] Seo, J.-H., Kim, H.-J., Kim,B.-J., et al. Educational and relational stressors associated with burnout in Korean medical students [J]. *Psychiatry Investigation*, 2015, (12): 451-458.
- [17] Cecil J, McHale C, Hart J, et al. Behaviour and burnout in medical students [J]. *Medical Education Online*, 2014, 19(1):1-9.
- [18] Li Jun, Yin Liqin, Liu Xiaoming. The impact of core self-evaluation on learning burnout of college students majoring in Physical Education: The mediating role of coping styles [J]. *Sports Science and Technology*, 2014, 36 (3): 94-96.
- [19] Qian Kangjie, Yin Keli, Zhang Lirong. Prediction of learning burnout on positive and negative psychological status of college students [J]. *Chinese Journal of Mental Health*, 2015, 29(3): 236-238.
- [20] Hou Yongmei, Hu Peicheng, Wang Yiyang. The impact of psychological resilience on medical students' learning burnout: the mediating role of coping styles [J]. *Psychological Progress*, 2017, 7(7): 845-851.
- [21] Hou Yongmei, Yuan Miner. Relationship between time management disposition and learning burnout among undergraduates in medical university: Mediating effect of academic self-efficacy [J]. *Advances in Social Science, Education and Humanities Research*, 2019, 315: 293-297.
- [22] Yu Xinyue, Yin mengyan, Zhao Yafei, et al. A cross-temporal meta-analysis of changes in Chinese college students' learning burnout [J]. *Psychology: Techniques and Applications*, 2020, 8(2): 74-83.
- [23] Deary IJ, Watson R, Hogston R. A longitudinal cohort study of burnout and attrition in nursing students [J]. *Journal of Advanced Nursing*, 2003, 43(1): 71-81.
- [24] Li Xiaoman. Problems and countermeasures of network ideological and political education in colleges and universities in the era of economic globalization [J]. *Marketing Circle*, 2020, (42): 65-66.
- [25] Huang Weiping, Li Qian. Causes and countermeasures of learning burnout among college students [J]. *Research on Ideological Education*, 2007, (4): 54-55.
- [26] Yi Weijing, Liu Bing. Analysis on the causes and countermeasures of college students' learning burnout [J]. *Modern Enterprise Education*, 2008, (12): 238-239.
- [27] Branko Slivar. The syndrome of burnout, self-image, and anxiety with grammar school students [J]. *Horizons of Psychology*, 2001, 10(2): 21- 32.
- [28] Li Hongyan. Exploring the causes of college students' learning burnout from the perspective of psychology [J]. *Educational Observation*, 2020, 9 (17):

92-94.

- [29] Raimundo Aguayo, Gustavo R. Cañadas, Latifa Assbaa-Kaddouri, et al. A risk profile of sociodemographic factors in the onset of academic burnout syndrome in a sample of university students [J]. *International Journal of Environmental Research and Public Health*, 2019, (16): 707-716.
- [30] Cooper CL. *Theory of organizational stress* [C]. London: Oxford University Press, 2001: 68- 85.
- [31] Zheng Huiqing, Lou Rengong. Interaction and prevention of burnout: Reflections on burnout in college English teaching [J]. *Heilongjiang Higher Education Research*, 2006, (8): 173-174.
- [32] Ding Yuanyuan, Chen Ying. Research on college students' learning burnout and parental rearing styles [J]. *Chinese Electric Power Education*, 2011, (29): 180-181.
- [33] Pang Zhihui, You Zhiqi, Zhou Zongkui, et al. The relationship between social support and learning burnout among college students: The mediating role of coping styles [J]. *Chinese Journal of Clinical Psychology*, 2010, 18(5): 654-657.
- [34] Liu Luo, Li Meiyi, Ou Xinlu, et al. Research on the relationship between positive psychological capital, perceived social support and learning burnout of college students in local universities [J]. *Contemporary Educational Practice and Teaching Research*, 2020, (14): 61-62.
- [35] Zhao Junjie, He Ailin, Zhu Haijuan. Research on the relationship between college students' academic self-efficacy, self-esteem, perceived social support and learning burnout [J]. *Career and Health*, 2020, 36(8): 1120-1123.
- [36] Tang Li. Investigation on grade differences of learning burnout among college students [J]. *Health Vocational Education*, 2019, 37 (21): 131-133.
- [37] Chen Yanmei, Hao Zongji. Study on the correlation between physical activity volume and learning burnout of college students [J]. *Contemporary Sports Science and Technology*, 2020, 10 (7): 84-85.
- [38] Liu Yiting, Ye Baojuan, Yang Qiang. The impact of stressful life events on college students' learning burnout: Chain mediation effect analysis [J]. *Chinese Journal of Clinical Psychology*, 2019, 27 (4): 782-784.
- [39] Cui Rui. The impact of psychological resilience and learning adaptation on learning burnout among college students [J]. *Modern Communication*, 2021, (8): 163-166.
- [40] Christopher R. Leupold, Erika C. Lopina, Julianne Erickson. Examining the effects of core self-evaluations and perceived organizational support on academic burnout among undergraduate students [J]. *Psychological Reports*, 2020, 123(4):1260-1281.
- [41] Wang Jiankun, Chen Jian, Hao Xiujuan, et al. The impact of college students' learning burnout on life satisfaction -- Mediating role of perceived social support and psychological capital [J]. *Chinese Journal of Mental Health*, 2018, 32(6): 526-530.
- [42] Chang Xufang. The relationship between college students' achievement motivation and learning burnout --- The mediating effect of core self-evaluation [J]. *Educational Observation*, 2019, 8(35): 137-139 + 130.
- [43] Deng Xuanmei. Research on the relationship between college students' personal growth initiative and learning burnout [J]. *Journal of Wenshan University*, 2019, 32(4): 104-108.
- [44] Song Guangwen, Yang Mengtian. Relationship between college students' self differentiation and learning burnout: The mediating effect of self handicapping [J]. *Heilongjiang Higher Education Research*, 2018, (2): 84-88.
- [45] Li Xueyue, Yang Xiuzhen. A study on the relationship between adaptive, maladaptive perfectionism and academic burnout among university students: The mediating effects of internal locus of control and self-encouragement [J]. *Korean Journal of Youth Studies*, 2019, 26(4): 85-111.
- [46] Wu Shuiyan, Li Huiyi, Peng Rong, et al. Mediating effect of self-esteem on the relationship between teacher-student relationship and learning burnout among college students [J]. *China School Health*, 2010, 31 (8): 939-941.
- [47] Qin Pengfei, Zhao Shouying, Li Dalin. The impact of stress perception on college students' mobile phone addiction: Sequential mediating effects of self-control and learning burnout [J]. *Journal of Psychological Science*, 2020, 43 (5): 1111-1116.
- [48] Xin Yudan. A study on effect of academic achievement pressure by professor on academic burnout with moderating effect on sense of self-control: Focused on female university students majoring in airline service [J]. *Journal of Tourism & Leisure Research*, 2020, 32(1): 423-442.
- [49] Zou Yuanyuan. Research on the relationship between college students' achievement motivation and learning burnout [J]. *Value Engineering*, 2011, 30(3): 153-144.
- [50] Yang Lijun. Research on the relationship between college students' classroom psychological contract, learning burnout and professional learning satisfaction

- tion [J]. *Journal of Heilongjiang Institute of Teacher Development*, 2021, 40(6): 109-111.
- [51] Liu Jiafu. Research on the relationship between college students' learning strategies, self-efficacy and learning burnout -- A questionnaire survey of college students from four universities in Western China [J]. *Journal of Western*, 2021, (8): 24-27.
- [52] Li Juan, Du Rongxia, Yang Peng, et al. The relationship between professional preference fit and learning burnout of college students [J]. *Journal of Shandong Institute of Agricultural Engineering*, 2018, 35(1): 161-166.
- [53] Neumann Y, Neumann EF, Reichel A. Determinants and consequences of student' burnout in universities [J]. *Journal of Higher Education*, 1990, 61: 20-31.



# The Immutability of Online Course in Art Education

Jie Fan\*

Department of Multimedia Art Design, Beijing Union University, Beijing, 100101, China

## ARTICLE INFO

### *Article history*

Received: 3 August 2021

Revised: 10 August 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### *Keywords:*

Art online teaching

Immutability

Semi observation

## ABSTRACT

The signifier and signified of symbol representation in art works can generate and reflect reality. However, it can never produce the absolute truth. This paper mainly discusses the relationship between immutability with arbitrariness, sociality, and continuity in art education, both online and in outline. Overall, it is recommended that practical art teaching should be guided by artistic achievements. In addition, we clarify immutability of network teaching mode in art education, and recommend exploration of conscious, independent and self-discipline modes.

## 1. Introduction

The art of online teaching from home, has become the norm during this period. Consequently, focus has shifted on how to improve this art. When compared to face-to-face teaching methods, network art education requires more conscious, autonomous and self-disciplined recipients, to ensure creation of spiritual works, and awaken another soul through the power of spiritual nourishment. This has always been the basis of research on the immutability of art education. However, this has not received much attention from educators. There is a need, therefore, to perform art training of self-consciousness, autonomy and self-discipline in the network art teaching, and clarify signifier and signified of art works. Further research on the immutability of University art education does not exclude the generation and concept of change.

## 2. The Relationship between Immutability and Arbitrariness

In college art education, most students inherit learning of art symbol elements and the imitative learning of technical effect symbols. However, coherence between these symbols remains a challenge. In the past paintings, such as logo design works, a signifier and the signified are closely related.

However, arbitrariness is evident in the relationship between the signifier and signified, such as in part of the so-called "art" in modern and contemporary art works. Specifically, this relationship is "irrefutable", and subsequently creates certain impacts on the direction of "meaningful expression" advocated by educators during teaching. It seems like the more arbitrary the work, the more creative genius. In this paper, we suggest that the nature of art should not be judged from the art's review perspective.

*\*Corresponding Author:*

Jie Fan,

Department of Multimedia Art Design, Beijing Union University, Beijing, 100101, China;

Email: [wtfanjie@buu.edu.cn](mailto:wtfanjie@buu.edu.cn)

Instead, the art's core elements should be carefully observed at the macro level, and the constituent elements of actual departments analyzed from the specific categories or forms of art. This will allow accurate determination of whether the art has quality characteristics <sup>[1]</sup>.

Art education mainly aims to cultivate artistic talents, in those who serve the society, and improve the works. In fact, art is present, irrespective of the political environment. Art is different from politics, in that it is not used to fight, but to serve the society. However, some dehumanizing forms of art, such as Chinese Yuan Dynasty art, medieval Gothic art, and Nazi art among others, often gradually deviate from normal social changes. Of course, online art education makes the educated no longer passive recipients, but interact in negotiation, choice and conflict <sup>[2]</sup>. In particular, the service value embodied in the form of new media art works needs educators' positive meaning guidance based on traditional cultural symbols. The immutability of art education is mainly reflected in serving the society, with immutability of network teaching in University art education reflected in this.

In the art education reform of undergraduate visual performance course, this paper attempts to put forward the general theoretical knowledge of online art education teaching method under the guidance of He Zhuang Heng Yuan art education thought and theory. It is hoped that it will improve awareness of the current art works and generate achievements. These teaching networks can facilitate collection of information and expand learning approaches for improved acquisition of artistic expression skills, such as Aftershot, Mageda and other software skills. It is hoped that people who receive art education can be conscious, independent and self-disciplined. Looking for the visual expression, between modern art and interactive technology. The main advantage of network teaching is that it can remotely communicate, and accurately transmit voice expression. However, works of art need spiritual education. Therefore, I recommend that trainers should use the method of "art works present the things around", an approach that requires symbolic meaningful expression of elements, to express works. A combination of this approach with information technology, can create meaningful works that improve synchronous development of logical thinking and creative thinking.

### 3. The Relationship between Immutability and Sociality

Social expression of art works often entails placing the fictional world above the real world. Consequently, a number of problems are associated with this art of teaching in Universities. The art project-based curriculum

has become a one-stop service for enterprise production, teachers' naming and students' miscellaneous work. Therefore, such so-called project-based courses are not in line with the original intention of University art education. Art project-based curriculum should aim to serve societal needs, by becoming a dominant positive media communication to guide purpose, balance the utilitarian value, and promote construction of socialist spiritual civilization. Overall, art project-based courses' final works not only create thought-provoking outcomes, but also generate educated University talents in the society. These works of art originate from life and can be higher than life.

There is a close relationship between immutability and variability of the symbol expression of art works with transfer between the signifier and signified. In addition, the artistic works of social groups are greatly influenced by the cultural values of various social groups. However, immutability does not rule out the possibility of change during development of information.

In other words, Chinese art works, such as the immutable symbolic expression in Japanese documentaries shot after World War II, may have changed local expression. For example, in order to effectively distinguish historical facts and media reality after World War II, Japanese documentaries shot in China are collectively referred to as "semi observation" documentaries. Here, "semi observation" means that high efficiency can show the ideal life an activity organization wants under the guidance of a personal mission statement. In this context, a personal mission statement can be your motto. In this paper, we unravel the direction of "semi observation" College Art Education from the research of "semi observation" documentary.

After World War II, Japan continuously improved her quality of education. Generally, this suggests the need to exploit the talents of the younger generation to achieve economic development. Currently, a rapid economic development has turned Japan into one of the leading countries in economic growth across the world. This indicates how big the pattern is and how far life can go. Being a branch of East Asian civilization, the question remains on how Japan fundamentally changed with regards to survival, life and even ultimate happiness, in a century. A key player in this development comprises a combination of international education and improvement of both local and regional civilization.

As early as the Tang Dynasty, Japan sent students to study in China. However, after the Qing Dynasty, Japanese students no longer studied in China. Instead, they turned to the forefront of Science - the United States. In fact, it is no accident that Japan dares to attack Pearl Har-

bor. Based on this, modern documentaries should be enlightening, and should cultivate the broad sense of leading the world. Instead of hating, reverence for life needs to be adopted as a common ideology for world civilization.

Future documentaries need to clearly illustrate the Japan's rise after World War II, from a theological, metaphysical, scientific perspective of the meaning of life. In addition, they should classify and clarify functional orientation of the current art documentary, and focus on building students' sense of awe for life, in order to promote consciousness of self-examination of Chinese civilization, and encourage the country to forge ahead. In previous documentaries, most of the cases have focused on physical and material support. Therefore, modern-times works need to pay more attention on cultivating spirit. For example, Tsinghua University was founded because of Boxer Indemnity. This is a masterpiece of spiritual upbringing.

Firstly, to highlight the core position of positive thinking of socialism with Chinese characteristics, we should have a sense of problem and wait for the corresponding position.

Art Documentary layered education and teaching quality improvement. From a philosophical perspective, we need to understand Japan's universal values, as well as those of China and the rest of the world. Studying these values, using existing works of art, might reveal some traces of cultural consciousness. In this paper, we discuss the problem of hierarchical education by combining international cultural view of life and death embodied in the film "Coco" in the peace era. Most of the impressions of the Nanjing Massacre, by Japanese invaders, came from documents and documentaries. The current advancement in science and technology has provided the "one mirror to the bottom" shooting technique, which can be used to recreate the past World War II theme "the Rape of Nanking". However, we need to clearly realize that the hatred towards Japan also needs stratification. Chinese public taxpayers' money should be spent on improving education that will enlighten the Chinese public to distinguish right from wrong, and establish a sense of hardship, rather than planting seeds of hatred by blindly recording the past history, reviewing and recreating the World War II theme.

Secondly, we should highlight the international leading role of "Chinese culture" and build practical tools for teaching art and design using Chinese characteristics.

This is needed in order to encourage college students to learn the "four correct understandings", which comprise correct understanding of the development trend across China and the world, Chinese characteristics and international comparison, responsibility of the times and historical mission, as well as being ambitious and down-to-earth.

In addition, firmly establishing the "four self-confidence" pillars, namely, self-confidence socialism with Chinese characteristics, theoretical self-confidence, system self-confidence and cultural confidence, is needed. Furthermore, it is important to strengthen top-level design of University education, as well improve research targeting self-consciousness, self-discipline and independent modes in the context of immutability of network teaching mode.

Here, combining the project-based curriculum oriented by Outcome Based Education achievements with its own school running characteristics and professional advantages of digital media art is carried out, based on Chinese practice. This also tells Chinese stories. In the present era of mobile Internet, interactive art works can help people eager for a free and happy life and actively fill in their own stories, including reviews. From the story describing Japanese invasion in China, this platform allows identification of pain points, and motivates professionals to work hard.

Finally, based on the art theory, the distance between ancient and modern culture and art needs to be shortened, by making rational use of special effects of modern technology in traditional art, which will boost cultivation of both morals and art.

Generally, Japanese documentaries always start from a national standpoint. Consequently, a vast majority of the Japanese have the most dignified character, and promote the resonance of knowledge teaching and value education. This is their national stand on values. However, a "Semi observation" documentary film can reshape the "voice" way, thereby constructing a new world.

In 2019, under the guidance of teachers of crystal digital vision department and the Department of media arts, students of Applied Science and technology college, who were upgraded from junior college to undergraduate in the Ideological and political project course practice, achieved their goal. In this paper, we carefully analyze one of the projects, a silk color painting "Qianli Jiangshan Tu" created by Wang Ximeng at the Northern Song Dynasty. A digital long volume creation project of "Beijing Cultural overview Wencheng 49" was completed by combining three-dimensional modeling as well as film and television special effects (see Figure 1).



**Figure 1.** A representative interface for creating digital long volume film and television

In the project, performance of the theme of thousands of miles of rivers and mountains, combined with the modern man-made scene, uses the special effect processing method called "one mirror to the bottom", generating a creation that promotes characteristic values of the Chinese culture.

The creation is not only a spiritual culture that the Japanese people should have, but an international shared culture, regardless of whether it is from learning advanced knowledge, having advanced scientific and technological ability, or the spirit of striving forward.

#### 4. The Relationship between Immutability and Continuity

Art can help individuals connect with their communities, ethnic groups, and even society. In the present time of life at home, the community is largely dependent on art. Consequently, the art of reflecting community life has become a key product of recognized laws and traditional practices. In order to promote the benign promotion of the image of "a good government in the city", as an urban and applied university, when training digital art and design professionals, it develops the educatees' personal sense of self-efficacy in art<sup>[3]</sup>. In the network art education, it is very important to carry out the new mode of teaching and research from the aspects of self-consciousness, autonomy and self-discipline, and carry out art education guided by works of art.

##### 4.1 An Artist's Professional Spirit is Unified with the Viewer's Aesthetic Experience

During socialization of human professional roles, art educators unconsciously expect an artist's creativity to be reflected in the skills of artistic works, defamiliarization cognition, narrative philosophy, among others. For example, the project in the online teaching of interactive visual expression course starts with construction of a digital community (see Figure 2). One of the aims is to cultivate a high level public taste, through the established cultural and artistic modules in the digital community. To effectively promote mutual growth, the artists' professionalism needs to be mutually benign and common with the user's aesthetic experience of digital community. Previous studies have shown that "Knowledge acquired through art" depends on recognition of the symbols and patterns that generate audience's experience<sup>[4]</sup>. Therefore, people in the community need to receive better cultural education and cultivate high-level public taste, to enable the public know why they like art. During the learning process, every art professional needs to accumulate and acquire the symbols

and patterns that generate audience experience, including auspicious symbols, golden section, symmetry and balance, and color contrast among others.

In a digital community project, artists derive their professionalism from effective art education inspiration and technical training. This is followed by technology-based training, including film and television software, interactive, as well as three-dimensional modeling. For network art teaching, most of the results-oriented projects can choose the "love home" content. Therefore, artists are encouraged to awaken feelings of loving themselves, their relatives and homeland, and cultivate a future love for their country. This is because it is only in the presence of professional and technical effects that artists can express their inner ideas, and have certain eternal values of art.

Project-based teaching methods have been extensively followed for network courses, especially during the present home-based learning caused by the epidemic. This is an excellent guide for students to actively build their own digital community.

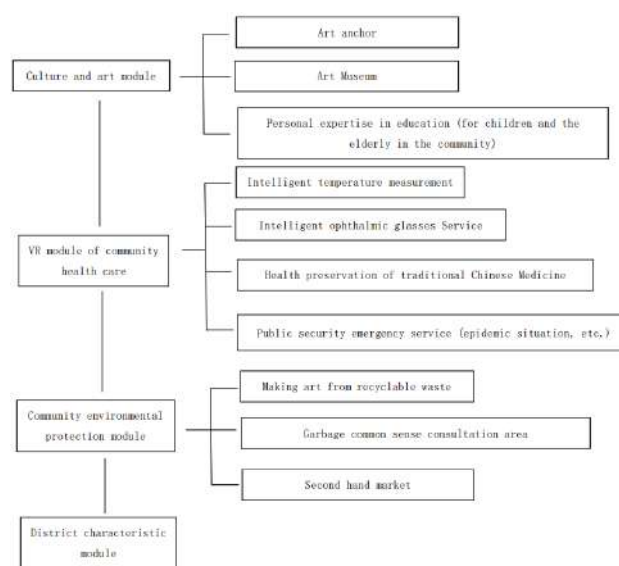


Figure 2. construction of virtual digital community

##### 4.2 The History of Artistic Value is Consistent with the Craftsman's Spirit in Fact Presentation

Artistic symbols are easy to solidify, but also most afraid of solidification<sup>[5]</sup>. Repeated quotation of symbol elements in art works inevitably bring about changes in the symbolic elements. For example, the "Qianli Jiangshan Tu" in the reference part of the elements of mountains and rivers helps to portray the motherland as magnificent and colorful, thereby expressing the modern social environment of Beijing culture. This treats the graphic elements and color elements of ancient paintings in some



form of inert knowledge. In addition, the original historical and artistic value is combined in a non-deductive way. Here, "signifier" refers to the graphic and color expression of artworks, whereas "signified" denotes the concept of things reflected in paintings. By using metaphors, images and symbols to describe the problem, we can more accurately reflect the essence of the problem <sup>[6]</sup>.

In modern online education, the individual educated, art educators, art works and other participants in education constitute a complete process of art education through interaction. For example, in the film "White Snake 2 green snake robbed" in 2021, the green snake's love for her sister became an obsession, so she fell into the Shura city of "asking for no". This is a new interpretation of historical mythological events. It can be metaphorical that many people can't settle down to do innovative research, are eager for success, and fall into the anxious situation of "not seeking". This wonderful artistic spirit education, with the help of new media, constructs the theme with time, and creates visual rhythm, expresses creativity and tells stories through various relationships of images <sup>[7]</sup>. Training is an isolated activity. Online education is an activity in which people agree with people's spirit and culture can be transmitted <sup>[8]</sup>. For example, online art works such as film and television works, as a kind of mass cultural consumer goods, bring spiritual training and self-influence, which can have a subtle effect on contemporary people's consciousness. Online art education can better realize the unity of historical art value and craftsman spirit.

### 4.3 Unity of Distance and Temperature of Audio-visual Effect

In an online art course, audio-visual cases are usually introduced for discussion and analysis. To provide an understanding into the meaningful expression of art works, educated people need to adopt the mode of self-consciousness, autonomy and self-discipline. For example, integrating into the author's consciousness enables identification of ways for sharing the cognition of a certain part of the author's art work. In addition, it enables self-access to art works in the author's life, creative background, and the social significance of the described events. The rhythm of nature allows one to rhythmically perceive the deep information, and identify their own insights of temperature between symbolic meaning and aesthetics. For example, in *Paradise Lost*, Junichiro Watanabe once said, "love too close will become a negative thing". The establishment of digital community, through the construction of meaningful formal topics, has encouraged people in the community to discuss and deeply learn the network. This will indirectly enable the neighborhood to meet and chat at a distance, especially during an outbreak such as the current pandemic.

## 5. Conclusions

An online art course should be based on its immutability, that is, art education that adheres to the principle of "survival by coding meaning symbols". In cases where we are forced to balance between unchangeable and changing events, we should constantly create variable factors, to enable realize the continuity of sustainable development with the social changes. Network art teaching has the indeterminacy of self-consciousness, autonomy and self-discipline. Under the influence of the socialization variable, people are encouraged to actively use media works to reflect the reality.

Through project-based teaching practice guided by art works, this paper has comprehensively explored the training scheme of art applied talents, with focus on research in art practice teaching with Chinese characteristics. In future, Chinese youth are encouraged to seek the guidance of the education thought of gratitude to the country for better understanding of their life vision, and strive to develop the country through science and technology, for guaranteed artistic achievements.

## Funding

This paper is one of the phased achievements of Beijing scientific research project: Capacity building of science and technology for innovation service -- Research on the path of integrated development to support the construction of four centers in Beijing. (Project No.: 12213991920010465)

## References

- [1] Liang Jiu. Art criticism [M]. Jiangxi fine arts publishing house, January 2008, page 25.
- [2] [US] Vera Zolberg. Constructing a Sociology of the Arts [M]. Yilin Press. 2018, page 110.
- [3] Howard S. Friedman, Miriam W Schustack. Personality: Classic Theories and Modern Research [M]. China Machine Press, April 2011, page 205.
- [4] [US] Edmund Burke Feldman. Philosophy of Art Education [M]. Zhejiang People's fine arts publishing house, August 2019, P. 105.
- [5] Yu Qiuyu. Art creation [M]. Chang Jiang literature and Art Publishing House, August 2013, page 173.
- [6] [RUS] Sergei ikovenko, Traiz Art, Inventive Problem Solving Theory [M]. Yanshan University Press, 2020, page 233.
- [7] Wei yanli, Qian zhaoyang, Zhang yidan. Interactive Form of New Media Art under Recognition Mode [J]. Hundred Schools in Arts. 2019, (1).
- [8] [GER] Karl Theodor Jaspers. Was ist Erziehung? [M]. Shanghai Joint Publishing, 1991, page 2.



# A Preliminary Analysis of Text Coverage and Extensive Reading of Chinese ESL Learners-- Range Analysis of *The Little Prince* and *Pride and Prejudice*

**Jiayu Zhuo\***

Language Academy, University of Malaysia Technology, Malaysia

## ARTICLE INFO

### Article history

Received: 3 August 2021

Revised: 10 August 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### Keywords:

Text coverage

Extensive reading

Vocabulary teaching

ESL learning

## ABSTRACT

One of the common problems for L2 learners in ESL reading is that the text is either too difficult to understand or too simple to challenge, particularly the extracurricular reading material. *The Little Prince* and *Pride and Prejudice* are typically listed in the key reading materials for L2 learners. Contrary to the popularity, a large number of L2 learners find it is hard to complete due to the low text coverage with existing vocabulary. The corpus has become an important language research tool to store language materials according to the specific goals and the way through certain technical means. This paper is going to explore the text coverage of *The Little Prince* and *Pride and Prejudice* by range analysis, and comparing with English Curriculum Standards to figure out suitable reading targets of these two materials.

## 1. Introduction

The famous American linguist Wilkinson once said, without grammar, we can express very little; without words, we can express nothing. It can be seen that vocabulary is the basis of English learners' language ability. For many years, however, due to the influence of structural linguistics, English teaching has put too much emphasis on language structure and language form and neglected the role of vocabulary in L2 learning. When the vocabulary is not highly thought by language instructors, they would hardly consider the relationship between the vocabulary in teaching materials and L2 learners' existing L2 level.

There is no doubt that vocabulary is the foundation of understanding the reading materials. Klare (1963) pointed

out that the word is the most important unit in measuring readability and frequency<sup>[1]</sup>. For second language teachers, choosing reading materials that are suitable for L2 learners' levels is extremely necessary. With the deepening of English education reform in China, in addition to English textbooks, extracurricular reading material like English novels has been progressively brought to light and attached importance.

The selected novels, *The Little Prince* and *Pride and Prejudice*, are generally featured in the best original editions recommended by English instructors in China. Influenced by the suggestion of expanding the amount of extracurricular readings, most L2 learners in lower levels would choose *The Little Prince* and in middle or advanced levels would choose *Pride and Prejudice*. However, most

\*Corresponding Author:

Jiayu Zhuo,

Language Academy, University of Malaysia Technology, Malaysia;

Email: 2562275375@qq.com

learners face the problem of low text coverage with their existing English vocabulary and knowledge, which results in an easy abandonment of the original versions. By using BNC (British National Corpus), the list applied to see the word frequency, this article is to analyze vocabulary from the chapter 21 in *The Little Prince* and the chapter one in *Pride and Prejudice*, to see whether they are suitable for students who acquire the most frequent 800, 2400, 3500, and 4500 words. The ultimate purpose of this article is to provide methodologies of selecting appropriate reading materials as well as vocabulary course designing for instructors and provide methodologies to L2 learners when reading materials beyond their coverage.

## 2. Literature Review

Krashen's input hypothesis theory (1982) stated L2 learners can automatically output as long as getting enough input<sup>[2]</sup>. Therefore, when low output abilities are brought to the forefront, input stage needs to be reflected as well, particularly materials selection. One of the criteria of measuring input material is vocabulary. As Lewis (1993) stated, the development of the four skills of a language depends on vocabulary learning, thus expanding L2 learners' vocabulary has been the central teaching goal of traditional ESL education<sup>[3]</sup>. Since the 1980s, many scholars at home and abroad focus on textbook vocabulary and vocabulary has been a basic problem in the formulation of the syllabus and textbook compilation, as teaching materials are the main way to obtain knowledge. For Chinese English learners, the main way to learn vocabulary is teaching materials.

In the recent decades, globalization creates opportunities for more L2 learners to interact with English native speakers. Although communication is not a problem like years ago, L2 are still restricted to vocabulary and expressions learning from English textbooks in the output stage. In 1988, Sinclair and Renouf (1988) found that the key usage of some words presented in the textbook is very different from the real usage<sup>[4]</sup>. Therefore, Chinese experts suggested authentic contexts should be encouraged, and original English reading material like novels, encourage ESL learners to do more extensive reading. For example, the English curriculum for senior middle schools (2017) states, in addition to teaching materials, the amount of extra-curricular reading needs to master over 230,000 words cumulatively to reach Level 7 and 300,000 to reach Level 8<sup>[5]</sup>. Admittedly, even though extracurricular reading is helpful in improving English level, negative sides like merely pursuing difficult materials is severer than before, which may hurt L2 learners' confidence and cause unpleasant L2 learning feelings.

Regarding to it, many scholars explored the relationship between text coverage and reading comprehension. According to Nation (2006), with a text coverage of 95% (1 unknown word in 20), a few readers gained adequate comprehension, but they were still in the minority<sup>[6]</sup>. Hu and Nation (2000) examined the relationship between text coverage and reading comprehension<sup>[7]</sup>. They pointed out that the ideal unknown destiny was around 2%, meaning that 98% of the running words in the text should already be familiar to the learners. Carver (1994) indicates that even 98% coverage does not make comprehension easy<sup>[8]</sup>. Kurnia (2003) found that few L2 learners gained adequate comprehension with 98% coverage<sup>[9]</sup>. Laufer and Ravenhorst-Kalovski (2010) pointed out that it is useful to call 95% coverage minimal coverage and 98% adequate coverage<sup>[10]</sup>.

To test reading materials, Corpus provides abundant research samples for corpus linguistics by collecting a large number of authentic texts, and it provides new methods for English vocabulary teaching. The emergence of corpus linguistics makes it possible to assist daily English teaching and students' efficient learning. The paper is going to use this method to discuss the text coverage of extracurricular materials and discuss methodologies for ESL instructors regarding to extensive reading materials by using examples of *The Little Prince* and *Pride and Prejudice*.

## 3. Data Analysis

### 3.1 Analysis and Modification of *The Little Prince*

The English Curriculum in the whole basic education stage (including compulsory education and senior high school) sets nine levels according to the learners' English levels, forming a gradual and sustainable English learning procedure. According to English Curriculum Standards for Compulsory Education (2017-year edition), the total number of vocabulary in the compulsory stage is 2400<sup>[11]</sup>. Level 2 is the basic requirement to meet at the end of grade 6, the required vocabulary of which is 800. Level 5 is the basic requirement that should be met at the end of grade 9, the required vocabulary of which is 1600.

As stated in the High School English Curriculum Standards, levels 6 to 9 are the objectives and requirements of ordinary high schools, and the total number of vocabulary is 4200. Level 7 is the basic requirement for high school graduation, the required vocabulary of which is 3500. Level 8 and level 9 are designed for high school students who are willing to further improve their English level. In the phase of post-secondary education, colleges and universities in China set the requirement of passing

CET 4 to graduate. In the syllabus for College English Test, the required vocabulary of CET 4 is 4500.

### 3.2 Analysis and Modification of *The Little Prince*

**Table 1.** Tokens, types and families at each word in chapter 21 in *The Little Prince*

WORD LIST	TOKENS/%	TYPES/%	FAMILIES
one	793/86.95	218/78.70	174
two	38/ 4.17	27/ 9.75	24
three	24/ 2.63	9/ 3.25	9
four	28/ 3.07	7/ 2.53	6
five	3/ 0.33	1/ 0.36	1
six	14/ 1.54	5/ 1.81	3
seven	1/ 0.11	1/ 0.36	1
eight	0/ 0.00	0/ 0.00	0
nine	4/ 0.44	3/ 1.08	2
ten	1/ 0.11	1/ 0.36	1
11	1/ 0.11	1/ 0.36	1
12	1/ 0.11	1/ 0.36	1
13	0/ 0.00	0/ 0.00	0
14	0/ 0.00	0/ 0.00	0
15	0/ 0.00	0/ 0.00	0
16	3/ 0.33	2/ 0.72	2
not in the lists	1/ 0.11	1/ 0.36	0
Total	912	277	225

The data provided in Table 1 show the word coverage in chapter 21 from the book *The Little Prince*. According to the chart, this chapter has total 912 running words. The first row shows that the first 1,000 word-families from BNC account for 690 tokens, the coverage of which is 86.95%. The second row shows that the second 1,000 word-families from BNC account for 38 tokens, and these 38 words make up 4.17% of the total running words in the text. In addition, 24 of the running words in the text are in base list three and these 24 words make up 2.63% of the total running words in the text. Moreover, 28 of the running words in the text are in base list four and these 28 words make up 3.07% of the total running words in the text.

After detailed analyzing word list 16, it is obvious to see words “ah” and “oh” are all modal particles, and cannot influence the reading process. As for the word not found in the list, “grain fields”, it is a compound word. According to the chart, the minimum requirement to understand the text is mastering the most frequent 4000 words with the text coverage of 97.15%. However, students who master the most frequent 3000 words may find this chapter a little hard to read with 94.19% reading coverage, as they have not reached the minimal coverage: 95%. Preparing stage is needed for this group of students to read this chapter.

Connecting to general Chinese students’ situations, on

the one hand, to read this chapter as the extracurricular reading material, the most suitable group of students is university students and a small amount of high school students in Level 8-9, because they are capable of decoding information in the chapter with their existing ability.

On the other hand, high school students in Level 7 need to do some preparing actions before reading it such as searching background information. Tuinman and Brady (1974) found that enough pre-teaching resulted in little change in comprehension<sup>[12]</sup>. Nation (2013) claims that if the vocabulary is an important factor in reading and readability measures, then pre-teaching the vocabulary that will occur in a reading text should increase the readability of the text<sup>[13]</sup>. To begin with, with word list three, there is a word “prince”, occurring 14 times in this chapter. Similarly, the base list four shows that the word “fox” occurs 20 times in this chapter. For these two words, pre-teaching is an effective way to increase the readability of the text, since these two words are the most two important nouns in this chapter, showing two main characters of this chapter: a prince and a fox. Second, objects, pictures and so on are often considered as the most valid way of communicating the meaning of the word. Because these two words are nouns, teachers could use pictures or flash cards, helping students get the meaning of words. If students could understand these two words before they read the chapter, the text coverage would increase to 95.61%, reaching the minimal coverage. And this chapter becomes a little readable for those students. Third, with such coverage, if students still do not understand the contents, further efforts could be considered. In word list six, there are words “tame”, “tamed” and “tames”, occurring 8 times, 3 times and once respectively. Nation and Moir (2008) said when there are many unknown word families, replacing the unknown words with known or phrases which are likely to be understood by learners<sup>[14]</sup>. Then, it is a good way for teachers to simplify the text by replacing the word family of “tame” by “control easily”, “controlled easily” and “controls easily” to reach the percentage of 96.93% since both word families of “control” and “easy” are in the base word list one and two in BNC. Beglar et al. (2012) found that the learners who made the most progress in the development of reading fluency over a year-long extensive reading program were not those who read the most, but those who read the most simplified material<sup>[15]</sup>.

Concluding analysis above, it is understandable that *The Little Prince* is an outstanding extracurricular reading material with its interesting contents, but chapter 21 is not suitable for ESL learners from Grade 1-8 in China, which means further data analysis of the remaining chapters are needed.

### 3.3 Analysis of *Pride and Prejudice*

**Table 2.** Tokens, types and families at each word in chapter one in *Pride and Prejudice*

WORD LIST	TOKENS/%	TYPES/%	FAMILIES
one	690/88.47	236/77.38	189
two	38/ 4.87	30/ 9.84	29
three	8/ 1.03	7/ 2.30	7
four	6/ 0.77	5/ 1.64	5
five	4/ 0.51	4/ 1.31	4
six	2/ 0.26	2/ 0.66	2
seven	2/ 0.26	2/ 0.66	2
eight	0/ 0.00	0/ 0.00	0
nine	1/ 0.13	1/ 0.33	1
ten	0/ 0.00	0/ 0.00	0
11	1/ 0.13	1/ 0.33	1
12	0/ 0.00	0/ 0.00	0
13	0/ 0.00	0/ 0.00	0
14	0/ 0.00	0/ 0.00	0
15	20/ 2.56	10/ 3.28	10
16	1/ 0.13	1/ 0.33	1
not in the lists	7/ 0.90	6/ 1.97	0
Total	780	305	251

Table 2 provided above is the Chapter 1 from *Pride and Prejudice*. According to the chart, the running words of this chapter are 780 words. Based on the first two rows, the text coverage is 93.34%. Besides, the coverage in word list15, the proper nouns list, is 2.56%. In word list 15, most vocabularies are persons' names like "Benny", "Bingley", "Jane", "Lizzy", "Lucas", "Lydia", "Morris" and "William", a holiday like "Michaelmas" or a place like "Chaise", which would not influence the procedure of reading. In addition to it, in the word list 16, words "oh" is a modal particle, which would not influence students' understanding as well. With these four lists, the text coverage of this chapter is 96.03%. Connecting to Chinese students' situations, students mastering the most frequent 2000 words (Level 6) or above are capable of reading this chapter as extracurricular reading material.

For students from Level 3-5, teachers need to make further efforts like giving glosses to students, making it appropriate for doing speed-training activities.

### 4. Reflections and Discussions

Based on the above data analysis, further reflections and discussion is going to be expanded regarding to the text coverage in ESL reading. Instructors need to give more attention to the text coverage of any materials during and after the class to assist L2 learners to improve language ability effectively and confidently. During the class time, when instructors do the part of presentation, direct and indirect vocabulary learning activities should

be involved. The most important principle in handling format and presentation is ensuring the vocabulary occurs across the four strands, namely meaning-focused input, language-focused learning, meaning-focused output and fluency development.

For example, in an extensive reading course, two strands should be considered<sup>[13]</sup>. For the fluency development strand, reading materials should not contain any or very few unknown words because the goal is to read the book as quickly as possible in order to develop reading speed. For the meaning-focused input strand, the book should contain a few new words, but not too many, so that reading is not burdensome and there is the opportunity to learn new vocabulary incidentally while reading, making use of the guessing from context strategy. Carver (1994) argues that in meaning-focused language use, learners should know most of the language they need for a particular task, but a small percentage of words, about 1% to 5%, should be unfamiliar so that there is an opportunity for these items to be learned<sup>[8]</sup>.

If the teachers' aims are to do the meaning-focused training, teachers do not need to make further effort after modification for the Chapter 21 from *The Little Prince*. In terms of the Chapter 1 from *Pride and Prejudice*, they could directly provide the chapter to students and they do not need to anything to help students understand more unfamiliar words. However, if teachers focus on speed-training, it would be better to deal with more unfamiliar words for students<sup>[13]</sup>. It is assumed that the highest density of glossing should be no more than 5%, and preferably around 3% of the running words. Therefore, taking the chapter from *Pride and Prejudice* as an example, this chapter could have around 24 to 39 glosses. With 24 more glosses, the text coverage would rise to more than 98%. Then this chapter could be used to do speed-training after adding glosses.

### 5. Conclusions

On a whole, there is no doubt that extensive reading is an effective way to improve language ability through 100% L2 input so that L2 learners' can output like native speakers. However, the precondition of selecting reading materials is the readability; otherwise, this method would easily lead to counter-productive result. The percentage of L2 learners' text coverage is one of the measuring tools of the readability, which is neglected by a large number of instructors.

One the one side, instructors need to create as many opportunities of immersing in L2 contexts as possible to make sure L2 learners receive enough input. One the other side, before requiring or recommending any original



materials, instructors should analyze the vocabulary in reading materials to make sure whether it is suitable for a certain level of students and design appropriate teaching plans to assist L2 learners in different levels so that they would benefit from the selected material to the maximum extent.

## References

- [1] Klare, G. R. (1963). *The Measurement of Readability*. Ames, Iowa: Iowa State University Press.
- [2] Krashen, S.D. (1982) *The Input Hypothesis: Issues and Implications*. Longman, New York.
- [3] Lewis, B. (2010) *The Lexical Approach* [M]. *Language Teaching Publications*, London.
- [4] Sinclair, J. & A. Renouf. (1988). A Lexical Syllabus for Language Learning. In R. Carter & M. McCarthy (eds. ) *Vocabulary and Language Teaching* [C]. Harlow: Longman, 140-158.
- [5] The Ministry of Education of the People's Republic of China [M]. *English Curriculum Standards for Senior High School*. Beijing Normal University Publishing House, 2017.
- [6] Nation, P. (2006). How Large a Vocabulary is Needed for Reading and Listening? *The Canadian Modern Language Review*, 61, 1, 59-82.
- [7] Hu, M., & Nation, I. S. P. (2000). Vocabulary Density and Reading Comprehension. *Reading in a Foreign Language*, 13(1), 403-430.
- [8] Carver, R. P. (1994). Percentage of Unknown Vocabulary Words in Text as a Function of The Relative Difficulty of the Text: Implications for Instruction. *Journal of Reading Behavior*, 26 (4), 413-437.
- [9] Kurnia, N. (2003). *Returning of Multi-word Strings and Meaning Derivation from L2 Reading*. Unpublished doctoral dissertation, Victoria University of Wellington, New Zealand.
- [10] Laufer, B., & Ravenhorst- Kalovski. G. C. (2010). Lexical Threshold Revised: Lexical Text Coverage, Learners' Vocabulary Size and Reading Comprehension. *Reading in a Foreign Language*, 22,1, 15-30.
- [11] The Ministry of Education of the People's Republic of China [M]. *English Curriculum Standards for Compulsory Education*. Beijing Normal University Publishing House 2017.
- [12] Tuinman, J. J., & Brady, M. E. (1974). How Does Vocabulary Account for Variance on Reading Comprehension Tests? A Preliminary Instructional Analysis. In Naeke, P. (ed.), *Interaction: Reading and Practice for College- Adult Reading*. Clemson, SC: National Reading Conference, 176-84.
- [13] Nation, P. (2013). *Learning Vocabulary in Another Language*. Cambridge University Press, United Kingdom.
- [14] Nation, I. S. P. & Moir, J. (2008). Vocabulary Learning and the Good Language Learner. In Griffiths, C. (ed), *Lessons from Good Language Learners*. Cambridge: Cambridge University Press, 159-73.
- [15] Beglar, D., Hunt, A., & Kite, Y. (2012). The Effort of Pleasure Reading on Japanese University EFL Learners' Reading Rates. *Language Learning*, 62, 3, 665-703.



# A Brief Discussion on the Causes and Countermeasures of College Students' Psychological Confusion and Mental Health Problems

Huiting Guo<sup>\*</sup>

University of Illinois at Urbana-Champaign (UIUC), Illinois, USA

## ARTICLE INFO

### Article history

Received: 3 August 2021

Revised: 10 August 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### Keywords:

College students

Psychological confusion

Mental health

Causes

Countermeasures

## ABSTRACT

College period is one of the most critical periods of one person's life for it is an important period of establishing world concept, outlook on life and values. Various challenges and pressures have had a great impact on the mental health of college students. In that case, college students' psychological confusion and mental health problems occur frequently and the overall condition of college students' psychological problems is worrying. The mental health of college students has also attracted the attention of colleges and the society. Besides, the mental health education courses have been adopted to guide college students. This article aims to analyze the causes of college students' psychological confusion and mental health problems and also the obstacles or difficulties in solving them from the perspective of college students' cultivation of positive psychological quality and mental health education. And corresponding solutions from both the outside and personal perspectives.

## 1. Introduction

College students are the reserve force for China's socialist modernization construction and development and the great rejuvenation of the Chinese nation. Therefore, the stability of college students' mental health has an important impact on the sustainable development of society. At this stage, our country's college students are facing more severe challenges. Such as competition for survival and greater pressure for employment. Therefore, the situation of college students' psychological confusion and mental health problems is not optimistic. Improving college students' psychological adaptability, cultivating college students' positive psychological qualities, and shaping college students' healthy psychological qualities have been becoming the focus of college psychological

education.

## 2. The Causes of College Students' Psychological Confusion and Mental Health Problems

### 1) Reasons and performance

The university period, which is a key life stage, brings various challenges to college students. These challenges involve the changing environment, physical maturity, sense of independence and autonomy of the family, sense of personal identity, new interpersonal relationships, academics Stress, future career choices, romantic relationships, etc. In addition, with the development of the times, the country and society have put forward higher requirements for college students. College students are faced with the uncertainty of social development and the unknown of future development, which are all the possible reasons

*\*Corresponding Author:*

Huiting Guo,

University of Illinois at Urbana-Champaign (UIUC), Illinois, USA;

Email: 1106620571@qq.com

of psychological confusion and mental health problems. Psychological confusion and mental health problems can cause college students' life confusion, emotional tension, negativity, irritability, sensitivity, loss of confidence in future development, depression, and suicide, etc. <sup>[1]</sup>.

## 2) Existing obstacles

Although many college students are influenced by psychological confusion and mental health problems, there are only a small number of them to seek help for psychological problems actively <sup>[2]</sup>. There are many reasons why this phenomenon happened. First of all, the society's awareness of psychological problems is limited. "Psychological stigma" is the discrimination and prejudice against mental health problems and mental illnesses caused by the uncivilized social environment. And it is the negative attitude towards mental illnesses caused by the stereotypes related to mental illnesses. Society has limited awareness to psychological problems such as depression and even the society has prejudice against college students with psychological problems. Although some students know that they have mental health problems, they give up seeking for help for worrying about the "psychological stigma" of negative evaluations by others. Secondly, for the students themselves, when they find that they have psychological confusions or mental health problems in their minds, they just choose to avoid or despise the needs of psychological problems. Because they think psychological health problems are not important and have no necessities to be dealt with. Thirdly, the cost of psychological consultations is generally very high and most health insurance paid by college students does not include psychological consultations, which makes the cost of psychological consultations become heavy economic burdens to college students for they have to spend a lot of money if they have psychological problems. Fourthly, although mental health education has become as a general course in university, the goal of it is not clear enough. Universities often seek help from professionals after psychological problems have been formed. The lagging of psychological interventions in universities is a big problem <sup>[3]</sup>. Mental health education fails to take the needs of students for long-term development and sustained physical and mental health into account. It only focuses on the highlighted parts and solves one problem after another with exhaustion but ignores the importance of mental health education skills in daily life.

## 3. The Countermeasures of Psychological Confusion and Mental Health Problems of College Students

### 3.1 The Outside Perspective

#### A. Strengthen positive psychological guidance

Colleges and universities should focus on creating positive thinking and experience for college students. Promoting college students' positive thinking in terms of psychology, study, interpersonal relationships, and daily lives is a common measure to solve college students' mental health problems. The mental health education of college students should be based on the theoretical connotation of positive psychology, which setting up "cultivating positive experience and shaping positive personality" as its core education goal. It can start from a macro perspective to explain to students the mechanism of positive emotional experience in shaping positive personality. And it also can also ask students to recall the recent scenes of being immersed in positive emotions, and to reproduce the psychological activities at that time from a micro perspective. So as to guide students to pay attention to the physical and psychological changes that have occurred after the positive emotional experience <sup>[4]</sup>.

#### B. Promote health education for college students

In order to implement the education's policy of the Ministry by emphasizing mental health education, colleges and universities have opened mental health and behavioral suggestion courses based on social needs. The contents of these courses cover introduction to mental health, interpersonal psychology and adaptation, emotional interference and control, loving psychology and adaptation., and learning psychology and adaptation, etc. Specifically, in most colleges and universities in China, as general education courses, Mental health education for college students and Guidance on innovation and entrepreneurship for college students are required general education courses that help to answer college students' career or development problems and provide experience and guidance for solving college students' confusion. In addition, I believe that more in-depth and extensive psychology courses such as interpersonal psychology, emotional interference and control, love psychology and psychological adaptation, and learning psychology and adaptation can be added to help college students to prevent and solve mental health problems.

#### C. College counselors should play their roles

As helpers and leaders of college students' study and life, college counselors are the best groups that know college students well. College counselors should pay close attention to the psychological conditions of students, conduct regular psychological education and give appropriate guidance to college students, and can also invite professional psychological teachers on or out of campus to give lectures. For college students who are psychologically confused or have mental health problems, college counselors can take the forms of organizing individual conver-

sations or group discussion activities to provide targeted helps<sup>[5]</sup>.

D. Give full play to the role of clubs and campus activities

Based on the principles of “helping others and helping yourself”, “prevention first” and “early detection and early intervention”, most colleges and universities have established psychological clubs or mental health-related campus activities, which allows students to gather together to discuss their confusions and solve their psychological problems. Sometimes also provide psychological courses that are used to pay attention to students' psychological confusion or mental health problems through the intervention or guidance of professional teachers who can provide feasible solutions.

E. The society should pay more attention and provide more helps

The painful news about college students' mental health problems are often to be heard and seen every year, but the society's attention and understanding of this problem is very limited. When tragedies occur, most people in society to blame the college students themselves, which can even cause secondary harm and influence. I hold the view that the society should become more tolerant and understanding to provide necessary helps for college students' mental health problems. It is also a good measure to include college students' psychological confusion and mental health problems in the insurance coverage, or to provide college students with psychological insurance<sup>[6]</sup>.

### 3.2 The Individual Perspective

A. Know yourself

The ancient Greek philosopher Socrates used to say “know yourself”. Understanding your own inner thoughts is a process of self-discovery. Keep a calm mind for psychological confusion and mental health problems of college students are common. So do not care about the “mental stigma” or negative evaluations of others for those who need mental health helps. Keep a normal heart by constant self-discovery and communication with family members and friends who can help you to better understand your own inner thoughts, which can help you to deal with some psychological confusion. At the same time, your family members and friends can serve as mirrors to reflect what kind of person you are from an objective angle, which helps you to better understand yourself and also helps you determine your life goals and make life plans.

B. Make a personal plan

The situations of college students themselves vary from person to person. A practical life plan should be formulated according to like personal values and interest. Clear

life goal that suits themselves must include short-term learning goals, from semester goals to students Career goals, and long-term career planning, from career choice to realization of life value.

C. Take appropriate venting and mitigation methods

When college students have psychological confusion and mental health problems, they often feel emotional tension, negative irritability, sensitivity and depression. When problematic emotions arise, we must actively adopt appropriate methods to vent and relieve them, such as doing sports, travelling or listening to music. Do not suppress negative emotions too much which can lead to producing counterproductive consequences<sup>[7]</sup>.

D. Seek professional help

When college students find that they have psychological confusion or mental health problems, or have feelings of helplessness and pain, they must seek helps in time. Roommates, classmates, seniors, parents, counselors, career planning teachers, psychology teachers and psychological counseling teacher all can provide college students with comparative suitable and free services and can help college students to solve most of their psychological confusion and general mental health problems. If you encounter more complicated and serious psychological problems or even have a tendency to depression, you must seek more professional help and go to psychological counseling institution to find a professional psychological counselor for consultation without hesitation<sup>[8]</sup>.

### 4. Conclusions

Under multiple pressures such as academic work and future career, college students facing with mental health problems cannot be ignored. Coping with the psychological confusion and mental health problems of college students can start from both the outside helps and the college students themselves, to adopting self-regulation planning, seeking effective help, guiding active mental health, using college students' mental health education. In that case, the society, colleges and students themselves can form joint efforts to help college students to prevent and solve their psychological confusion and mental health problems.

### References

- [1] Zhang Ying. Common psychological confusion and coping strategies among college students [J]. Psychological Monthly, 2020.
- [2] Guo Yanmin. Research on Positive Psychology and Mental Health Education of College Students[J]. Cultural Industry, 2021.
- [3] Haonan Zhang, and Xiurong Zhang. 2020. "Influence

- of Psychological Health Education and Behavioral Suggestion on Positive Psychological Qualities of College Students." *Revista Argentina de Clínica Psicológica* 29 (2): 173-79.
- [4] Saleem, Sadia, Ayesha Asghar, and Zahid Mahmood. 2020. "Perceived Parental Rearing Practices, Interpersonal Relationships and Psychological Problems in College Students." *Bahria Journal of Professional Psychology* 19 (2): 1-10.  
DOI: 10.24205/03276716.2020.220.
- [5] Wegmann, Jennifer, Jason Marshall, Chou-Yu Tsai, and Shelley Dionne. 2020. "Health Education and Changing Stress Mindsets: The Moderating Role of Personality." *American Journal of Health Education* 51 (4): 244-56.
- [6] Lin Yuewei. Problems and improvement approaches in college students' mental health education [J]. *Modern vocational education*, 2021 (35): 216-217.
- [7] Huang Bin. Current situation and suggestions of mental health education in Contemporary Colleges and universities [J]. *Food research and development*, 2021,42 (16): 243.
- [8] Zeng Daoping, Li Xuewu. Influencing factors and preventive measures of College Students' mental health [J]. *Heilongjiang science*, 2021,12 (15): 140-14.

# On the Role of Distinctive Features of British English Sounds in the Cartoon *Peppa Pig* for Chinese Learners to Conquer Mother Tongue's Negative Transfer

Gang Li\*

Beijing Language and Culture University, Beijing, 100000, China

## ARTICLE INFO

### *Article history*

Received: 6 September 2021

Revised: 20 September 2021

Accepted: 15 October 2021

Published Online: 30 October 2021

### *Keywords:*

*Peppa Pig*

British English

Distinctive features

Negative transfer

## ABSTRACT

With the process of globalization and integration, more and more people tend to be bilingual. Undoubtedly, mastering a second language is significant. This thesis aims to explore how to conquer the difficulties in learning British English sounds through analyzing a British cartoon *Peppa Pig*. Chapter one begins with the research background, significance and purpose of research. The thesis takes the cartoon *Peppa Pig* as the starting point to demonstrate the role of distinctive features for Chinese learners to conquer negative transfer. The empirical research could be found in Chapter two, because of requiring to know the concrete circumstance of Chinese learners. Through the collection and analysis of data, we can know these problems which Chinese learners exist in the process of learning British English. Based on the comparison of Chinese and British English, Chapter three clarifies the difficulties in learning British English. As for Chinese learners, mastering distinctive features can promote learners to master British English sounds better than stress and rhythm. Chapter four states the role of the distinctive features in helping conquer Chinese negative transfer in the cartoon *Peppa Pig*. The final chapter is the conclusion of this thesis and involves a new study for Chinese learners to learn British English sounds under the distinctive features.

## 1. Introduction

With the process of globalization and integration, foreign languages have become a window for people to know the world, which makes it necessary for Chinese learners to master the language of English.

The thesis mainly researches the difficulties and key points that Chinese learners have confronted in learning British English. In the process of learning English, pronunciation is an essential part. For non-native English learners, whether they can have a fluent tone and standard

pronunciation is closely related to their listening, speaking, reading, understanding and perception. In order to arrive at a harmonious and successful communication, the study shows that Chinese learners still need to promote their English pronunciations learning at first.

For non-native English learners, mastering standard and fluent English pronunciations requires not only making full use of the technological convenience, but also paying attention to the change of concepts and modes of thinking.

First of all, the thesis probes into the general difficult

\*Corresponding Author:

Gang Li,

Beijing Language and Culture University, Beijing, 100000, China;

Email: 13840393861@163.com



British English sounds for Chinese learners by means of the empirical findings. Second, factors resulting in negative transfer were clarified. It is more important for Chinese learners to master the difficulties than the study of stress and rhythm of British English sounds. Besides, the role of the distinctive features is stressed, which is good for Chinese learners to conquer Chinese negative transfer. And in the last chapter, it is the conclusion of this thesis and involves a new expectation for Chinese learners to learn British English sounds under the distinctive features.

To sum up, the study has certain guiding significance for Chinese learners to learn British English pronunciation and overcome the negative transfer. They should deepen their understanding of the differences in phonetics between English and Chinese. Only in this way can they promote the levels of speaking British English.

## 2. An empirical Research

### 2.1 Research Questions

Is there negative transfer for Chinese learners to learn British English sounds? If the answer is yes, how can we conquer the negative transfer?

### 2.2 Hypothesis

Negative transfer is the very source for Chinese learners to learn British English sounds. Negative transfer could make it difficult for Chinese learners to learn British English sounds. Differences between Chinese and British English sounds are the source of negative transfer for Chinese learners.

### 2.3 Design

Through survey for learners, we can roughly find out the phonetic errors faced by Chinese learners in learning English sounds at this stage. Due to the limitation of comprehension ability for the second language's learners, some difficult sounds are hard to master.

The reason why many incorrect sounds in pronunciation are hard to correct is that they have a very close relationship with their native language expression. Sometimes, some subtle mistakes are hard to detect for Chinese learners and require feedback from teachers or classmates.

For this problem, learners are bound to make the same mistake again and again without obtaining comprehensive feedback. These habitual errors in learning the target language can be classified as a kind of errors.

Error analysis, put forward by S.P.Corder in the 1970s, is a systematic analysis of mistakes made by learners in British English learning, and a study of the causes of er-

rors, so as to reveal the process and principles of learners' second language acquisition.

To understand the errors in the process of learning English, we are supposed to know the different types of errors. Corder divides inaccurate points into two types: performance errors and competence errors<sup>[1]</sup>. Performance errors refer to the accidental slips of tongue or pen made by learners when they are tired or hurried. Normally, this kind of error has no regularity. It happens occasionally even for native speakers, and thus the performance errors are not serious and can be avoided with little effort by the learners.

Competence errors, on the other hand, refer to a regular error caused by inadequate competence of the target language, which is more serious than performance errors. It deviates from the track of the target language and reflects the speaker's language ability and level. For instance, Chinese learners often forget to add "s" to the verb of the third person's present tense. Another striking example what can express the error of Chinese learners is Chinese learners' habitual mixture of personal pronouns (e.g. the misuse of "she" and "he" in conversation).

For such errors, learners are difficult to detect and correct themselves. Most importantly, the same errors will occur repeatedly in the use of the Chinese learners. Therefore, in the process of learning English, the emergence of errors should be paid enough attention by Chinese learners.

### 2.3.1 Choice of Material

The fact proves that, the study will be instructive for Chinese learners to conquer negative transfer and grasp British English sounds.

Through a comprehensive consideration, the cartoon *Peppa Pig* was judged as a better choice for Chinese learners to learn English and overcome negative transfer. The specific reasons are as follows.

For starters, there are frequent and exaggerated sounds in the cartoon. It is the feature that can arouse the learners' attention to certain words or sentences. Through the cartoon *Peppa Pig*, the audience can appreciate the humorous stories, and master some typical pronunciations.

Secondly, these sentences used by *Peppa pig* are simple and short; these representative sentences exist in every aspect of life, which enables learners to recognize the differences more clearly.

Thirdly, the cartoon's speed is moderate. Such characteristics are suitable for learners of different ages. If they can follow the speed of *Peppa Pig*, it will be conducive to promote the capacity of hearing. Even if they may encounter a few problems and setbacks through the cartoon, they can overcome them by themselves.

Finally, the cartoon *Peppa Pig* involves many an interesting conversation, which can trigger Chinese Learners' interests to learn British English. Out of concern for the comprehensive consideration, this paper finally decides to take the cartoon of *Peppa Pig* as the starting point of the thesis.

Accordingly, based on the cartoon, the thesis expounds the phonetic features and the differences between British English and Chinese, which is beneficial for Chinese learners to learn British English sounds. The study not only can help Chinese learners to conquer the negative transfer, but also it is good for children to reshape accurate pronunciations of British English sounds.

Concerning the social background of learning English, scientific and technological product has brought us many pronunciations of learning English. That is to say, in the new era, people's linguistic concepts should master a language in a more scientific and effective way.

In the thesis, distinctive features are stressed, which distinguishes the difference between each phoneme and highlights the difficulty of learning British English sounds. Realizing the point, a series of studies is conducted gradually.

First of all, the study collects five clips from the cartoon *Peppa Pig*. And then, subjects are chosen from different majors and age groups. Finally, through analyzing the 34 samples, some statistics involving the British English sounds were shown clearly. Based on the research, the thesis analyzes some phoneme which is hard to speak for Chinese learners and makes a contrast with Chinese.

### 2.3.2 Data-collection

The aim of the study is to conclude general difficult British English sound for Chinese learners. At the beginning, select 34 samples as the objects of study (different genders, ages and majors). And then, the study collects five clips from the cartoon *Peppa Pig*. After having a general understanding of the above basic information, these people will be asked to read the same text in the next step (see the details in the Appendix to the text). Finally, their recorders will be analyzed to know which sounds are more likely to make mistakes for Chinese learners.

In the research, there are 10 males (accounting for 29.4%) and 24 females (accounting for 70.6%) in this research. Male and female were taken into consideration, which can the research objective and exclude the gender factors.

According to the Table 3, we can realize that different age groups have been studied. Therefore, the research result accord with different ages and the difficult sounds are suitable for different ages to learn British English.

**Table 1.** Age distribution of Chinese learners

Age	Account	Percent
A. under 15	3	8.8%
B. 16—25	23	67.6%
C. 26—35	6	17.6%
D. over 36	2	5.9%
Total	34	100%

**Table 2.** Major distribution of Chinese learners

Majors	Amount	Percent
A. English language majors	8	23.5%
B. French language majors	7	20.6%
C. Japanese language majors	3	8.8%
D. Artistic design majors	4	11.8%
E. Nursing majors	1	2.9%
F. Accounting majors	4	11.8%
G. Computer science majors	2	5.9%
H. Pre-school education majors	2	5.9%
I. Structural engineering majors	3	8.8%
Total	34	100%

The research covers as wide fields as possible, so that the analysis structure can be more objective and general. At the same time, the key and difficult pronunciations analyzed will be used more comprehensively by different majors.

## 3. Negative Transfer: Language Acquisition Difficulties Resulting from Language Differences

### 3.1 Negative Transfer Hypothesis

The theory of transfer was put forward by Robert Lado in the mid-1950s. In psychology, transfer refers to the influence of knowledge, skills, methods and attitudes acquired in the learning process on the learning of new knowledge and skills<sup>[2]</sup>. Some of these influences are positive and some are negative. Its positive and promoting effect is called positive transfer, and its hindering effect is called negative transfer, also called interference.

Robert Lado holds the view that positive transfer occurs where the structural features of the two languages are the same, while negative transfer occurs where they are different, which is the contrastive analysis hypothesis.

As for Chinese learners, the main difficulties to master second language come from the interference of Chinese. It is necessary to predict the difficulties and errors in second language learning by contrasting the similar and different points of the two language structures, so as to stress the difficult points and key points in the teaching process. Not

only can the idea overcome the interference of mother tongue but also establish new habits for Chinese learners.

### 3.2 Distinctive Features of Phonemes

The idea of distinctive features was first put forward by Roman Jakobson (1896-1982), one of the representatives of structuralism Prague School, in the 1940s as a means of working out a set of phonological contrasts or oppositions to capture particular aspects of language sounds. The pronunciation characteristic with the function of distinguishing phonemes is called the distinctive features of the phoneme.

Jakobson pointed out that the core of distinctive features is binary features and a phoneme is the sum of several distinctive features<sup>[3]</sup>. The phoneme system of each language may only have a part of the distinctive features, but not all the distinctive features.

Each phoneme can be decomposed into several distinct features. It is easier to make clear the characteristics of phonemes in specific languages by using distinctive features.

#### 3.2.1 The distinctive features of unvoiced and voiced sounds

Since the inception of the phonological analysis of distinctive features in the 1950s, features traditionally have been specified by binary values to signify whether a segment is described by the feature; a positive value, [+], denotes the presence of a feature, while a negative value, [-], indicates its absence.

Next, we compare the distinctive features of English and Chinese phonemic systems from two perspectives: pronunciation method and pronunciation location.

**Table 3.** Distinctive features of English and Chinese phonemic systems Features

Language \ Features	Place of Articulation		Manner of Articulation	
	Vowels	Consonants	Vowels	Consonants
English	[+palatal]	[+dental] [+glottal] [+Palatal] [+alveolar]	[±round]	[±unvoiced]
Chinese	[+palatal] [+apical] [+retroflex]	[+palatal] [+blade] [-palatal]	[±round]	[±aspirated]

Distinctive features are often regarded as Jakobson's greatest contribution to phonology. The table expounds the distinctive features of English and Chinese phonemic systems.

In the process of English learning, learners can also analyze every pairs' distinctive features (e.g. the difference of /p/ and /b/ is whether they are aspirated, hence the aspirated and unaspirated opposite is their distinctive features of /p/ and /b/). Accordingly, the contrastive research is expected to provide some implications and reference for the further research of the learning of British English.

#### 3.2.2 The Importance of Distinctive Features

Through the analysis of the distinctive features, the subtle differences between languages can be highly strengthened in cognitive thinking, and the bad habits of learners in second language learning can be gradually corrected. When their problems are constantly overcome, the progress can be intuitively reflected in communication, and then their learning can also get positive feedback from others.

This kind of feedback is likely to become a benign trend. On the one hand, it can promote the improvement of level of learners in other aspects, such as listening, writing and reading. On the other hand, learners' interest in second language will be constantly stimulated, which makes learners more enthusiastic about learning a language.

### 3.3 Differences between Chinese and English Sounds

Understanding the differences between Chinese and English and highlighting the key points and difficulties is a new perspective for second language learning. This method could be useful than learning a language in isolation.

#### 3.3.1 An Overview of Chinese and British English Sounds

Mastering a language involves the study of speech sounds, grammar, and vocabulary. Sounds are produced through the human vocal organ, respectively, the larynx and vocal cords. It is a medium that conveys semantic information and can be understood by the recipient. Sounds are a special physiological and psychological phenomenon.

Voice has three attributes: (1) physical attributes. They are pitch, intensity, length and timbre. Among them, Chinese belongs to tone language. The pronunciations of Chinese are mainly determined by pitch, while English is determined by intensity. (2) Physiological properties; Sounds were produced through the human vocal organ, respectively, the larynx and vocal cords. Human voice organs include respiratory organs, vocal organs and reso-

nance organs. Sounds are a medium that conveys semantic information and can be understood by the recipient. (3) Social attributes, which is the most essential attribute of speech <sup>[4]</sup>.

Chinese and English are different language systems, that is, Sino-Tibetan and Indo-European language <sup>[5]</sup>. Both of them have a complete and very different phonetic system. Although many a morpheme is same or similar in the hearing, they possess subtle differences in the places and manner of articulation.

### 3.3.2 Different Vowel and Consonant Systems

In British English and Chinese, some phonemes seem to be the same, but in fact they are slightly different. English vowel system is relatively simple, consisting of 20 vowels and 24 consonants, while Chinese vowel system consists of 10 vowels and 22 consonants.

For the vowels and consonants of these two languages, if learners can clearly find out the differences and focus on learning, it will help Chinese learners to break through their obstacles of learning British English.

### 3.3.3 Different Characteristics of Syllable Structures

The syllable structures of the two languages are quite different. If they do not discern the differences in syllable structures between the two languages, Chinese learners are prone to meet many problems in conversation.

The syllable structure of Chinese has the following characteristics. First, the syllable structure is concise and the boundary is clear. A Chinese character is usually expressed as a syllable. Each syllable must possess a phoneme and must be a vowel. There are at most four phonemes, which constitute a rhyme head, a rhyme belly and a rhyme ending <sup>[6]</sup>. Thus the boundaries between syllables and syllables are clear. (e.g. [tsuaŋ]).

Secondly, most of the sounds are loud and melodious. As for Chinese, a syllable may have no consonants, but it must have vowels. Vowels are absolutely dominant in syllable structure. Two consonants are not allowed to appear continuously in the same syllable, that is to say, Chinese syllables do not have multiple consonants.

Third, the tones of each syllable in Chinese have their own rhythm. Every syllable must have a tone, which is an indispensable part of Chinese syllables. Even if two syllables are the same but the tones are different, they often have different meanings (e.g. mā, má, mǎ, mà).

Concerning the syllable structures of British English, there are several prominent features. On the one hand, its combination is free while the combination of Chinese

syllables is restricted by the pronunciations position and rhyme head. Furthermore, English has more types of syllabic structures in English than in Chinese.

On the other hand, in English syllables, there are more consonants than vowels, and there are consonant clusters <sup>[7]</sup>. There may be two or three consonants at the beginning or end of a word continuously. In Chinese syllables, fewer consonants and vowels are dominant. Each consonant in the syllable has a vowel before or behind it.

Accordingly, when Chinese learners realize the differences in syllables between the two languages; they can highlight the key points of learning. For example, many a Chinese learner habitually adds vowels to English consonants. If they can realize the distinction, it will be a great progress in the process of learning English.

Realizing different characteristics of syllable structures, Chinese learners will establish a new recognition to the learning of the second language. If they talk with others with British English, or learn English through watching *Peppa Pig*, they will be subconsciously concerned about the differences in syllable structure between the two languages. This change is conducive to the mastering of English pronunciations.

### 3.3.4 Tone language and Stress Language

In a stress language like British English, intonation changes indicate attitudinal and emotional meanings, while in a tone language like Chinese, pitch changes in intonation mark different expressions of meanings <sup>[8]</sup>.

Based on the previous study, Chinese is determined by pitch while English is determined by stress. Therefore, that is why Chinese is called tone language while English is regarded as “sing-song” language.

Contrasting the difference of tone language and stress language, it would be meaningful for learners to learn a language. There is a common phenomenon to notice that western learners cannot distinguish the tones of Chinese (e.g. “bèi zi”, “bēi zi”). Conversely, Chinese learners cannot discern the stress of English (e.g. conduct /'kɒndʌkt/ noun, /kən'dʌkt/ verb). For Chinese learners, if they can fully realize the differences between the two languages, the pronunciation and intonation of British language will be more natural.

## 3.4 Difficulties for Chinese Learners to Learn British English

For Chinese learners, the mastery of stress and intonation is an important part of pronunciations learning. Because of the influence of Chinese tone language for a long time, it is not easy for learners to grasp English tone



naturally.

As for some typical phonemes, this chapter makes specific analysis and distinction from the two dimensions of place of articulation and manner of articulation. This is designed to help learners recognize the differences between the two languages, so as to better overcome the barriers of learning English.

### 3.4.1 Stress and Rhythm

To understand the knowledge of English stress and rhythm, we should know the changing rules of stress position and accurately grasp the stress of sentences according to a context or grammar.

The boundary of Chinese is clear among syllables, because each syllable has its own tone, and can speak clearly<sup>[9]</sup>. Stressed syllables have high pitch value, clear and long pronunciation time. Weak syllables have low pitch and the pronunciations sounds vague.

For Chinese learners, what should they do is to avoid the influence of Chinese rhythm in English. On the contrary, several light syllables should be compressed together so that the pronunciation sounds native and easy to understand.

Many learners' English sounds are shown that they have no rhythm, cannot express certain emotions, and it is difficult to arouse the interest of the audience. If Chinese learners can grasp these characteristics and practice regularly, they will have a better grasp of the phonetic rhythm.

In terms of tone, although there are some similarities in pronunciations, Chinese tones only appear for a single word, while English tones act on the whole sentence. Therefore, different tones need to be considered according to different situations. However, Chinese learners do not have a good command of English pronunciation. Sometimes they put Chinese pronunciation habitats into single English words, which will also cause difficulties or mistakes in English pronunciation.

Compared with the great difference between Chinese and English in terms of words and grammar, nevertheless, English pronunciation problems do not cause too much difficulty for Chinese students. In any case, if Chinese learners can pay attention to the above problems and carry out targeted training, it will be easier for Chinese learners to overcome the differences in stress and rhythm.

### 3.4.2 Analysis of Difficult Distinctive Features/Sounds for Chinese Learners

Undoubtedly, difficult sounds are the biggest obstacles for Chinese learners to master British English. Sometimes, for speakers, just several sounds were spelt incorrectly,

which makes the whole talk unnatural. Thus it is good for learners to promote their English levels through finding these sounds that were spoke habitually and trying to overcome it.

They should know which difficult sounds are before learners are determined to conquer non-standard pronunciation. C.Practor comes up with a difficulty level theory that divided difficulties into six levels, that is, from zero to five. With the higher the level, the more difficult it is.

According to the theory, difficult sounds which are hard to spell for Chinese learners can be divided two types: similar but different sounds and completely different sounds. If new knowledge or skill involves some content that have been mastered long before, it will be easier relatively. Because when a learner is triggered to establish a connection, the efficiency of learning knowledge is high.

On the contrary, if new knowledge differs with former contents completely, learners cannot build effectively the connection. At the same time, learners naturally do not produce knowledge confusion. However, when some contents are similar but different, learners could establish an incorrect connection. What's worse, it's hard for learners to detect their errors, so it's also very difficult to correct them. Involving the aspect of English phonetics, this problem is still prominent and hard to overcome. In the process of learning English, Chinese learners are disturbed by their mother tongue. When learning certain phonemes which is similar but different, learners are tend to make mistakes and hard to perceive. Theoretically speaking, similar but different sounds are harder to acquire than different completely sounds.

Furthermore, each learner has their own habits on speaking British English, therefore, different learners exist different difficulties in sounds. Even if that is complex, we can still get a general recognition of which sounds are hard to spell and often confused with their mother tongue. The research is conductive for Chinese learners to find several common difficulties and overcome the obstacles.

## 4. Distinctive Features: A Possible Solution to Conquer Chinese Learners' Negative Transfer in Learning British English

In the process of second language acquisition, there are two important linguistic concepts that need to be focused by Chinese learners, namely, the distinctive features of phonemes and the negative transfer. If we can establish a certain relationship between the two, it will help learners overcome the negative transfer to a large extent, and master a second language better.

### 4.1 Distinctive Features to be Mastered

Through the collection and analysis of 34 samples,



the result is presented in the form of data so as to clarify which concrete sounds are the biggest obstacles for Chinese learners to learn British English.

#### (1) The analysis of consonants in British English

The research divides consonants into two types, voiceless consonants and voice consonants. These tables show the consonants that Chinese learners habitually make when reading the text *Peppa Pig*.

**Table 4.** Percentage of pronouncing voiceless consonants incorrectly for Chinese learners

voiceless consonants	Amount	Percent
/t/	1	2.9%
/θ/	1	2.9%
/s/	1	2.9%
/ʃ/	4	11.8%
/tr/	3	8.8%
/ts/	1	2.9%
/tʃ/	2	5.8%
Total	13	5.5%

According to the survey data, /ʃ/, /tr/, /tʃ/ are often mispronounced (e.g. shopping, trolley and actually). According to the table, the sound /ʃ/ is misread most frequently. The reason why Chinese learners make the mistake habitually is that learners often confuse the sound with /ʒ/.

Two sounds have the same place of articulation. They are postalveolar and fricative. Voiceless consonants and voice consonants are their distinction. That is to say, when pronouncing these two sounds, we can observe if the cords vibrate to judge whether they are /ʃ/ or /ʒ/. If the vocal cord vibrates, this is the sound /ʒ/, and vice versa.

**Table 5.** Percentage of pronouncing voiced consonants incorrectly for Chinese learners

Voiced consonants	Amount	Percent
/d/	1	2.9%
/g/	2	5.8%
/v/	10	29.4%
/ð/	3	8.8%
/z/	4	11.7%
/ʒ/	3	8.8%
/n/	9	26.5%
/ŋ/	8	23.5%
/l/	3	8.8%
/dr/	1	2.9%
/dʒ/	6	17.6%
Total	50	13.4%

In the table of voiced consonants, /v/, /ð/ and /n/ are spoke habitually by Chinese learners. Meanwhile, learners often confuse these sounds with other similar sounds (/v/ and /w/, /ð/ and /θ/, /n/ and /ŋ/). Next, we will make an in-depth analysis to the three pair of similar but different sounds.

The fricative /v/ and the semivowel /w/. Two sounds similar extremely, but you can perceive the subtle dis-

tinction when hearing two pronunciations carefully and repeatedly, such as very and wine.

The former is not only a fricative, but also it is a labiodental. The latter is a semivowel. Because there is no the sound /v/ in Chinese, learners are not particularly familiar with it, therefore, they will habitually link with their mother tongues and find similar sounds corresponding to it. Chinese learners tend to articulate /v/ into /w/. This is a common phenomenon for most Chinese learners in the process of learning English.

The voiced consonant /ð/ and the voiceless consonant /θ/. The pronunciation parts of the two sounds are basically the same when they are pronounced. The tongue is placed between opened upper and lower teeth. The tip of tongue exerts as much force as possible on the lower teeth. The airflow is pronounced by friction between the tip of the tongue and the gap between the upper and lower teeth. The following is a detailed analysis of the similarities and differences between the two sounds.

On the one hand, they are both dental sounds which are made by the tongue tip or blade. Only fractures [ð, θ] are found to be strictly dental. On the other hand, they are fricative. A fricative is spoken when there is close approximation of two articulators so that the airstream is partially obstructed and turbulent airflow is produced.

However, whether or not the vocal cords vibrate during pronunciation is the subtle difference between the two sounds.

The distinction of nasal sounds: /n/ and /ŋ/. As for the two sounds /n/ and /ŋ/, nasal is their common feature. If the air is stopped in the mouth but the soft palate is down so that it can go out through the nasal cavity, the sounds are nasal stops. Even if both types of sounds are stops, phoneticians have retained the term stops to indicate a stop and used the term nasal to indicate nasal stops. [n, m, ŋ] are nasals found in both English and Chinese.

What distinction they exist is that the former is alveolar while the latter is velar. This is their main difference in sounds.

#### (2) The analysis of vowels in British English

In order to make a more accurate and objective analysis, the research divides vowels into two categories: monophthong vowels and diphthongs. The following tables show vowels that Chinese learners habitually make mistakes when reading the text *Peppa Pig*.

According to the table of monophthong vowels, it is clear that /e/ and /æ/ is spoken incorrectly by Chinese learners. Distinguishing the differences of vowels, we are supposed to consider the front, center, back of the tongue and the levels of tongue height.

The following is the difference of monophthong vow-

els /e/ and /æ/. The two sounds have subtle distinction. If learners ignore their differences and confuse /e/ with /æ/, their British English will sound unnatural. In the text *Peppa Pig*, it is too hard for Chinese learners to distinguish the difference between /e/ (e.g. head, *peppa*, red) and /æ/ (e.g. rash, actually, hat).

The level of tongue height is a main factor to distinguish the two sounds. The more open the mouth, the lower the level of tongue height. Therefore, contrasting the two sounds, the mouth is more open than the sound /e/ when spelling the sound /æ/.

**Table 6.** Percentage of pronouncing monophthong vowels incorrectly for Chinese learners

Monophthong vowels	Amount	Percent
/i:/	1	2.9%
/ɪ/	5	14.7%
/e/	10	29.4%
/æ/	10	29.4%
/ə/	6	17.6%
/ʌ/	2	2.8%
/ɔ:/	1	2.9%
/ʊ/	1	2.9%
Total	48	17.6%

**Table 7.** Percentage of pronouncing diphthongs incorrectly for Chinese learners

Diphthongs	Amount	Percent
/aɪ/	12	35.3%
/eɪ/	1	2.9%
/aʊ/	4	11.8%
/əʊ/	4	11.8%
/eə/	1	5.8%
Total	22	12.9%

Diphthongs are not as fixed as monophthong vowels. On the contrary, diphthongs slide from one vowel sound to another. The process leads the position of tongue and the shape of mouth to change.

Based on the table of diphthongs, we can know that the sound /aɪ/ is the biggest obstacle for Chinese learners in the learning of diphthongs. The reason is that learners cannot distinguish the difference between /aɪ/ and /eɪ/. In the research, many people speak incorrectly “hide and seek” as “head and seek” in the text of *Peppa Pig*.

As a matter of fact, as long as we can distinguish the difference between /a/ and /e/, the pair of diphthongs can be spoken accurately. When reading the sound /aɪ/, the mouth is rounded, the tongue rises, and the tip of the tongue shrinks backwards. The “/a/” sound transitions smoothly to the “/ɪ/” sound. This sound is the pronunciation of the letter “I” or “Y” in the word

When practicing this sound, the tip of the tongue touches the teeth and the lips are flat. From the “/e/” to the “/ɪ/”

long sound. It is the pronunciation of the letter “A”.

## 4.2 The Role

As an important factor, the negative transfer influences Chinese learners to master British English. The opinion that the mother tongue has negative impacts on the learning of British English was emphasized as early as the forties and the fifties by Fries (1945) and Lado. Until now, negative transfer has been recognized as an important factor in second language learning. The factors of negative transfer mainly include avoidance, fossilization, simplification, over-generalization, hypercorrection, inadequate learning, faculty teaching.

As for the hypothesis, Lado holds the point that we cannot make a comprehensive interpretation to the problems if the circumstance that students learn a second language has not been observed. Therefore, no matter what theory, research, behavior must be combined with the actual situation to get the correct results<sup>[10]</sup>.

In the process of learning English, besides recognizing the differences between Chinese and English in phonetics, Chinese learners should practice repeatedly, and gradually right their incorrect phonetic habits.

In addition, learners should actively use the second language to communicate with people, and pay attention to the mistakes they do not realize according to the effective feedback from others. Through feedback from others and their own practice, learners can effectively promote their own pronunciations, which is instructive to acquire a fluent and standard British English.

The distinctive features are an effective means for learners to overcome the negative transfer in learning a second language. By comparing and analyzing the two languages, learners can find out the subtle differences of phonemes and strengthen the learning of the key and difficult points in the process of second language acquisition.

If learners only learn a language in isolation, their perception of errors is also very one-sided. Therefore, the distinctive features are an important means for learners to overcome the negative transfer and master a second language. For example, Chinese learners have some difficulties in learning these /v/ and /w/. They tend to articulate /v/ into /w/. The former is not only a fricative, but also it is labiodentals, and the latter is a semivowel (see the details in the 3.23-3.24). When Chinese learners hear the exaggerated pronunciation and tune on the cartoon *Peppa Pig*, they can try to discern the distinction (e.g. Why is Papa so serious? George likes to play with his sister very much).

If learners try to connect the two languages and try to make a further distinction, the difference between them should also be the most important aspect which learners

should pay attention to. This way of learning enables learners to gradually change from single learning to conscious learning after they realize their mistakes.

## 5. Conclusions

There are similarities and differences in phoneme systems and pronunciation characteristics between English and Chinese phonetic systems. Understanding the differences in phonetic systems and the specific manifestations of negative transfer in Chinese can help Chinese learners overcome the negative transfer in English learning.

The contrastive study of English and Chinese has certain guiding significance for Chinese learners to learn English pronunciation and overcome the negative transfer. By means of comparative analysis, the learners make a basic comparison between English and Chinese about phoneme systems, syllable structure features and tones, and find out the differences between the two systems.

As for Chinese learners, in order to promote the pronunciation of spoken English, they should deepen their understanding of the differences in phonetics between English and Chinese. At the same time, learners can also listen to more original materials and watch films, imitating the outstanding features of native speakers and improving their English level. The reason why the thesis takes the cartoon *Peppa Pig* as the breakthrough point of the study is also considering this aspect.

In addition, learners are supposed to improve their ability of thinking in English and actively understand the differences between the two modes of thinking, so as to cultivate the capacity of perception to the British English, which is essential for Chinese learners to overcome negative transfer and master a second language.

## References

- [1] Hu Zhuanglin. *Linguistics Tutorial*. [M] Beijing: Peking University Press, 2001.
- [2] Liu Xun. *Introduction to Teaching Chinese as a Foreign Language*. [M] Beijing: Beijing Language Teaching and Research Press, 2001.
- [3] Qu Changliang. Rethinking the Origin of English Term of Jacobson's Distinctive Concept. [J] *Language education*, 2017, 16 (1): 57-61.
- [4] Shao Jingmin. *General Theory of Modern Chinese*. [M] Shanghai: Shanghai Education Press, 2015.
- [5] Ye Feisheng, Xu Tongqiang. *Outline of Linguistics*. [M] Beijing: Peking University Press, 1981.
- [6] Qu Qingqing, Liu Weilin, Li Xingshan. The Phonetic Processing Unit of Chinese Language Production: A Research Based on Phoneme. [J] *Institute of psychology, University of Chinese Academy of Sciences*, 2018, 26 (9): 1535-1544.
- [7] He Shanfen. Several Aspects of Contrast Between English and Chinese in English Phonetics Teaching. [J] *Journal of Shanghai Institute of Foreign Languages*, 1987, 52 (6): 70-73.
- [8] Shattuck, Stefanie, and Klatt Dennis. The Limited Use of Distinctive Features and Markedness in Speech Production: Evidence from Speech Error Data. [J] *Journal of Verbal Learning and Verbal Behavior*, 18(1) (1979): 41-45.
- [9] Huang Borong, Liao Xudong. *Modern Chinese*. [M] Beijing: Higher Education Press, 2002.
- [10] Lado, Robert. *Linguistic across cultures*. [J] Ann Arbor: University of Michigan Press, 1957.

# The Effectiveness and Issues of Using Feedback in Second Language Writing

**Yichen Wang\***

Xi'an Medical University, Xi'an, Shaanxi, 710021, China

## ARTICLE INFO

### *Article history*

Received: 6 September 2021

Revised: 20 September 2021

Accepted: 15 October 2021

Published Online: 30 October 2021

### *Keywords:*

Feedback

Second language writing

English teaching

## ABSTRACT

Based on the description of feedback in the literature and the classification of feedback by different scholars, this paper discusses the efficiency and possible issues of the teachers' use of different feedback in the teaching of second language writing. Through interviews with experienced English majors, this paper further demonstrates the importance of teachers' use of feedback in second language writing teaching. At the end of the paper, the author also shows that the combination of different feedback according to specific situations in teaching can better promote the writing proficiency of second language learners.

## 1. Definitions and Explanations of Key Terms

### 1.1 The Theory of Feedback

Feedback is widely acknowledged that plays a crucial role in the instructional process<sup>[7]</sup>. It is defined differently by different researchers. Truscott, J.<sup>[11]</sup>, for instance, states that any method used to reflect the right and wrong of teaching to learners can be regarded as the feedback. When it is used in the study of second language writing, feedback is still considered as the essential part for improvement of second language writing skills<sup>[7]</sup>. Biber et al.<sup>[1]</sup> also argue that both first language (L1) and second language (L2) writing skills can be enhanced through feedback. This means that feedback can be used to make learners more focused on effective self-expression than just practicing the multi-draft composition<sup>[7]</sup>. The presentation of feedback has changed over the past two decades. It is no longer just teacher's written feedback but

also combined with other forms. For example, feedback can be given by teachers, other peers, or computer system even though the writing workshop and oral feedback. Learners can get progress from feedback because there are many focuses of feedback. It can include the content like ideas, organization and also focus on the aspects of language such as grammatical form and usage<sup>[1]</sup>.

### 1.2 The Classification of Feedback

In the field of second language acquisition, Shao<sup>[9]</sup> points out that scholars use the clarity of feedback as a criterion for classification. Direct feedback, also known as explicit feedback, is that the teacher directly pointed out the learners' error and corrected the error. On the contrary, indirect feedback which is as well as implicit feedback means that the teacher underlined the error without giving correct format but left it to the students to correct it<sup>[2]</sup>. Ferris and Roberts<sup>[6]</sup> claim that indirect feedback is more

*\*Corresponding Author:*

Yichen Wang,

Xi'an Medical University, Xi'an, Shaanxi, 710021, China;

Email: 347477035@qq.com

helpful for learners' second language acquisition since learners are involved in error corrections which could make them more impressive so that enable to achieve long-term improvement in writing. Besides, Hyland, K & Hyland, F<sup>[7]</sup> also mentions that feedback can be divided into summative feedback and formative feedback due to the purpose. The former is regarded as comment given after writing used to estimate the outcomes of writing while the latter focuses on the learners' improvement of writing ability rather than ability in assessment. He asserts that formative feedback normally assists the summative feedback during the writing pedagogy.

### 1.3 The Theory of Error Correction

Written error correction is also called grammar correction and corrective feedback which is one of the most important components in the feedback. Based on Truscott, J.<sup>[11]</sup>, error correction composes of the following parts: explicit, metalinguistic feedback, elicitation, recast, repetition, clarification, and translation. Teachers can consider these aspects when giving feedback to learners, which can make feedback more effective and thorough. Furthermore, it is also useful for the teacher to notice that error correction cannot treat various linguistic error types in an identical way. Because they do not represent the same period of time, these linguistic knowledge are in the same main position respectively<sup>[12]</sup>.

## 2. The Key Issues in Written Feedback

### 2.1 The First Issue about Effectiveness of Corrective Feedback

One of the most controversial topics in the error correction is whether it is effective for improvement in the accuracy of second language learner's writing<sup>[2]</sup>. Different scholars hold different opinions and attitudes on this issue.

#### 2.1.1 The oppositions of using corrective feedback

Truscott<sup>[10]</sup> suggests that the error correction would not only help the second language writing but also have a negative impact. He advocates that this method should not continue to be used in teaching. The study did by Bitchener, J.<sup>[12]</sup> also find that students who are given four very different categories of feedback still make no obvious differences in their writing ability. Another strong evidence comes from Truscott, J.<sup>[11]</sup>, whose experimental study concludes that students measured by grammar and vocabulary errors are less advanced than content-based students. Ineffectiveness of error correction also can be verified by Bitchener, J.<sup>[12]</sup>. Based on the results of Bitchener, J.

<sup>[12]</sup> study, the content groups are more advantageous than error group. Even in the aspects of the use of words, both groups improve considerably and do not make the great differences. Bitchener, J.<sup>[12]</sup> also argues that students who often experience modified mistakes are more likely to be restricted in writing. Additionally, Truscott, J.<sup>[11]</sup> claims that it is meaningless to give students error correction since it has no effect on the improvement of students' longitudinal writing. Teachers are also asked to shift the focus of feedback to the content and writing process of student writing<sup>[11]</sup>. Hence, the grammar correction is useless for second language writing<sup>[10]</sup>, but also leads to a possible decline in the quality of students' writing because of the lack of attention to content.

#### 2.1.2 The supports of using corrective feedback

In order to against the viewpoint of Truscott<sup>[10]</sup>, a great number of researches did by opponents. Ferris<sup>[4]</sup> argues that written corrective feedback should not be abolished because it does help the learners promote their accuracies in writing. He points out that the Truscott's argument is pretty immature and overly strong. The study of Truscott, J.<sup>[11]</sup> also verify that through the revised manuscript, it was found that the group that was given the error correction obviously had only a small number of grammatical errors compared to students who did not receive feedback at all. Besides, Ferris and Roberts<sup>[6]</sup> conclude that based on past literature, 80% of errors can be successfully corrected by students through feedback from teachers.

Scholars also try to focus on students' attitudes toward teacher corrective feedback. Most results of studies indicate that students' view on teacher corrective feedback is positive. Ferris and Roberts<sup>[6]</sup> as well as points out that compared with peer feedback and oral feedback, ESL students have a consensus that teacher written feedback is more helpful for their writing. Furthermore, students wish their writing mistakes to be commented by the teacher. Otherwise, they will be disappointed<sup>[10]</sup>.

### 2.2 The Second Issue about Effectiveness of Direct or Indirect Feedback

Direct feedback and indirect feedback which promotes the accuracy of students' writing has attracted the attention of many scholars Ferris<sup>[4]</sup>. Different scholars have expressed different opinions on this issue.

### The discussion of both two feedbacks

In terms of effectiveness of indirect feedback, Ferris and Roberts<sup>[6]</sup> suggest that indirect feedback allows students to personally participate in the correction of errors



and the resolution of problems which can achieve long-term second language acquisition by improving students' attention and noticing. Another instance for this is that Ferris<sup>[4]</sup> discovers that through indirect feedback, the accuracy of students in writing is increasing. Moreover, indirect feedback is more effective in reducing students' errors of writing in the long run<sup>[6]</sup>. From the students' perspective, the several studies show that students tend to indirect feedback with coded error is more helpful to them<sup>[3]</sup>. Indirect feedback also promotes students to review themselves and self-correction<sup>[3]</sup>.

However, when it comes to direct feedback, other scholars' research proves its effectiveness. Ferris<sup>[4]</sup> experimented that in a survey of 5,000 teacher feedbacks, students prefer to apply direct feedback in the writing process because they are allowed to directly use advice from teachers into their new pieces of writing. The view that direct feedback is helpful also support by Ferris<sup>[4]</sup>, whose study shows that direct feedback can make the correct rate as high as 80% or more while indirect feedback is only 77%. In addition, Chandler<sup>[3]</sup> emphasizes that direct feedback helps students understand the correct format of the target language by reducing student confusion. It is also useful for lower proficiency students to correct complicated errors<sup>[3]</sup>.

To sum up, since various factors have to be considered, it is difficult to give a very clear conclusion to the above two issues.

### 3. Conclusions

#### 3.1 Author's Voice on the Topic

In my view of point, students can benefit from appropriate feedback, which means that various factors should be considered not just focusing on the grammar errors when teachers give feedback to individual students, so the effectiveness of feedback can be increased. For example, Chandler<sup>[3]</sup> mentions that teachers should take into account the social function of feedback and meaning-related issues in learner's writing. Ferris, Pezone, Tade, and Tinti<sup>[5]</sup> did the research reveals that experienced teachers adjust their feedback based on the student's background such as the capability, the personality of each student. Considering contextual features, it can also be proved that giving appropriate feedback is effective by combining different types of feedback in teaching writing. For instance, students with a high degree of language are more suitable for indirect feedback, leaving students with space for self-modification (Lalande, 1982), whereas low-level language learners due to lack of the language proficiency are not able to correct errors by themselves<sup>[5]</sup>. Hence, using

different feedback to different language level students are allowed the teacher to improve the effectiveness of feedback.

However, although feedback actually has advantages for English language learner's writing, it still exists some limitations in feedback. For example, Ferris<sup>[4]</sup> states that according to his own teaching experience, she finds that her suggestions about feedback only more available for students' treatable errors. Another limitation is that students show their interests in teachers' direct feedback while the previous studies demonstrate that indirect feedback chronically facilitates students' writing ability. As a result of this, the teacher should make adequate preparation if they choose indirect feedback on their students' errors<sup>[6]</sup>. But these shortcomings are not unsolvable. In order to address the issue, Ferris<sup>[4]</sup> argues that do not use the changeless method to correct those untreatable errors in students writing and these errors can be handled by training and explicit feedback. As for the second limitation, developing students' independent self-editing and self-reflection skills could be the solution. Besides, giving students expatiation also could be helpful to overcome the limitation<sup>[6]</sup>.

In summary, it can be drawn a conclusion that feedback plays an extremely central role in English language writing. In addition, it is necessary to give students feedback on their writing since it is advantageous for them to enhance their writing ability.

#### 3.2 Author's choice of most effective feedback

Personally, the author prefers that indirect feedback is most effective for English learners, especially in terms of long-term benefits. In the process of using indirect feedback by students, they must learn to solve and correct their mistakes according to the clues left by the teacher. This means that in this process the student's learning motivation is stimulated which leads to the development of the long-term second language knowledge acquisition<sup>[5]</sup>. The impact of indirect feedback on students' accuracies of writing is continuous and can keep it for a long time. Ferris & Roberts,<sup>[6]</sup> also reports that students who received indirect feedback had a higher rate of error decline than students who received direct feedback. She also mentions that the short-term correction ability of students who receive direct feedback will not develop into long-term ability. Language acquisition is a long-term accumulation of learning<sup>[8]</sup>, therefore, indirect feedback that has a lasting impact on students becomes more important and more effective for improvement in the accuracy of second language learner's writing.

## 4. Interview

Because of the respect for the interviewer's personal privacy, the teacher who was interviewed would use a pseudonym, which means that the letter "Z" refers to the teacher in the interview report.

### 4.1 Teacher Profile

Z is a Chinese teacher who has been teaching English in the university of China for 21 years, and she also is a teacher with rich teaching experience. Her teaching subjects are comprehensive English, English listening and English Lexicology which are all the compulsory courses for Chinese students who study in English major.

### 4.2 Report of Interview

Z holds the view that it is necessary that the English language teacher should give the students feedback. Z<sup>[13]</sup> argues that feedback is very crucial for motivating students learning, in the field of second language (L2) writing, most scholars admit the importance of feedback. Her argument also is verified by Hyland, K & Hyland, F<sup>[7]</sup> who asserts that feedback is regarded as the essential part and its importance is acknowledged in the academic world. When Z was asked which kinds of writing feedback are valuable for learners, Z<sup>[13]</sup> thinks that different feedback should be used since teacher should give different writing comments on individual students' writing. She also mentions that the standard of effective feedback is variable, depending on the actual situation of the student's writing. For example, when there are too many grammatical errors in the student's writing article, then you should pay attention to grammar correction. However, sometimes if the content of the student article makes you feel confused, you should give the student a content evaluation. Sometimes when the cohesion and coherence in students' paper are poor, organizational issues should be pointed out in the feedback. Z<sup>[13]</sup> insists that the effective feedback should be able to students realize their errors and weakness in their writing and also can help students write better in a long term. Besides, Z<sup>[13]</sup> suggests that in the effective feedback, text-specific should be considered since it plays a key role in writing feedback. When discussing the pros and cons of feedback, Z said "As for advantages, I think, it is obvious that it can help students easily locate their problems and revise their text correctly, and it is also very useful for developing students writing ability. While in terms of disadvantages, maybe it is time-consuming, and inappropriate comments maybe undermine students' confidence in writing." When asked if she prefers indirect feedback or direct feedback, Z<sup>[13]</sup> states that it depends on

the actual teaching situation, but direct feedback is more targeted for students to locate their errors accurately so that they can correct them better. Chandler<sup>[3]</sup> concludes that direct feedback allows students to better understand feedback and make full use of feedback to modify their own errors. Furthermore, when asked about the attitude of students about feedback, Z<sup>[13]</sup> notes that according to her teaching experience, the attitude of Chinese English learners is very positive. She points out that students are inclined to receive feedback from teachers. In the study of Hyland, F.<sup>[13]</sup> also finds that most students are willing to receive the feedback from teachers.

In brief, the questions and answers of the interviews are closely related to the issues I discussed in part A. For example, the first to fourth questions in the interview were all raised for the first issue. Another instance is that the seventh question in the interview is for the second issue. Hence, interviewed teacher's ideas provide me different perspective and understanding of feedback.

From the above teacher's beliefs and experiences, there are some implications for my future teaching. First, the factors affecting the effectiveness of feedback is various, so teachers cannot just use a single type of feedback in the teaching process. Giving feedback to students in different forms can enhance the positive impact of feedback on teaching. Second, in the face of different students, the teacher should give different comments on the individual writing situation of the students. Third, it is extremely important to choose the appropriate method to give feedback. Giving students simple and less information feedback is maybe not proper in teaching.

## References

- [1] Biber, D., Nekrasova, T., & Horn, B. (2011). The effectiveness of feedback for L1-English and L2-writing development: A meta-analysis. *ETS Research Report Series, 2011*(1), i-99.
- [2] Bitchner, J., Young, S., & Cameron, D. (2005). The effect of different types of corrective feedback on ESL student writing. *Journal of Second Language Writing, 14*, 191-205.
- [3] Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of second language writing, 12*(3), 267-296.
- [4] Ferris, D. (1999). The case for grammar correction in L2 writing classes: A response to Truscott (1996). *Journal of second language writing, 8*(1), 1-11.
- [5] Ferris, D. R. (1997). The influence of teacher commentary on student revision. *Tesol Quarterly, 31*(2), 315-339.

- [6] Ferris, D., & Roberts, B. (2001). Error feedback in L2 writing classes: How explicit does it need to be? *Journal of Second Language Writing*, 10, 161-184.
- [7] Hyland, K., & Hyland, F. (2006). Feedback on second language students' writing. *Language Teaching*, 39(2), 83-101.
- [8] Littlewood, W. (1984). *Foreign and second language learning: Language acquisition research and its implications for the classroom*. Cambridge University Press.
- [9] Shao, X. (2015). On written corrective feedback in L2 writing. *English Language Teaching*, 8(3), 155.
- [10] Truscott, J. (1996). The case against grammar correction in L2 writing classes. *Language Learning*, 46(2), 327-369.
- [11] Truscott, J. (2007). The effect of error correction on learners' ability to write accurately. *Journal of Second Language Writing*, 16, 255-272.
- [12] Bitchener, J., & Knoch, U. (2009). The relative effectiveness of different types of direct written corrective feedback. *System*, 37(2), 322-329.
- [13] Hyland, F. (1998). The impact of teacher written feedback on individual writers. *Journal of second language writing*, 7(3), 255-286.

# Research on Implementation Modes of Ideological and Political Courses in Pediatric Nursing

**Weiwei Zhou**\*

Department of Medicine of Huaibei Vocational & Technical College, Huaibei, Anhui, 235000, China

## ARTICLE INFO

### *Article history*

Received: 14 September 2021

Revised: 25 September 2021

Accepted: 15 October 2021

Published Online: 30 October 2021

### *Keywords:*

Pediatric nursing

Ideological and political course

Implementation mode

## ABSTRACT

with the continuous advancement of socialist modernization, China needs more and more talents, in particular the talents who are not only high in professional techniques, but also high in ideological and moral level and thinking ability, thus producing ideological and political courses. Along with the constant development of education cause, the professional education starts to concern on ideological and political work and integrate ideological and political courses into professional teaching. To this end, the paper explores the specific implementation path of ideological and political course mode from the perspective of pediatric nursing, describes ideological and political courses in detail and points out the requirements on the construction of ideological and political courses of pediatric nursing so as to provide reference for education of pediatric nursing and improvement of students' comprehensive quality.

## 1. Introduction

In recent years, all universities and colleges have paid more and more attention to modern education, adopt various education methods, introduce diverse education concepts, try to improve education level and consummate teaching effect, and cultivate well-rounded talents for the society. Influenced by ideological and political courses in professional teaching in pediatric nursing, the teaching objectives include two aspects: one is to teach the expertise about pediatric nursing to students and the other is to train and educate the students to improve their vocational quality as well as ideological and moral level so that the students can have multi characters facing the future and the society.

## 2. Overview of Ideological and Political Courses

With a view to learn about the specific implementation modes of ideological and political courses of pediatric nursing, we shall firstly learn about the ideological and political courses and cognize the ideological and political courses in detail through definition, form, essence, concept, structure, methods and current status.

### 2.1 Definition, form and essence of ideological and political courses

The ideological and political courses mainly refer to the whole process that professional education and ideological & political education through teaching. Professional

\*Corresponding Author:

Weiwei Zhou,

Department of Medicine of Huaibei Vocational & Technical College, Huaibei, Anhui, 235000, China;

Email: [zww514@163.com](mailto:zww514@163.com)

teaching and ideological & political education are mutually independent but mutually coordinated, and their basic objective is to realize all-round education on students. Compared with other education concepts, they are more integrated and global <sup>[1]</sup>. In the process of ideological and political courses, teachers will take ideological and political education including basic academic knowledge and intellectual values as the basic form, combine ideological & political work with professional courses, influence the awareness of students by routine teaching and promote their behaviors to change toward anticipated directions.

Different from professional courses, ideological and political courses are a kind of education in essence and can help students realize the construction of good moral character and professional quality. Ideological and moral education has always been the key point of education. China has insisted on ideological & moral education and ideological & political education all the times, and such educations have run through the whole process of study career of students from primary schooling, so they are characterized in durability <sup>[2]</sup>. In recent years, in face of the changing domestic and foreign environment, with a view to enhance the ideological awareness of new generation youngsters, the concept of ideological and political courses has been proposed and widely recognized. The implementation of ideological and political courses is conducive to helping students consolidate fine thought, and cultivating and reshaping correct outlooks; in addition, to insist on ideological and political courses can inherit and carry forward Chinese fine traditional morals and cultures.

## 2.2 Concept, structure and method of ideological and political courses

The purpose of any education is to promote students' all-round development, so ideological and political courses are homodromous with and not opposed to professional teaching. The implementation of ideological and political courses doesn't represent the negligence of professional teaching and the key point for students to survive and develop in the society is still the professional ability. But the fine characters under the influence of ideological and political courses will last for the lifetime. If they are compared, the courses will be put in opposite to the fine characters. In fact, only the interaction and coordinated development can realize the essential value of education.

The economic foundation determines the superstructure. With the change of economic society, people's sense has also changed. Education has always been the focus of national people. During the advancement of education modernization, the general structure shall be changed in time to adapt to the modern society. The launch of ideological

and political courses manifests the reform of educational structure. The traditional educational structure focusing on professional performance has disappeared while well-rounded and multi-vector quality education has emerged. Ideological and political courses have changed the traditional and dissociated educational structure and realized the integration of ideology & politics and professions.

Ideological and political courses can be regarded as an education way different from professional teaching and based on ideology and morality of students. The training on talents covers professional ability and ideology & morality, but it shall be realized by multi-element system. Specially, the training includes textbook settings, teaching contents, disciplinary construction and comprehensive management. During the implementation of multi-element system, professional teaching and ideological & political courses run through the system and form an interactive relationship <sup>[3]</sup>. The schools shall implement the concept of ideological and political courses, guide teachers, realize all-round communication and education of ideology and politics by optimizing teaching objectives, upgrading contents, renovating structure and changing model, enable students to have a consistent and correct political view, try to cultivate students' confidence in nation and culture, help students build national awareness and promote the formation of fine characters.

## 2.3 Combination of ideological and political courses and pediatric nursing

A new policy will be definitely launched based on a certain practical situation. Why the ideological and political courses are launched is that a lot of problems occur in students' cultivation in universities. Some universities lack of organic combination of ideological & political courses and professional courses cannot give play to the role of coordination. For instance, certain students of pediatric nursing only attach importance to learning nursing expertise and improving skills and neglect the construction of professional quality and ideology & morality, which will definitely trigger severe education problems and impact talents cultivation and far-reaching development.

It is a fact that the combination of ideological & political courses and pediatric nursing is not close. The current pediatric clinical nursing lacks nurses, most of the areas haven't formed vocational recognition for pediatric nursing and the durable pediatric nursing faces severe real test, which will definitely lead to rise of separation rate of pediatric nurses. With a view to satisfy the requirements, hospitals will definitely reduce the industry entry threshold of pediatric nurses, which will impact nursing quality



to a certain extent, lead to frequent change of pediatric nursing industry and hinder industrial steady operation as well as development. In face of severe real problems, it has been a great concern for universities about how to effectively conduct ideological and political courses and how to combine ideological & political courses and pediatric nursing professional teaching.

### **3. Launch of Pediatric Nursing Education and Ideological & Political Course Model**

During combination of pediatric nursing with ideological & political courses, five aspects shall be started. Firstly, teachers shall attach importance to moral education embarked on ideological awareness; secondly, teachers shall reform educational syllabus in time, and optimize teaching objectives; thirdly, teachers shall attach importance to element exploitation and give play to the function of education; fourthly, teachers shall teach curricular and extracurricular contents; fifthly, teachers shall stress the importance of evaluation on teaching.

#### **3.1 Cultivate ideological and political awareness and pay attention to moral education**

Though students are the subject of study and their initiative and cooperation are needed for teaching, as general designer of teaching, teachers are also important. An excellent teacher shall have advanced ideological awareness, namely ideological and political awareness, and full sense of responsibility and mission, run ideological and political awareness through teaching work and silently influence students<sup>[4]</sup>. The ideological awareness and teaching ability of teachers who are independent individuals will be affected by a lot of aspects and it is impossible to keep their pace completely consistent, so with a view to push forward ideological and political courses, teachers shall change ideological opinions, cultivate ideological and political awareness, try to learn ideological and political knowledge, and learn and cognize ideology and politics deeply and completely, which can lay a foundation for subsequent teaching. Apart from teachers, universities and colleges shall take effort, enhance the assessment on teachers, and focus on teachers' morality and teaching style. Moreover, schools shall combine teachers' assessment results and promotion, and create a fair competitive environment and mechanism for teachers. Only in this way, teachers can better conduct moral education without worry.

#### **3.2 Reform syllabus and optimize teaching objectives**

The syllabus has an important position in teaching pro-

cess. The syllabus of pediatric nursing usually contains the teaching objectives of pediatric nursing, specifies main contents and scope of teaching, clarifies key points and difficult points of pediatric nursing and even covers the choice of teaching methods. With a view to carry out ideological and political courses and run them through the whole process of teaching of professional pediatric nursing, we shall reform the syllabus, re-specify methods, contents and scope pursuant to real teaching requirements and status, better guide teachers in work and guide students to study hard<sup>[5]</sup>. Universities, colleges and teachers shall cognize the syllabus in detail, improve the attention to reform of the syllabus, and get ready to push forward ideological and political courses. It is indispensable to reform the syllabus. Teachers shall prepare contents in combination with students' comprehensive ability. When formulating relevant assessment and evaluation standards, teachers shall consider ideology & morality and comprehensive quality, improve the scientificity of the syllabus and give full play to its role of globality and guidance.

#### **3.3 Enhance element exploitation and give play to the function of education**

The integration of ideological and moral courses and pediatric nursing needs an accurate connection point and there are not only one connection point but multi connectable links. The absence of the connection point will make it difficult to introduce ideological and political elements and to arouse the interests of students in study, so it is important to exploit connection points and ideological and political elements. The teaching of pediatric nursing will definitely contain a lot of educational elements and resources. Teachers shall improve the identification ability, exactly exploit relevant resources and elements, take relevant knowledge as carriers and connection points, and achieve effective linkage. Because professional teachers are not familiar with ideological and political knowledge, they can design curriculum with ideological and political teachers at the stage of teaching research and assure the effectiveness of curriculum teaching.

#### **3.4 Fully combine curricular teaching contents with extracurricular teaching contents and improve teaching effect**

From the perspective from environment, the current pediatric nursing teaching can be mainly divided into the curricular and the extracurricular. The opportunity of curricular teaching and extracurricular teaching shall be fully utilized for ideological and political contents. In terms of curricular teaching, teachers can apply all teaching means

and devices flexibly, fully mobilize the enthusiasm of students, achieve the objectives of interactive teaching, add ideological and political contents and constantly improve teaching effect<sup>[6]</sup>. In terms of extracurricular teaching, teachers may request students to get mass teaching resources by multimedia and other technical means, enable students really feel the main work of pediatric nursing in accordance with internship and other curricular requirements, conduct ideological and political education using actual cases, enhance students' sense of identity and empathy, so as to improve the teaching effect and boost the work of ideological and political courses.

### 3.5 Stress teaching evaluation and attach importance to teaching feedback

Teaching evaluation is a link which are often neglected. In fact, it is significant for improving teaching effect to conduct efficient and scientific teaching evaluation. It is a new teaching mode to reform pediatric nursing teaching and merge ideological and political courses. As it is unknown that whether the teaching objectives, contents and modes are scientific and rational, teaching evaluation can clarify the rationality and scientificity of the foregoing work, help teachers discover problems in time and optimize teaching work<sup>[7]</sup>.

Teaching evaluation mainly includes two aspects. One is to evaluate the study effect of students. It is necessary to measure effect from the perspective of students and attach importance to teachers. Teachers shall combine students and teachers, take performance, skills and ideological morality as standards, and pay attention to whether students have the fine characters such as coordination, dedication, patriotism and professionalism apart from grasping expertise and skills. The other is to evaluate the teaching effect, request students to insert questionnaires, take teachers' teaching ability, teaching attitude and ideological morality as standards and conduct comprehensive evaluation on teachers<sup>[8]</sup>. Based on foregoing evaluation, teachers shall learn about the comprehensive effect of teaching reform, analyze the strengths and deficiencies, take positive measures to make up defects and promote coordinated development of pediatric nursing and ideological & political courses.

## 4. Conclusions

To be concluded, ideological and political courses provide new modes and new routes to current teaching in

universities. With constant exposure of defects in teaching modes of traditional professional courses, teachers have gradually realized that it is necessary to reform the existing professional teaching work, and ideological and political courses can be a new direction of reform. It is a key point for the teaching of universities about how to formulate scientific educational theories and how to transfer theories to practices. Therefore, we explore the new modes and believe good teaching effect can be achieved by taking expertise as carriers and adding ideological and political contents. Pediatric nursing teaching can be reformed in the direction mentioned above, and nurses with high professional level and strong ideological & ideological awareness shall be cultivated.

## References

- [1] Sun Yaru, Yang Xiuling, Wang Xin, et al. Application of Hybrid Teaching Model in Pediatric Nursing Teaching [J]. *Journal of Nursing Science*, 2021, 10 (2): 6.
- [2] Mao Xia. Application of Flipped Classroom Teaching Mode in Practical Teaching of Pediatric Nursing [J]. *Health Guide*, Issue 12, 2021, Page 268, 2021.
- [3] Xie Yuanyuan, Sun Weijuan, Yang Sainan. Research on the Practice Integrating "Ideological and Political" Elements into Pediatric Nursing Teaching [J]. *Modern Vocational Education*, 2020 (21).
- [4] Li Liwei, Hou Jianwei, Wei Guiji. Exploration on Ideological and Political Practice Approaches in Pediatric Nursing Course [J]. *Course Education Research*, 2020 (52): 114-115.
- [5] Sun Linlin. Application of Ideological and political construction of pediatric nursing course in medical colleges [J]. *International Education Forum*, 2020, 2 (11): 173.
- [6] Chen Yu, Huang Jinlong, Xu Hongwei, et al. Preliminary Study on the Internalization of Humanistic Spirit Education in the Teaching of Pediatric Nursing [J]. *Heilongjiang Medicine and Pharmacy*, Issue 5, Vol. 43, 2020, pp 54-55, 57, 2020.
- [7] Liu Dan. Discussion on the Ideological and Political Course Construction of Pediatric Nursing Course in Medical Colleges [J]. *Diet Health*, Issue 46, Vol. 6, pp 275-276, 2019.
- [8] Cui Xingfang. Establishment of Ideological and Political Course System in Pediatric Nursing Teaching [J]. *China Health Care & Nutrition*, Issue 7, Vol. 29, 2019, pp 253-254, 2019.

# Turn-taking in EFL Classroom Discourse

**Longfei Zhang\***

North China University of Water Resources and Electric Power, Zhengzhou, Henan, 450046, China

## ARTICLE INFO

### *Article history*

Received: 8 October 2021

Revised: 14 October 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### *Keywords:*

Classroom teaching and learning

Turn-taking

Linguistic elements

EFL learners

Intercultural elements

Turn-raising signals

Turn-taking patterns

## ABSTRACT

In this essay, there will be a contrast and comparison between the teacher-dominant turn-taking patterns and students-centered turn-taking patterns. This comparison can help us to find out which pattern can help develop an effective turn-taking in classroom discourse. In terms of the turn-taking pattern in EFL classroom, there also will be a study of turn-taking patterns. This study is concentrated on the EFL students who study in foreign language classroom. Different turn-taking patterns will be recorded to analyze students' language performance and language anxiety during the turns change process. Brown (2008) proposes that senior foreign language learners tend to be influenced by the low sense of confidence, the feel of shame and inferiority. However, evidence shows that many students with higher level of language proficiency also are silent in the foreign language classroom. They seldom take turns to make a contribution to the speech in the classroom. This essay shows great interests in the relationship between EFL learners' language anxiety and turn-taking patterns. Particularly, this essay will explore the several turn-taking patterns which can help to foster the flow of classroom talk. These turn-taking patterns will be analyzed in two directions: the teacher-fronted turns exchange and students-centered exchange. This can help EFL teachers to adjust the turn-taking patterns to the classroom teaching to help students get more involvements in the classroom conversation.

## 1. Introduction

One of the values of Conversation Analysis (CA), which serves as a research principle, is its power of engaging researchers on obvious communication characteristics as well as break down the principles out of the expectations (Richards & Seedhouse 2004) <sup>[1]</sup>. The study of Conversation Analysis is of great values for the classroom teaching and learning. Based on ethnomethodology, conversation is described as the discourse which is created and talked by people involved in the conversation, and it has certain principles and is guided in some certain ways (Cook 1989). As for conversation, it has turns-taking, and

this is due to the fact that there are participants in the conversation. Cook (1989) in his book depicts that the mechanisms of turn-taking is how participants make the flow of the conversation, and the mechanisms changes according to cultural and linguistic elements <sup>[2]</sup>.

As for the definition of turn-taking, Sacks et al (1974) explain turns-taking is the order movements during games, for distributing political offices, arranging traffic at crossroads, giving service to customers at the business buildings, and for the speech exchange <sup>[3]</sup>. Sacks' explanation gives the general view of turn-taking in daily life. Actually, in the EFL teaching and learning, turn-taking deserves great attention. Turn-taking is guided by a set

\*Corresponding Author:

Longfei Zhang,

North China University of Water Resources and Electric Power, Zhengzhou, Henan, 450046, China;

1007577511@qq.com

of principles which refer to the linguistic elements, and many phenomena acts as the cues of turn-taking. According to Cook (1989), effective turn-taking not only includes linguistic elements, and eye-contact, body language, intonation as well as volume together make a difference to turn-taking. Ford and Thompson (1996) depict that turn-taking happens in the coincidence of melodic, syntactic and pragmatic completion<sup>[4]</sup>. However, turn-taking in EFL classroom seems to not so easy. Many factors are involved in the classroom teaching and learning. It is common that there is some failure of turn-taking in the EFL classroom conversation.

During the daily conversation, turn-taking is very common. In the first language conversation, turn-taking occurs in an easy and natural way. One of the most important roles of turn-taking in daily life is that consideration and respect should be taken into consideration since the subjects in the conversation are human beings<sup>[5]</sup>. However, it is accepted that turns-taking is very difficult for EFL learners, and this is due to the fact that it demands the intercultural elements and multi turns-raising signals. Many EFL learners encounter problems about how to continue the speech, and Cutler and Pearson (1986) states that when a conversational communication breaks down, this phenomenon arouses from the unsuccessful efforts of turns-taking<sup>[6]</sup>. It is true that EFL learners always feel anxious and silent when they are cued to speak in the foreign language classroom. Therefore, the study of the patterns of turn-taking is beneficial to the management of EFL classroom conversation.

## 2. Literature Review

Burgoon (1976: 62) claimed that “individuals with communicative reticence exhibit the predisposition of unwillingness to communicate”<sup>[8]</sup>. This phenomenon is very common if there is an observation of Chinese students’ performance in the foreign language classroom conversation. Teachers feel frustrated to manage the flow of the classroom conversation. There are several causes related to this situation. It is widely accepted that the feeling of shame and lack of language proficiency and confidence, to some extent, result in the failure of turns change among teachers and students. As a matter of fact, students feel pressed and stressful or even tend to be silent if they are cued to speak a foreign language<sup>[9]</sup>. The need of the students’ language performance in foreign language classroom increasingly becomes salient among many researchers. A self-report measurement<sup>[10]</sup>, the unwillingness to communicate scale (Burgoon 1976), nonverbal and relational communication associated with reticence<sup>[11]</sup>, and nonverbal communication performance

and perceptions associated with reticence ( Burgoon, Pfau & Manusov 1987) together make a difference to the study of students’ silence in classroom turn-taking phenomenon<sup>[12]</sup>. In the traditional foreign language teaching, teacher governs the whole flow of the classroom communication, and dominants the central role in the class. During the discussion between students and teachers, many students fear of making mistakes so that they keep silent in the conversation. Therefore, when teachers create the turn-exchange with the class, it is reasonable that students have no reaction with the cues. This phenomenon is correspondent with Liu and Jackson’s (2008) study, which shows that the anxiousness of foreign language learning is closely related with the level of self-confidence of learners’ own language proficiency. This means the more students feel confident with their own language proficiency, the more they will be willing to make an utterance in the EFL classroom conversation. In addition to this, in the classroom turn-taking conversation, the traditional teacher-governed speech reveals the information to students that teacher is the information provider and tend to be more knowledgeable than themselves. As a consequence, students always have a sense of inferiority in terms of knowledge capacity. This is regarded by many researchers as language anxiety. There are variable turn-taking patterns in foreign language classroom conversation. The relationship between turn-taking patterns in classroom discourse and EFL students’ language anxiety can bring benefits to the management of the turn changes in the class.

Jacobs (1986: 151) claims that classroom communication seems like a game which is a “goal-oriented activity involving moves by one or more players, mutual dependence and constraints on moves, and the need for strategy and tactics”<sup>[13]</sup>. The talk of classroom has some certain patterns and roles. For ESL teachers, it is demanding for them to have a clear understanding of what kind of turn-taking patterns can facilitate their control of classroom communication. Some researchers have explored the relationship between EFL students’ language anxiety during the classroom talk and the patterns of turn-taking. In fact, students’ language anxiety and performance in EFL classroom is influenced by a variety of factors. For example, students’ own confidence in their language competence may make a difference in their contribution in the classroom discussion. This means students with higher level of confidence in their foreign language proficiency tend to join the classroom communication frequently. In addition to this, according to Koul, Roy, Kaewkuekool and Ploisawaschai (2009), the actual language proficiency and language superiority have a negative on students’ language anxiety in class<sup>[14]</sup>. However, in this essay, great



interests are shown in the relationship between turn-taking patterns and EFL students' language anxiety and performance in the classroom communication.

According to ethnomethodologists, one type of turns taking is an adjacency pair (Cook 1989). This often happens when the utterance of one participant in the conversation is very similar with that of another participant. Adjacency pair occurs in everyday life. Cook in his book gives the examples of adjacency pairs, like offer (acceptance/refusal), assessment (agreement/ disagreement), blame (denial/ admission) and question (expected answer/unexpected answer). Adjacency pair occurs in the daily life, and the question and answer utterance happen through a series of turn exchange. In the EFL classroom communication, the turns-taking patterns are traditionally defined as Question-Answer-Comment (Q-A-C) and Question-Counter Question-Answer-Comment (Q-CQ-A-C), and this clarification is on the basis of Nicholls' (1993) statement. In the classroom discourse, these two patterns occur throughout the talk. In the following part of this essay, a detailed illustration of the two patterns will be created to explore how they help get students' more contribution and involvement in the classroom conversation.

As for the Question-Answer-Comment (Q-A-C), it is very similar with Initiation-Response-Evaluation (I-R-E). In daily conversation, turns are governed as adjacency pair or Question-Answer (Q-A), but in the classroom discourse, turns are governed as Q-A-C pattern<sup>[15]</sup>. After a pair of question and answer, there also comes to a comment on the answer. This can be seen in the sentence pair below:

- (1) A: Have you finished your assignment?  
B: Yes, I have submitted it yet.  
A: That's great.
- (2) A: Do you know what the capital of China is?  
B: Of course. It is Beijing.  
A: Fantastic.
- (3) A: Did you enjoy the piano concert?  
B: Yes.  
A: It was great performance.

From the perspective of McHoul (1978), teachers hold the dominant role to comment on students' responses, despite of the fact of the optional role of this C-part<sup>[16]</sup>. The problem of the pattern is that the answer is not always what the teacher wants to get. The rationale behind this phenomenon is that teacher in this kind of turn-taking pattern is dominant, and this traditional teacher centered classroom implies the "power inequalities" (Nicholls 1993). This is very similar with Long's (1983) "unequal power" discourse<sup>[17]</sup>. The teacher's dominant role in this turn-taking communication may impair students' confi-

dence so that they hesitate to make a contribution to the classroom interaction.

In terms of the Question-Counter Question-Answer-Comment (Q-C Q-A-C) pattern, it results in the turns changes in the group. According to Nicholls (1993), this C-Q part is the significant turns move to teachers, and teachers take the responsibility to guide the discourse. When teachers dominate the conversation and distribute the questions, students raise their questions they encounter. The process can be seen in the following sentence:

T: Do you know how to get to the first crossroad from here?

Q S1: What is crossroads?

CQ T: Does anyone know the meaning of crossroad?

A S2: A road that crosses another road.

T: Could you explain it to S1?

S2: It is the junction where one street crosses another.

Form the example above, the C-Q part is also directed by teacher which is a traditional teacher-fronted classroom. Teacher directs the question raised by student to the class group. Thus, teacher has restructured the turn-taking in the classroom discourse.

Whether the traditional turn-changes in classroom discourse fosters students' involvement in the discussion has elicited heated debate. Actually, turn-taking patterns in classroom have some certain effects on classroom interaction and communication<sup>[18]</sup>. Nevertheless, some researchers, like Rymes (2009), argue that the traditional patterns block the students' involvements in the communicative text and learning process. Based on the former analysis in this essay, it is clear that teacher acts as the head of the discourse. Teacher is the information provider and holds an upper position than students in the classroom communication. Muller (1988) also claims that teacher is the only information provider, and students seem to be of less knowledge, and only teacher takes the responsibility to make comments on students' utterance. In this situation, students obviously feel stressful in the classroom talk and hesitate to take their turns to make an utterance. In Zhang's (2011) study, she states the ideas that the traditional turn-taking patterns should focus on learners instead of teacher-fronted classroom. Teachers should better make learners direct the classroom, and importantly, the students-students communication should be emphasized in the turns taking. It seems that the students-centered turn-taking approach can better facilitate the turns exchange and learning process.

In the following part, there will be an analysis of several turn-taking patterns in classroom discourse. The traditional teacher-fronted turn-taking patterns and students-centered turn-taking approach will be analyzed. Es-



pecially, there will be a specific focus on the students-centered turn-taking pattern. There is an assumption that this kind of learners-centered turn-taking can reduce learners' anxiety and enhance the effective turns change during classroom communication and interaction. The written transcripts about students-centered turn-taking will be created and presented in the essay. Besides, there will be a contrast and comparison of traditional teacher-centered turn-taking pattern and students-centered turn-taking pattern, and this can check the efficiency of whether the approach of students-centered turn-taking can better enhance the flow of the classroom interaction and communication.

### 3. Discussion in Teaching and Learning

If the topic is determined, and the conversation is aroused, the conversational and interactional turn-taking should be taken into consideration. There are variable turn-taking patterns in the classroom discourse. The traditional Q-A-C and Q-C Q-A-C patterns have some certain influence on students' class performance. In the traditional teacher-fronted classroom, these two traditional turn-taking approaches are widely applied in the classroom teaching. In this part, there is a comparison and contrast between teacher-fronted turns change in EFL classroom and students-centered turns change. Based on the related literature to Q-A-C and Q-C Q-A-C turn taking patterns, it reveals the some certain disadvantages behind the traditional teacher-centered approach. Moreover, on the basis of Zhang's (2011) study, she proposed that the teaching of turn-taking should absorb the idea of students need to direct the dominate role in the turns exchange process.

In light of the traditional turn-taking patterns, Q-A-C or IRE frequently happens in the daily life conversation as well as the classroom discourse. Example of the teaching of this turn-taking pattern has been given in the previous part. There will be a deep look into this pattern. During this transcript, teacher dominant the class talk. This process can be shown by the following sentences.

Q T: How long have you surfed internet each day?  
(5')

A S1: Several hours.  
(4')

A S2: Always.

C T: Yep. Quite a long time.

In the conversation, teacher elicited the question. However, instead of answering the questions immediately, students replied several seconds later. There another type which is Initiation-Response-Feedback (IRF), and this can be seen from the following example:

I T: What kind of website have you searched for such long time?

(9')

R S2: Hmm, I often search for sports news.  
(5')

R S3: I, you know, listen to the BBC news every day.

F T: That's sounds great. Have you found that listening BBC news brings you any benefits?

In the first teaching of Q-A-C turn-taking, several turns later, teacher is likely to find variable responses. However, in the I-R-F turn-taking, similarly, students do response the questions within several seconds thinking. Then, teacher gives his or her feedback and continues with another question. At the beginning, turns exchange smoothly. However, after several pairs of turn exchange, students got tiered to continue the turns. This is due to the fact that the difficulty level of the questions grows, and students fear of making mistakes and getting negative feedback. Therefore, students became reluctant to make responses. This shows than the teacher-centered teaching of the Q-A-C and I-R-F turn-taking patterns, to some extent, impeding the flow of the classroom talk instead of facilitating it.

The teaching of EFL learners often encounters the turn-taking pattern of Q-C Q-A-C. This kind of turn-taking is also traditionally teacher-centered control of conversation talk. This means teacher still takes the responsibility to arrange the talk. Here is a Q-C Q-A-C turn-taking.

Line 1 S3: Listening BBC news helps me broaden my horizons.

(2')

Line 2 C S4: Teacher, what is the meaning of horizon?

(2')

Line 3 Q T: Well, Linda, do you know the meaning of this word?

(3')

Line 4 S5: Hum.

(2')

Line 5 Q T: Does anyone have any idea about the meaning of horizon?

(4')

Line 6 A S1: Broadening horizons means opening our eyes.

Line 7 C T: Yap, that's it. Good job.

From the general view of this process, students still do not take the turns to make responses until they think for a while. Specifically, during students' discussion, they encountered problem. In line1, they ask questions for teacher to help solve the problem. Instead of answering the question the teacher himself, he directed the question to the student named Linda. At this point, teacher dominated the

talk and allocated the talk to another student. However, Linda did not take the turn to answer the questions. Again, teacher held the dominate role to allocate the question to the whole class. Several seconds later, students came up their ideas eventually. In line 7, teacher made his comments, and the conversation continued. It is similar with the Q-A-C and I-R-F patterns, and Q-C Q-A-C turn-taking pattern in this conversation also is the traditional teacher-fronted. The class talk is managed by teacher. It is evident that teacher restructured the talk through employing a CQ part in the turn-taking process. It is practical to foster the flow of the talk. However, when this process continues, there tend to be a silence during the conversation, even though teacher dominant the talk. This is due to the fact that students feel stressful during the turns exchange process. They encountered language anxiety at this stage. In actual fact, teacher still took the control of making comments, and students tended to feel anxious to make mistakes and get negative feedback. They are pushed by teachers' power to answer the questions. Similarly, they are afraid of making errors and getting negative comments. Students silence and hesitation to take turns at this process mainly results from language anxiety.

From the analysis of the teaching of turn-taking patterns, it can be concluded that these traditional turns exchange in classroom interaction and conversation, to some extent, blocks the flow of the EFL classroom talk. This can be seen from many studies which reveal that the unequal power in the classroom talking can elicit students' language anxiety. McHoul (1978) suggests that the allocation of the different speakership in classroom shapes the organization of classroom interaction and communication<sup>[19]</sup>. In the traditional teacher-fronted classroom, teacher is centered and has the power to manage the flow of the conversation. Students tend to be in an inferior position. In this process, teacher acts as the classroom manager and information provider, and he or she tends to know more than students do. According to Long, this phenomenon is kind of 'unequal power discourse' (1983:11). This unequal power in class is the main reason why students encounter language anxiety during the turns-taking process, and this plays a significant part in the failure of EFL turns change. Importantly, students can be the director of the classroom conversation, and take the responsibility to manage the flow the talk. Students should have the right to choose the next speakership, like any students or even the teacher, to continue the turn (McHoul 1978). This students-centered turn-taking in classroom discourse help reduce students' nervousness, get their more involvement and engage more attention. There is another written transcript which we can find something new about the teaching of turn-taking.

This turn exchange is more students centered.

- (1) L9: Mary? ((formally))
  - (2) T: uh huh?
  - (3) L9: your input plea// (h huh //huh//huh)//
  - (4) T: //huh//
  - (5) L11: // (h huh //huh//huh// huh) <huh>
  - (6) Q L9: there is this e::h (+) some sort of an idiom you pretend to
  - (7) pay us and we pretend to work
  - (8) CQ T: ok. What do you think that could bet (+) do you have any
  - (9) idea?
  - (10) L11: do you know what the word pretend means
  - (11) (++)
  - (12) T: do /know what the word pretend means
  - (13) L11: yeah (+) I- I doubt (+) I don't know that see
  - (14) CQ T: oh ok who - do - does anybody know what the word pretend
  - (15) means.
  - (16) L5: //pretend?//
  - (17) L6 ://pretend7//
  - (18) LB: pret(h)e:nd? ((LB sounds disbelieving))
  - (19) L7: //pretend7//
  - (20) A L6: //pretend// to be (+) like you're trying to show something
  - (21) from
  - (22) you that u:h
  - (23) A L9: is not?
  - (24) A L6:is actually not you
  - (25) (+)
  - (26) L11: a::h
  - (27) L5:pretend
  - (28) L11: ok
- (Nicholls 1993)

From the above mentioned, a general view of the transcript is that the turn-taking process continues smoothly. Specifically, in line 6 and line 7, students aroused the question creatively, instead of the teacher's dominant role in the class. This disturbs the power imbalance in the traditional EFL classroom talk. In line 1, student directed the turn to teacher. Then, in line 6, students continued dominant talk and raised a new topic. This Q-part breaks down the traditional principles of turn-taking in EFL class where teacher is centered. Then, in line 8, teacher inserted a C-Q part. However, in line 10, interestingly, students self shifted the topic to teacher. Instead of answering the question instantly, teacher repeated the question and wanted to get response from this student. Without getting the right answer, teacher took the responsibility to insert another C-Q part and allocated the question raised by the former student to the whole class. In the following part,

students provided their own understanding with sounds delivering. From line 15 to line 28, turns exchange happens among students automatically and freely. There was less reluctance to take the turns. Obviously, there is less teacher's involvement in the following part. It seems that during the student-student communication, turn-taking in class continues smoothly.

#### 4. Conclusions

From the analysis above, the traditional teaching approach of teacher-centered turn-taking pattern tends to impede students' learning and the flow of the classroom talk. Long regards dominant teacher role as the "pre-determined ability to control topic and speaker" (1983: 11). The unequal power allocation in classroom discourse can arouse students' language anxiety. For ESL students, it is very common that they hesitate to take the turns to express them in class. Many ESL students believe making mistakes in front of the whole class and teacher is kind of shame. Many studies have explored this phenomenon. Worde (1998) reveals that almost one half EFL students encounter language anxiety in variable degrees<sup>[20]</sup>. That is why the failure of turn-taking always happens. From the analysis of the patterns of the turn-taking, the traditional ones are teacher-fronted classroom talk, and this kind of interaction and communication does not go smoothly. During the classroom process, students are more likely to feel stressful. In contrast, when students are put in the central role of the classroom talking, especially when there is the student-student communication, the conversation continues naturally and smoothly. In the last written transcript, even though teacher plays the C-Q part, the teacher's role in this process is not so strong and explicit. This, to some extent, helps decrease students' language anxiety. In conclusion, the key factor of solving the problems embedded in the turn-taking process in EFL classroom is to reduce the students' language anxiety and let students, instead of teacher, be the power to manage the flow of the talking.

#### References

- [1] Richards, K., & Seedhouse, P. (eds.) (2004). *Applying Conversation Analysis*. London: Palgrave Macmillan.
- [2] Cook, G. (1989). *Discourse*. Oxford: Oxford University Press.
- [3] Sacks, H., E. A. Schegloff & G. Jefferson. 1974. 'A Simplest Systematics for the Organization of Turn-Taking for Conversation'. *Language. Journal of the Linguistic Society of America*. 50.
- [4] Ford, C.E. & Thompson, S. A. (1996) 'Interactional units in conversation: syntactic, intonational and pragmatic resources for the management of turns.' In E. Ochs, E.A. Schegloff and S.A. Thompson (eds) *Interaction and Grammar*. Cambridge University Press, Cambridge, 134-184.
- [5] Wiemann, J.M. & Kanpp, M. L. (1975). Turn-Taking in Conversations. *Journal of Communication*. Purdue University.
- [6] Cutler, A. & M. Pearson. (1986). 'On the Analysis of Prosodic Turn-Taking Cues'. In C. Johns-Lewis (Ed.): 139-155.
- [7] Brown, L. (2008). 'Language and Anxiety: An Ethnographic Study of International Postgraduate Students.' *Evaluation and Research in Education*, 21(2), pp. 75-95.
- [8] Burgoon, J. K. (1976). 'The unwillingness-to communicate scale: Development and validation.' *Communication Monographs*, 43, pp. 60-69.
- [9] Zhang, H. (2011). Language anxiety in ESL classroom: analysis of turn-taking patterns in ESL classroom discourse. *International Conference on Education, Research and Innovation*, 18, pp. 29-33.
- [10] McCroskey, J. C. (1997). Self-report measurement. In Daly, J. A., McCroskey, J.C., Ayres, J., Hopf, T., & Ayres, D. M. (Eds.), *Avoiding communication: Shyness, reticence, and communication apprehension*, Cresskill, NJ: Hampton Press, PP. 191-216.
- [11] Burgoon, J. K., & Koper, R. J. (1984). Nonverbal and relational communication associated with reticence. *Human Communication Research*, 10, pp. 601-626.
- [12] Burgoon, J. K., Pfau, M., Birk, T., & Manusov, V. (1987). Nonverbal communication performance and perceptions associated with reticence: Replications and implications. *Communication Education*, 36, pp. 119-130.
- [13] Jacobs, S. (1987). 'How to make an argument from example.' In Ellis, D. G. and Donohue, W. A. (Eds.), *Contemporary issues in language and discourse processes*. Hillsdale, N.J.: Lawrence Erlbaum.
- [14] Koul, R., Roy, L., Kaewkuekool, S., & Ploisawaschai, S. (2009). 'Multiple Goal Orientation and Foreign Language Anxiety.' *System*, 37, pp. 676-688.
- [15] Nicholls, J. (1993). 'Exchange Structure in the ESL Classroom: Q-A-C and Q-CQ-A-C Sequences in Small Group Interaction.' *Pragmatics and Language Learning, Monograph Series*, (4), pp. 183-191.
- [16] McHoul, A. (1978). The organization of turns at formal talk in the classroom. *Language in Society* .7 (2).
- [17] Long, M. H. (1983). 'Inside the "black box": Methodological issues in classroom research on language

- learning.’ In H.W. Seliger and M.H. Long (Eds.), *Classroom oriented research in second language acquisition*. Rowley, Mass.: Newbury House.
- [18] Zhang, H. (2011). Language anxiety in ESL classroom: analysis of turn-taking patterns in ESL classroom discourse. *International Conference on Education, Research and Innovation*, 18, pp. 29-33.
- [19] McHoul, A. (1978). The organization of turns at formal talk in the classroom. *Language in Society* .7 (2).
- [20] Worde, R. (1998). *An investigation of students' perspectives on foreign language anxiety*. George Mason University, Fairfax, Virginia.

# Value-added Evaluation System for Vocational School Students Construction and Practice Research

**Jian Zhang Yurong Cheng\* Bing Ran**

Chongqing Education Management School, Chongqing, 401320, China

## ARTICLE INFO

### Article history

Received: 8 October 2021

Revised: 14 October 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### Keywords:

Vocational school

Value-added evaluation

System construction

## ABSTRACT

Student evaluation in the new era should be rooted in the educational macro background of "cultivating people by virtue" and comply with the overall policy orientation of educational evaluation reform. This research focuses on the construction and implementation of value-added evaluation system. Combined with the characteristics of vocational school students, this paper constructs a four-level index system and refines the student evaluation standards. The evaluation subjects are students, head teachers, teachers, parents and enterprise managers. Through the development of the related APP, it is convenient for each evaluation subject to input information, and finally use K-line chart to visually present the change process of the appreciation in students' literacy. A value-added evaluation system with strong timeliness, objectivity, motivation and operability is constructed.

## 1. Introduction

Student evaluation in the new era should be rooted in the educational macro background of "cultivating people by virtue" and conform to the overall policy orientation of educational evaluation reform. The reform of educational evaluation is an important content to promote the construction of high-quality talent training system in the new era. The evaluation of students is an important part of the overall reform system of educational evaluation, and it is also the focus of the general concern of the society. The reform of student evaluation method is imminent, which has become the most critical and core field in the process of the current educational reform and development. In this process, how to carry out student evaluation and realize the increase in value of students' growth is a top priority and a more difficult problem.

## 2. Research Background

### 2.1 Background of the Times

At present, the world is undergoing profound changes unseen in a century, and China has embarked on a new journey to build a modern socialist country in an all-round way. Education evaluation is related to the high-quality development of education. What kind of evaluation baton there is, there is what kind of school-running orientation. In 2020, the CPC Central Committee and The State Council issued the "Overall Plan for Deepening the Reform of Educational Evaluation in the New Era" ("Overall Plan" for short), marking that the reform of China's educational evaluation system in the new era has entered a new stage from partial reform to overall reform. "Overall plan" proposed to establish a correct employment orientation. We should reverse the employment orientation of "only

\*Corresponding Author:

Yurong Cheng,

Chongqing Education Management School, Chongqing, 401320, China;

Email: 307242919@qq.com



famous universities" and "only educational background", and establish a talent use mechanism that is guided by moral character and ability and targeted at job demand. The "overall Plan" adheres to the problem orientation, starts with the concerns of the Party Central Committee, the people and the society, and advances the reform of key areas of education evaluation to achieve substantial breakthroughs. Adhere to scientific and effective method, improve the result evaluation, strengthen the process of evaluation, explore value-added evaluation, perfect comprehensive evaluation, make full use of information technology, and improve the scientific, professional and objective nature of educational evaluation. For the first time, "value-added evaluation" was advocated and promoted in the central policy documents <sup>[1]</sup>.

## 2.2 Vocational Education Background

In April 2021, at the National Vocational Education Conference, General Secretary Xi Jinping made important instructions on vocational education that vocational education should develop towards high quality and cultivate hundreds of millions of high-quality technical talents, skilled craftsmen and Great Country Craftsman. The Implementation Plan of National Vocational Education Reform proposes to establish and improve a perfect evaluation, supervision and evaluation system of vocational education quality, emphasizing the establishment of a vocational education quality evaluation system centering on learners' professional ethics, technical skills and employment quality. In the context of the establishment of a modern vocational education system, some vocational school students choose to participate in the higher education, and some students choose employment. It is found that the existing student evaluation model of secondary vocational schools is basically based on the traditional academic evaluation model of ordinary schools, and the academic performance is evaluated according to the examination results of each subject, except that there are some skill rating or skill testing related to specialty and work. Moral education evaluation is the head teacher's "scoring" according to the students' daily performance, but this "scoring" lacks the corresponding standards, process, empirical data and information support, resulting in the relatively common distortion phenomenon of "scoring". Whether secondary vocational schools can train the students to become self-supporting workers, and then become technical talents, become the physical fitness, healthy personality, mental health, moral, intellectual, physical, aesthetic and labor all-round development of the socialist builders and successors, will be an important basis to measure the value-added results of vocational education. Value-added

evaluation is especially suitable for the types and characteristics of vocational education and the actual situation of students <sup>[2]</sup>.

## 2.3 School Background

Our school is a national model secondary vocational school, and the school is committed to the development of education and teaching connotation. In terms of evaluation research our school has a certain basis, "multiple quantitative evaluation research and model construction of secondary vocational school students majoring in numerical control technology", "reform pilot of the implementation of grade point evaluation system in secondary vocational schools", "teaching quality evaluation research of the major of secondary vocational accounting" and other scientific research projects have been concluded. The multivariate quantitative evaluation model established by our school has "four evaluation subjects" and "three ability indicators", and finally "one score" will be given to students, which gives students a comprehensive evaluation based on the ranking of students' score in the class, grade or major. This evaluation model has changed the traditional evaluation method of "one examination to determine the merits and disadvantages", realized the multiple evaluation subjects, and paid attention to the process management. The project of reform pilot of the implementation of grade point evaluation system in secondary vocational schools will focus on the evaluation of students' academic, use credit grade point evaluation system for student course learning, professional qualification, skills contest, and enterprise practice to conducted a comprehensive evaluation, and determine whether a student has reached the standards of graduation, employment and entering a higher school. The current evaluation system can be used to assign a value to students' academic level or moral quality by "scoring", but it cannot play the "value-added" function of evaluation and cannot better reflect the longitudinal development and change process of students. Therefore, it is necessary to conduct in-depth research on the original basis and build a value-added evaluation index system <sup>[3]</sup>.

## 3. Research Value

### 3.1 Theoretical Value

The value-added evaluation index system for "comprehensive development" as the guiding ideology, based on the evaluation of students' core quality, the evaluation process made it from the "tools" to "humanistic", from "single" to "pluralism", from "assigning a value" to "value-added", from the transformation of "speculation" to

"positive", and highlighted the value concept of "Humanistic Development". The series of theoretical achievements can provide reference for vocational education evaluation.

### 3.2 Practical Value

Taking Chongqing Education Management School as the pilot school, this project conducts action research from the aspects of the construction of value-added evaluation index system, the implementation of value-added evaluation, the establishment of database and APP development. It provides practical experience for students' all-round development and personalized growth, diagnosis and reform of school education <sup>[4]</sup>.

## 4. Definition of Core Concepts

### 4.1 Vocational School

It refers to all kinds of vocational schools offering full-time vocational education, mainly recruiting junior and senior high school graduates or those with the same educational level. The basic schooling system is mainly three years. It is to train high-quality workers and skilled personnel who have all-round development of morality, intelligence, physique, art and labor and have comprehensive professional abilities to work in the front line of production and service <sup>[5]</sup>.

### 4.2 Value-added Evaluation

China's value-added evaluation research originated from the West. The American Comprehensive Education Reform Act was enacted in 1983. Sanders and Robert. McLean began a preliminary exploration of value-added evaluation. In 1988, the Tennessee Department of Education formed the Education Improvement Act, and value-added evaluation became the legal method for evaluating students, teachers, and schools in the state. Since the end of 1980s, China has carried out value-added evaluation reform in Hong Kong, Shanghai and Suzhou.

In this paper, the definition of value-added evaluation is quoted from The introduction of School Value-added Evaluation Model by Lai Han of Chongqing Institute of Education Evaluation: School value-added evaluation is by tracking research, the method of tracking students over a period of time, and the changes of their scores at different time, and through the establishment of multilevel analysis model, separate school uncontrollable factors such as demographic factors, students' family background, school students quality, etc. from the influence on student achievement, and separately investigate the "net effect" of the impact on student achievement from school, so as to achieve a more

accurate evaluation of school effectiveness <sup>[6]</sup>.

Domestic scholars Zhang Liang, Zhang Zhenhong and Miao Heming discussed two viewpoints on the connotation of value-added evaluation in the paper School Value-added Evaluation Strategy and Implementation Suggestions: one refers to the evaluation of students' academic progress, namely "achievement theory"; the other is the evaluation of all aspects of the quality of students, such as the degree of intellectual, social and emotional development, that is, the "comprehensive view". This study supports the second view. Citing the views of scholars such as Zhang Liang, the connotation of value-added evaluation is interpreted as follows: First, the content index of value-added evaluation has realized the transformation from the narrow changes in grades to the improvement of students' quality in all aspects. Second, "value added evaluation" is a concept. It attaches importance to the overall development of students' quality, reflects the process of students' development, and takes into account the differences of students, so it is a more comprehensive, scientific and desirable view. Third, "adding value" is a standard. The measure of school effectiveness is basically the value-added development of school education on students. Fourth, adding value is a method. One is the remainder of the comparison between the observed value and the predicted value; the other is the extent of the progress of students' own achievements <sup>[7]</sup>.

### 4.3 System

"System" is a whole of similar things in accordance with a certain law and a specific connection. "Evaluation system" can be defined as a whole composed of evaluation content. The "value-added evaluation system" in this paper is an evaluation system guided by the value-added evaluation theory, which takes "human" development as the essence and records the growth and development of students in a comprehensive, truthful and dynamic way.

## 5. The Research Content

### 5.1 Study and Research on Value-added Evaluation Theory

Citespace software is used to analyze and summarize the collected literature to form a literature review of value-added evaluation, and then deeply study and research the theory of value-added evaluation.

### 5.2 Construction of Value-added Evaluation Index System for Vocational School Students

The value-added evaluation index system is constructed

with the three aspects of "cultural foundation, independent development and social participation" as the first level index system, and the six qualities of "cultural deposits, scientific spirit, learning to learn, healthy life, responsibility and practice innovation" as the second level index system, and the eighteen basic points of "Humanity accumulation, human feelings, aesthetic temperament and interest, rational thinking, critical questions, having the courage to explore, willing to learn and good at learning, diligent in reflection, the information consciousness, cherishing life, healthy personality, self-management, social responsibility, national identity, international understanding, labor consciousness, problem solving, technology application" as the third level evaluation index system. Combined with the characteristics of vocational education, this study refined the fourth level quantitative indicators, and assigned the values according to the fifth level scale method to form a scientific and rigorous value-added evaluation index system [8].

The evaluation subjects of this system are students, homeroom teachers, teachers, parents and enterprise managers.

The evaluation system has four characteristics: first, it is timeliness, which can evaluate students at any time and observe the "value-added" changes of students' various aspects of literacy, so as to provide a basis for students' development and education diagnosis and reform; Second, strong objectivity. All of the students' performance or behavior at any time will be recorded, which is objective and fair; Third, strong incentive. Students can see the vertical changes of their own scores, can also compare with others, which can stimulate the internal motivation of students; Fourth, it is highly operable. Any evaluation subject can input data through the port, the system will automatically calculate the score, and the "K" graph can be seen directly using the APP.

### 5.3 The Formulation and Implementation of Value-added Evaluation Individualized Program

Study the formulation of educational evaluation program and the design of implementation plan and implementation scale. According to the five different subjects of evaluation such as students, teachers, head teachers, parents and enterprise managers set up working groups, respectively focus on the evaluation program and a variety of evaluation questionnaire of the different groups, collect data through the method of observation, live recording, test method, questionnaire survey method and other methods, through the port enter the data into the database and the APP of students' growth, and regularly record the data in the student's personal growth portfolio.

### 5.4 Development of Value-added Evaluation Database System and Value-added Evaluation APP

In today's era of big data, with "artificial intelligence + education", it is convenient to collect, sort out, process and use student evaluation information. Value-added evaluation is an evaluation method based on big data collection and sorting. In order to make data processing more scientific and accurate, this study uses information technology to develop a database system whose content matches the four levels of the value-added evaluation index system. The APP sets a port to connect to the database, and the input end of each evaluation subject is opened. The collected growth data of students can be generated into a K-line graph, which can intuitively and conveniently present the changing course of students' literacy.

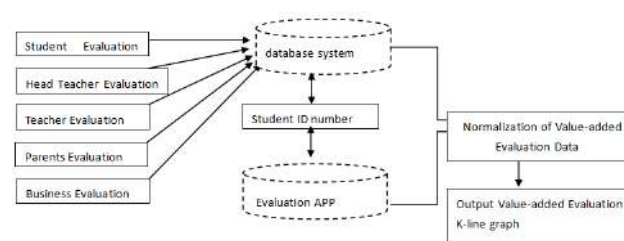


Figure 1. Value-added Evaluation Database System

### 5.5 Data Analysis and Conclusion Study of Value-added Evaluation

Analyze and compare the data results of the pre-test, stage test and post-test of the evaluated students, verify the data through the value-added evaluation model, write the research report, and draw a research conclusion.

## 6. Research Ideas

This study conducts specific research according to the basic idea of "review of theoretical and practical results -- analysis of current situation -- construction of evaluation index system -- formulation and implementation of evaluation plan -- research and development of database and APP -- operation adjustment -- research conclusion". Through investigation, the evaluation status of secondary vocational schools was understood, and Citespace software was used to sort out the related literature on value-added evaluation theory and the development of Chinese students' core literacy. The key point of this study is to explore the value-added evaluation index system on the basis of the existing "431" multiple quantitative evaluation model and the evaluation project of the grade point system. The system can be demonstrated by experts and tested in pilot schools before implementation. After

correction and adjustment, the database system and value-added evaluation APP are developed. Finally, the system enters the implementation stage to form a value-added evaluation index system with perfect value added.

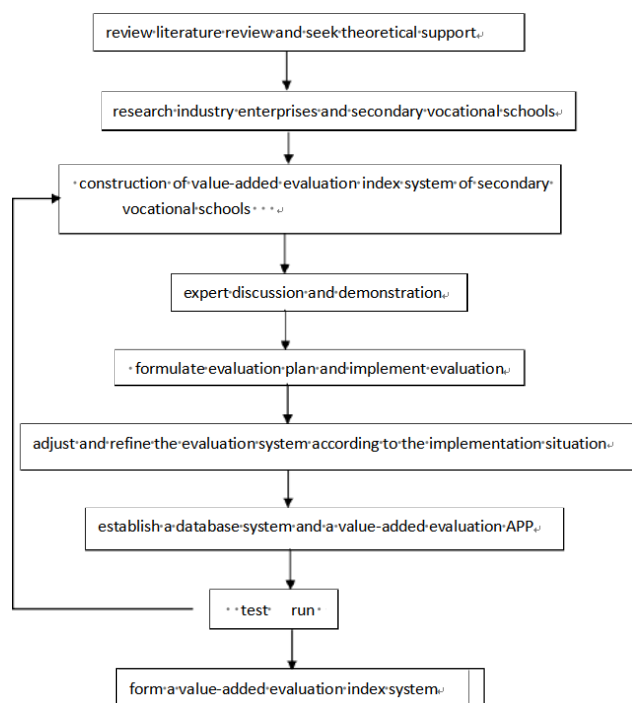


Figure 2. Research Ideas

## 7. Research Methods

### 7.1 The Literature Research Method

The literature research method is a research method that collects and reads a large number of relevant literature, logically processes and inferences the literature according to the needs of the research topic, and makes it meet the needs for the research and demonstrations. In this study, professional software was used to conduct quantitative and visual analysis of the effective literature after strict screening, seeking useful theoretical support and technical guidance for this project.

### 7.2 Questionnaire Method

(1) Investigate the quality requirements of the enterprise industry for employees in the aspects of humanistic background, scientific spirit, learning to learn, healthy life, responsibility, practice and innovation.

(2) Investigate the existing evaluation models of relevant secondary vocational schools, analyze the pros and cons, and provide an empirical prototype for this research.

### 7.3 Action Research Method

Action research method is a method adapted to conduct

the research on the work and practice of practical workers in the social field. This topic tries to build a value-added evaluation system to solve the problem of moral education evaluation. In order to make the evaluation system feasible and effective, we must participate in the actual work of moral education evaluation in schools. Find problems in practice, adjust and revise the evaluation index system in reflection, further improve the database system and the evaluation APP, so as to continuously push forward the whole research project.

## 8. Expected Research Results

A. Value-added Evaluation Index System for Vocational School Students;

B. Value-added Evaluation Implementation Plan and Scale for Vocational School Students;

C. Value-added Evaluation Database System for Vocational School Students;

D. Value-added Evaluation APP software for Vocational School Students;

E. Construction and Practice Research Report and Related Papers of Value-added Evaluation Index System for Vocational School Students.

## References

- [1] Zhuang Xizhen. On the Significance of Value-added Evaluation to the High-quality Development of Vocational Education [J]. China Vocational and Technical Education, 2021(04):12-17.
- [2] Jiang Hanrong. Empowering Students' Growth: Value-added Evaluation in Secondary Vocational Integrated Teaching [J]. China Vocational and Technical Education, 2021(10):35-39.
- [3] Jin Yule, Pu Xuetao, Zhao Tingting, et al. Pen Talk: Educational Evaluation Reform and System Innovation in the New Era [J]. University Education Science, 2021(01): 13-25.
- [4] Jiang Dayuan. Transboundary, Integration and Reconstruction: Three Characteristics of Vocational Education as a Type of Education: The experience of learning the Implementation Plan of National Vocational Education Reform [J]. China Vocational and Technical Education, 2019 (7): 9-12.
- [5] Zhao Zhihao. From Assigning to Adding Value: Concept Transformation and Practice Exploration of Students' Moral Education Evaluation [J]. Shanghai Educational Research Institute, 2021(02):40-44.
- [6] Zhang Liang, Zhang Zhenhong, Miao Heming, School "Adding value" Evaluation strategy and Implementation Suggestions [J]. Modern Educa-

- tion,2020(08):25-28.
- [7] Zhou Yao, Chen Xingbei. Value-added Evaluation: Core experience from Tennessee [J]. Management of Primary and secondary schools,2020 (10): 11-15.
- [8] Liu Zhentian. Education Evaluation Should Break-through the Constraints of the “Five solae” and Focus on Establishing the “Four News” [J]. Journal of National Institute of Education Administration,2020(11):13-15.



# On the Monarch and Reflections on Machiavellism from the Oriental Perspective

**Xiaoou Jin**\*

School of Journalism and communication, Lanzhou University, Gansu, 401120, China

## ARTICLE INFO

### *Article history*

Received: 8 October 2021

Revised: 14 October 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### *Keywords:*

*The Prince*

Machiavellianism

Oriental perspective

## ABSTRACT

Machiavelli, a famous Italian politician, stated that as long as the final aim is proper, a king can use whatever means despicable in order to achieve the supreme position. His thought is summed up as Machiavellianism later. His point of view fits into the dominion strategy of Feudal Chinese Emperor, which can be concluded as confucianism and legalism. Through the analysis of Machiavellianism from the oriental perspective, we find that the art of imperial rule whether western or eastern happen to share the same view. Through out the history of ancient China, analogous to Machiavellianism, Legalism had been proved useful in rule since early. Moreover, different from the west, Chinese dominator used confucianism ethics on the surface for morale, and applied legalism in practice.

"Machiavelli's exposition in *The Prince* freed political theoretical views from morality, and took power as the basis of law, thereby turning the basis of politics from morality to power."

-Karl Marx

## 1. Political Reform--Machiavellianism

In the history of political science in Europe, starting from Aristotle, politics has been considered as a branch of ethics, which is the practice of ethics.

In reality, politics has always been treacherous and calous, especially in Italy. But in theory, scholars always describe politics as something solemn and sacred, requiring politicians to pursue purity in perspective of morality. As if politicians can govern the country well as long as they cultivate good morals without considering political reality. This kind of argument is a bit similar to what Confucian-

ism calls "sageliness within and kingliness without".

Machiavelli changed this tradition. He separated ethics and politics upholding a cruel spirit of realism, and developed political science into an independent discipline. Instead of what the ideal king should do, he only discussed what the monarch in the real world should do.

In the political theory of the Middle Ages, dominion is seen as "blessing from God", that is, "Divine Right of Kings", which means that the king's power of ruling the secular country comes from God's permission. This custom has a profound relationship with the doctrine of Christianity. It is clearly stated in the Bible that "all secular rule comes from God." This is why in the medieval Christian world, the king must be crowned by the pope. Because the king must be authorized by God before achieving secular dominion. Moreover, authorization can only be implemented by the pope---God's agent in the sec-

*\*Corresponding Author:*

*Xiaoou Jin,*

*School of Journalism and communication, Lanzhou University, Gansu, 401120, China;*

*Email: jin2702037@163.com*

ular world.

By the time of Machiavelli, with the development of Renaissance and the prosperity of commerce in the Italian states, it was difficult for the statement like "Divine Right of Kings" to convince the public, especially the wealthy and prominent clans who developed by means of industry and commerce during the Renaissance, such as Medici which Machiavelli depended on. These clans were particularly dissatisfied with this serious of political theories. The reason is simple---the church has completely monopolized the authorization of secular rule, so that the burgeoning families cannot obtain the rule that matched up with their strength. Therefore, as a theorist, Machiavelli completely overthrew the statement of "Divine Right of Kings" in his works, and proposed that the dominion should be obtained only through power. In Machiavelli's own words, the study of right to rule should not chase the "illusion", that is, the authorization of God, but "the real essence", which refers to power, in particular, refers to the military power mastered by an individual <sup>[1]</sup>.

In this serious of new theory, elements including morality, tradition, and religious piety etc. which directly affect whether a person can achieve the right to rule, in Machiavelli's view, only have practical significance. That is to say, one should observe moral rule, traditions and religions, when these are useful for a king to gain real power. Nonetheless, once such observance weakens king's power and threatens his rule, then these constraints should be discarded. This is why there are mountains of descriptions of conspiracies and tricks in *The Prince*. The starting point is that Machiavelli believes that power is the only source of dominion, while the means used by the king is an application of this power <sup>[2]</sup>.

The starting point of *The Prince* is that people are evil at birth, so what he advocates is not kingcraft but arbitrariness, which is a bit like legalism of ancient China. Machiavelli believes that it is better to be feared than to be respected and loved. But sometimes it is necessary to convince the people that the monarch is a person combines of all kinds of virtues in one. That is to say, the ruler should behave humanely and clemently as well as pretend to love the people as his children. For this reason, on the one hand, people should be punished by others rather than monarch himself. Moreover, in the end, the atrocity can be blamed on others and the king would find scapegoats to avoid being condemned as tyrant. On the other hand, benefits should be personally granted. In summary, give people favor bit by bit, so that he will look forward to more; give people a blow fatally, so that there is no possibility to revenge. The monarch should usually keep silent, pretend to be indifferent to anything, and avoid being pried into

the heart. But the monarch, in turn, should know his own subordinates well, be able to manipulate them at any time, and use the power of killing if needed. Machiavelli believed that the monarch should absolutely control a well-equipped army.

In addition, the prince must never trust anyone, never confide his sincerity to others in order to maintain the supreme position, and never tie his destiny to others. All people should be suspected. Henchmen should be organized to spy on them secretly. Besides, the prince should bother to organize groups to exclude dissidents, and set up different jobs to restrain each other. In short, in order to protect the position of supremacy, any means are acceptable.

Machiavelli discussed is political strategy on the basis that human beings are stupid, always have endless desires and expanding ambitions; they are always pursuing advantages and avoiding disadvantage. People's occasionally doing good deeds are seen as an approach to gain fame and profit. People have the natural instinct to submit to power. What the monarch needs is cruelty, not love. Man should be cruel like a lion and treacherous like a fox. The monarch may as well take evil habits as usual, and don't worry about being blamed for cruel behavior. Compassion is dangerous, and human love can even destroy the country. As long as the final aim is proper, you can use whatever means despicable in order to achieve a noble purpose <sup>[3]</sup>.

He abandoned the medieval scholastic philosophy and dogmatic method of reasoning started from human nature rather than Bible and God, and studied social and political issues based on historical facts and personal experience. He regarded politics as a practical discipline, distinguished politics from ethics, and regarded the nation as a purely power organization.

His theory of the state is based on the theory of evil nature. He believes that people are selfish, and power-and-reputation-oriented. Therefore, there are often fierce fights between people. In order to prevent the endless combats between human beings, the country emerges as the times require, enacting laws, restraining evil, and establishing order. The country is the product of human evil.

So as mentioned above, Machiavelli's *The Prince* is a book that teaches people, to be precise, rulers, elites, monarchs, and civilians who have the ambition to become leaders of the country, how to better govern the country. On this basis, any method can be used as long as it is furthersome to the country and the happiness of people. This is the core of Machiavelli's ideology, that is, using unscrupulous means to achieve goals.

## 2. Machiavelli's Personal Portrait -- Birth of The Prince

Only by living in a chaotic society and experiencing the cruel official career can he write such classic *The Prince*. The era he lived was the end of the Renaissance that originated in Italy, but Italy was still in a state of disunity. Therefore, from his own perspective, Machiavelli strongly advocated ending the state of division and establishing a strong centralized state, so that the great majority of Italian people, including Machiavelli himself, can live a happy life.

To achieve extraordinary accomplishment, what you need are remarkable people, using unusual means. In fact, it is commonwealth that Machiavelli really yearns for. But for the sake of unity of Italy, under the circumstances at the time, great cause had to be done by a strongman. Machiavelli was willing to give counsel to such a person, which coincided with the hundred schools of thought in the Warring States period.

Machiavelli had high hopes for Cesare Borgia, and later for Lorenzo de' Medici--heir to the Medici family, for whom *The Prince* was created, hoping to get his family's favor. But Lorenzo also died soon. As Russell pointed out in *A History of Western Philosophy*: "It is true that there are many points in his thought that really need to be criticized as that of most ancient politicians, some parts are superficial."<sup>[4]</sup>

But these points are nothing but the performance of his time. In the final analysis, it was the time that created Machiavelli's ideas.

## 3. Oriental Perspective--Confucianism and Legalism in Feudal China

In the distant eastern countries, as early as The Spring and Autumn and the warring states period, the morality opposed by *The Prince* in the political field has been denied in practice.

The last politician who governed the country with moralism was the famous Duke Xiang of Song--- one of the Five Hegemons of the Spring and Autumn period.

During the battle of Hong River, the army of Song vassal state had already arranged array, while the army of vassal state of Chu just began to cross the Hong River from the other side. The Prince Muji suggested attacking the enemies when half of the army of vassal state of Chu crossed the river so they could defeat the enemy army in a run-off. However, Duke Xiang of Song said, "We are the army of justice. How can we do this?" He insisted on waiting for the army of vassal state of Chu. After the army of vassal state of Chu crossed the river, another minister,

Gongsun Gu, persuaded Duke Xiang of Song to attack the enemy while the hostile force was not ready. Duke Xiang of Song still stuck to benevolence and refused to start first. It was until the army of vassal state of Chu was arrayed that Duke Xiang of Song waged the war against the enemy. As a result, naturally, the army of vassal state of Song was no match for the army of vassal state of Chu, which was beaten to pieces. Duke Xiang of Song himself was hit in the thigh, fleeing back to vassal state of Song destructively<sup>[5]</sup>.

Although Duke Xiang of Song has been ridiculed by people for thousands of years, what Duke Xiang of Song embodied are nothing else than the ancient etiquette, virtue and morality. Despite the small scale of the battle of Hong River, it is one of the signs for propriety disintegration in the Spring and Autumn and the warring states period. Since then, there's no vassal state adhering to the ancient etiquette any more. The mode of operation coming down from the Shang and Zhou Dynasties --beating a drum after arranging array, has been completely replaced by a more agile combat method that pays attention to strategy since the war.

Among the thinkers of the "Axis Age", Confucius and Mencius called for Rites of the Zhou as well as righteousness and virtue, but no country dared to try to govern the nation with justice and morality.

However, a group of legalists, including Shen Dao, Shen Buhai, Shang Yang, and Han Fei Tzu, put forward a realistic strategy of ruling the country similar to that of *The Prince*. Han Fei Tzu summarized his theory of governance to "shi"--power, "fa"--regulation and "shu"--method. He added that a king's calamity lies in being credulous. Once the king trusts others, he will be controlled. He advocated strongly that being too kindhearted is forbidden for a prince. If not, regulations will be difficult to establish and it's hard to generalize and apply laws. Moreover, laws should be promulgated to the people. While strategy should be hindered in king's mind, using to control the officials in secret<sup>[6]</sup>. In the end, the State of Qin, which implemented the legalism, unified the six vassal states.

In the following history--July 626 AD, Li Shih-Min launched a mutiny at Xuanwumen, shooting his brother and prince Li Jiancheng to death. His younger brother Li Yuanji also died in this mutiny. In order to remove the source of the trouble, he killed all the children of Li Jiancheng and Li Yuanji. At the end, he obtained the throne of the empire and through this foul method. But after that, he worked hard to rule and created Golden Years of Zhen-Guan for the Tang Dynasty, becoming famous Emperor Taizong of Tang in the history. The example is enough to prove that no matter how cruel the methods a king uses in

the eyes of others, as long as he is able to defeat the enemy and obtain the throne, any strategy are acceptable and excusable. The ethical tragedy that he killed his close kin has faded to "war for winning tomorrow". Similarly, there is Emperor Yongle--Zhu Di who launched the campaign of Jingnan and seized the throne of his nephew.

However, it is impossible to govern the country solely by legalism. The Qin Dynasty ended in the second emperor's hand for the sake of the bloody, violent rule.

People always take it for granted that history advances in the dialectical cycle like "positive-negative-combination". In the Han Dynasty, on the one hand, the rulers adopted Confucianism to decorate their governing strategy. On the other hand, they continued to rule the country by legalism in practice--that is, confucianism within and legalism without.

The well-known scholar Qin Hui believes that "China has a political tradition of "confucianism without and Legalism within". Using confucianism ethics on the surface for morale, and applying legalism in practice. To be precise, the ruler carry out both etiquette and law at the same time. Outwardly the prince raves about justice and morality, while practicing legalism in fact, which fits neatly into what Machiavelli advocates: "The monarch does not necessarily have to possess all the qualities that are considered good, but it is indeed necessary for him to be considered that he has all the qualities mentioned above in people's eyes."

There is also an interesting case in the Han Dynasty: Wang Mang.

Before and even during the early days of Wang Mang's accession to the throne, he won the devout support of almost the entire elite class of Confucian scholars. All the words and deeds of Wang Mang corresponded to Confucian standards, which is the sole example in Chinese history. Wang Mang was regarded as the "new saint" after Confucius. From the era of Confucius to the end of Han Dynasty, only Wang Mang has verily completed the in-

dividual fulfillment road in the sense of Confucian from cultivating the self, regulating the family, governing the state to leading the world to peace. All his reform measures were extracted from the Confucian doctrine, and corresponded to the mainstream Confucian ideas at that time, which were policy of benevolence in the real sense. But things go contrary to his wishes. What the Confucian sages said were ill-timed in terms of specific policies. In the end, Wang Mang died and the country was destroyed.

## 4. Conclusions

*The Prince* is a book written by Machiavelli based on his political experience, focusing on the political situation in Italy in the sixteenth century. He identified some fundamental general principles about human life from the time he lived in, which are still applicable today. As long as humanity remains the same, the power tactics described in *The Prince* will not be invalidated, and this book will never fade into history.

## References

- [1] [France] Louis Althusser. Politics and History: from Machiavelli to Marx [M]. Xi'an: Northwest University Press, 2018.
- [2] Wang Shouqian. Translation and annotation of Zuo Zhuan [M]. Guiyang: Guizhou people's publishing house, 1991.
- [3] Tang Mingyan. Political thought of pre Qin scholars on self-cultivation [M]. Tianjin: Tianjin People's publishing house, 2019.
- [4] [UK] Russell. History of Western Philosophy [M]. Beijing: Commercial Press, 2016.
- [5] Babel I . Okategoriserade TOLERANCE AND TRUST Reflections on Some Scandinavian Values and Experiences[J]. Balticworlds Com.
- [6] Babel I . Okategoriserade TOLERANCE AND TRUST Reflections on Some Scandinavian Values and Experiences[J]. Balticworlds Com.

# Reform of Elastic-Plastic Mechanics and Strength Design of Pipelines Based on Ideological and Political Education

Yanfei Chen\* You Zong Mingchang He Chunsha Wan

China University of Petroleum (Beijing), College of Mechanical and Transportation Engineering, Beijing, 102249, China

## ARTICLE INFO

### Article history

Received: 8 October 2021

Revised: 14 October 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### Keywords:

Oil and gas storage and transportation

Safety

Ideological and political education

The teaching reform

## ABSTRACT

Oil and gas storage and transportation safety courses are very important in oil and gas storage and transportation engineering. With the ideological and political construction of the course in the new period, the mode of professional knowledge teaching cannot meet the teaching requirements. The teaching team has been practicing in the course for many years. By inserting typical characters, typical projects, national policies and industry trends into the course, students' patriotism, academic confidence and environmental protection awareness have been cultivated, and remarkable results have been achieved. At the same time, it can provide some reference for the ideological and political education of engineering majors.

## 1. Introduction

With the frequent occurrence of oil and gas pipeline accidents in recent years, petroleum universities pay more and more attention to the teaching quality of oil and gas storage and transportation engineering safety courses. In order to adapt to the change of the actual form, many petroleum colleges and universities have carried out different degrees of teaching reform<sup>[1,2]</sup>. Oil and gas storage and transportation safety courses mainly include *Strength Design and Safety Management of Oil and gas Storage and Transportation Facilities* and *Elastic-Plastic Mechanics*, etc. *Strength Design and Safety Management of Oil and gas Storage and Transportation Facilities* is mainly a course for undergraduates, which focuses on allowing students to understand the calculation method of strength of storage and transportation facilities and master each

step of integrity management. *Elastic-Plastic Mechanics* is a theoretical course for graduate students, focusing on cultivating students' ability to use elastoplastic mechanics knowledge to solve practical engineering problems. These safety courses are of great significance for training storage and transportation professionals.

In 2016, General Secretary Xi Jinping stressed that ideological and political work should run through the whole process of education and teaching and create a new pattern for the development of higher education in China at the National Conference on Ideological and Political Work in Colleges and Universities<sup>[3]</sup>. In 2017, the report to the 19th National Congress of the Communist Party of China (CPC) also clearly pointed out that the fundamental task of cultivating moral education and cultivating people should be carried out to train socialist builders and successors with all-round moral, intellectual, physical and aes-

\*Corresponding Author:

Yanfei Chen,

China University of Petroleum (Beijing), College of Mechanical and Transportation Engineering, Beijing, 102249, China;

Email: [chenyfvip@163.com](mailto:chenyfvip@163.com)



thetic development. In 2018, General Secretary Xi Jinping delivered an important speech at the seminar of teachers and students of Peking University, in which he pointed out that China needs to further strengthen the reform of higher education. In 2020, the Ministry of Education issued the Guidelines for Ideological and Political Construction of Higher Education Courses, requiring ideological and political education to be integrated into the personnel training system, especially to comprehensively promote ideological and political education in higher education institutions and improve the quality of personnel in higher education institutions<sup>[4]</sup>. In the following national Education conference, General Secretary Xi Jinping emphasized the integration of "enhance morality, foster talents" into all aspects of school education<sup>[5]</sup>. Ideological and political education is one of the important measures taken by a large number of colleges and universities in response to the call of the state, as well as an important measure of educational reform in the new era. Ideological and Political courses will integrate ideological and political education into all disciplines, in teaching student's professional knowledge at the same time to expand students' social and political vision, guide students to accept positive socialist political thought and excellent traditional virtues of the Chinese nation, so as to cultivate students into high-quality talents in the new era<sup>[6]</sup>.

The safety courses of oil and gas storage and transportation engineering are so professional that the traditional ideological and political education courses are easy to produce "two layers" phenomenon when integrated into such classes, which may waste lot of teaching resources. Therefore, it is necessary to carry out appropriate curriculum reform to make ideological and political education efficiently integrated into the safety courses of oil and gas storage and transportation engineering<sup>[7]</sup>.

## 2. Course Status

Take *Strength Design and Safety Management of Oil and gas Storage and Transportation Facilities* and *Elastic-Plastic mechanics* as examples. *Strength Design and Integrity Management of Oil and Gas Storage and Transportation Facilities* first carried out substantive teaching reform, which was combined by *Pipeline and Tank Strength and Safety* and *Integrity Management of Oil and Gas Storage and Transportation Facilities*, involving huge content and extensive knowledge. With the large-scale construction of national storage and transportation facilities such as pipelines and tanks, many old standards and methods are no longer applicable and students need to be introduced to the latest standards and specifications related to their majors. Because oil and gas storage and

transportation are a very large and complex system, and pipeline accidents occur frequently in recent years. The integrity system of pipeline and storage tank has been paid more and more attention. After the merger, the new curriculum includes a unique training program designed to improve students' practical application of the knowledge they have learned. Compared with previous courses, this course reduces the proportion of traditional closed-book exams, and pays more attention to the examination of master students' practical training projects, so as to continuously improve students' ability to understand, master and use knowledge.

*Elastic-Plastic Mechanics* is a theoretical mechanics course. As a branch of solid mechanics, it is a course specializing in the study of the stress, strain and displacement of deforming solid under the action of external factors (temperature, pressure, etc.) and their distribution laws. It is a great challenge for teachers to instruct this course to non-mechanics students. In recent years, this course is also trying to carry out teaching reform. In order to better get close to the oil and gas industry in the teaching, many classic cases are integrated into the classroom. A large number of cases are analyzed by elastoplastic mechanics knowledge so that students can connect the knowledge with the actual. Currently, there is no elastoplastic mechanics textbook suitable for the oil and gas industry. The teaching team combines years of teaching experience to compile the elastoplastic mechanics textbook. The textbook focuses on theoretical explanations and combines knowledge of the oil and gas industry with the aim of teaching students' basic theories, and then students can improve their ability to use knowledge through practical cases in the book.

## 3. The Dilemma of Ideological and Political Teaching

At present, the ideological and political education courses of the university are still mainly taught by teachers from the School of Marxism. In the undergraduate stage, there are *Ideological and Moral Cultivation and Legal Foundation*, *Introduction to the Basic Principles of Marxism*, *Outline of Modern Chinese History* and *Introduction to Mao Zedong Thought and Socialism with Chinese Characteristics*. For graduate students, there are courses such as *Research on theory and Practice of Socialism with Chinese Characteristics* and *Dialectics of Nature*. These courses focus on ideological and political education for students, but they focus on the theory and system of knowledge in the teaching, and the memory of knowledge points in the exam, resulting in many students' mind wandering in class and reciting before the exam.

Obviously, this teaching method cannot meet the increasingly important ideological and political education objectives. In response to this phenomenon, many colleges and universities have carried out corresponding teaching reforms, such as "smart classroom", "flipped classroom" and other new teaching methods<sup>[8] [9]</sup>. These innovative teaching methods break the traditional classroom teaching mode and improve the quality of teaching. However, due to the large classroom teaching, students of different majors are in the same classroom, ideological and political education is difficult to involve students' own field, cannot fully mobilize students' enthusiasm in the classroom, and reduce the quality of ideological and political education classroom.

The quality of ideological and political education can be improved by conducting ideological and political education to students by teachers of this major. However, too much ideological and political education will obviously occupy the time of many specialized courses, resulting in the deterioration of the teaching quality of specialized courses. In the teaching process, because the ideological and political education content is relatively easy to learn, it is easy to lead to students' weariness of more difficult knowledge points.

#### 4. Attempt and Exploration of Curriculum Reform

In the new era, it is extremely urgent to integrate ideological and political education into the whole teaching process in order to carry out the two major educational tasks of "cultivating moral characters" and "cultivating socialist builders and successors". China University of Petroleum (Beijing), as a domestic petroleum institution of higher learning, has explored an ideological and political education curriculum reform suitable for oil and gas storage and transportation safety courses.

##### 4.1 Introduce the Patriotic Story of Oil Workers

It is very important for teachers to give students an impression at the beginning of the course. At the beginning of the course, introducing the patriotic story of the famous oil workers can enhance students' recognition of the course and even professional pride. Therefore, the early design of the course requires teachers to vividly introduce the patriotic story of the oil men to students.

From "iron man" Jinxi Wang, to "new era iron man" Qimin Wang, and then to "Daqing new iron man" Xinmin Li, there have been three generations of "oil iron men" in China's oil industry. Jinxi Wang, as the first generation of "iron man", people are most familiar with a sentence is

"would rather live less than 20 years, try hard to win the big oil field". Iron man was the title given to Wang Jinxi by the society at that time. From an ordinary worker to a well-known oil man in China and even the world, he has devoted his whole life to the development of China's oil industry and is a national hero who shares the country's worries. His "iron man spirit" has inspired generations of oil workers<sup>[10]</sup> Qimin Wang, as the second generation of "iron man", took base in Daqing Oilfield and put forward the "efficient water injection production method", a new method to stabilize oil production in the middle and low water cut stage. He took 10 years to find out the method of stabilizing and increasing production in Daqing oilfield. After 7 years, Daqing oilfield increased more than 20 geological reserves. After a series of attempt and exploration, Daqing oilfield had maintained a stable production of 50 million tons for 27 years. Qimin Wang has given a new connotation to the "iron man spirit"<sup>[11]</sup>. Xinmin Li, as the third generation of "Iron man", introduced China's drilling team to the world. From the expedition in Sudan to Iraq, Xinmin Li created a new name card of "Iron Man" drilling. Xinmin Li let the image of "Iron Man" show a new era style and spiritual temperament<sup>[12]</sup>.

The introduction of the three generations of oil "iron man" in the course, while carrying forward the "iron man spirit", can deeply infect students, give students a spiritual impact and improve students' political sentiment in the study of professional courses. At the same time, it also stimulates students' fighting spirit to fight for the oil industry, the motherland and the national rejuvenation, and increases students' motivation to learn professional knowledge.

##### 4.2 Cultivate Students' Academic Confidence

In the process of teaching, teachers let students gradually feel the charm of the subject and cultivate students' academic confidence is also an important goal of the course ideological and political. Oil and gas storage and transportation engineering safety courses as an important content of oil and gas storage and transportation engineering safety is an extremely important part of oil and gas storage and transportation engineering. Oil and gas storage and transportation safety includes essential safety, public safety and supply security, and any link problems will lead to very serious consequences. Materials and load factors of pipeline system will cause structural failure of the pipeline due to defects. The nature of oil and gas storage and transportation cannot be guaranteed. Because piping systems inevitably appear. Because of inevitable appearance of pipeline system in human living areas, or some ecologically fragile areas, when the essential safety

of the pipeline system is in question, it is easy to cause some disasters, and pose a threat to public safety. At the same time, accidents in the pipeline system may cause the problem of shutdown, leading to some phenomena such as "gas shortage" and "oil shortage", which pose a threat to the supply security. Especially in *Elastoplastic Mechanics* and *Strength Design and Safety Management of Oil and Gas Storage and Transportation Facilities*, the value of some parameters may have a very important influence on the strength of the whole structure, so the correct value must be taken in accordance with the corresponding regulations, rather than the arbitrary value. In practical teaching, some software can be used to simulate the influence of key parameters on the structure, so that students can intuitively understand the knowledge point. At this time, the course ideological and political can start from the macro perspective and introduce some famous projects to students, such as Central Asia oil and gas pipeline, China-Russia crude oil pipeline, China-Myanmar oil and gas pipeline and the China-Russian eastern natural gas pipeline, etc. Among them, from the perspective of energy security, China-Myanmar oil and gas pipeline has created a new energy channel for China, so that China's energy security has been further improved. From the political point of view, the China-Myanmar oil and gas pipeline is not only an ordinary oil and gas pipeline project, but also an important achievement and crystallization of the establishment of diplomatic relations between China and Myanmar for 60 years. The project is mutually beneficial to the people of both countries and has been highly valued by the leaders of both countries. It is also one of the most representative projects in the oil and gas storage and transportation industry. The China-Russian eastern natural gas pipeline adopts the pipe diameter of 1422mm, the high-grade steel of X80 and the operating pressure of 12 MPa, which represents the highest technical level of oil and gas pipelines in China. The China-Russian eastern natural gas pipeline is also an important part of China's four strategic oil and gas channels. It is a major oil and gas pipeline project of strategic significance, which further guarantees China's energy security. By introducing these famous projects in the course, students can have a deeper understanding of their major, feel the process of knowledge transforming into practice, and cultivate their academic confidence, and be confident that what they have learned can have a great potential in engineering.

#### 4.3 Transmit the Concept of Environmental Protection

The transmission of environmental protection concept in the course is based on two aspects. One is the macro

national policy and industry development trend. The other is the oil and gas pipeline industry accident cases. In terms of national policies, China highly values ecological and environmental protection. Guided by the conviction that lucid waters and lush mountains are invaluable assets, the country advocates harmonious coexistence between humans and nature, and sticks to the path of green and sustainable development. At present, China's national energy structure is transforming to low carbon. Carbon dioxide emissions will reach the peak in 2030 and achieve carbon neutrality in 2060. Oil and natural gas plays a pivotal role in the energy transition. China's oil and gas storage and transportation facilities are constantly developing to high quality. In the process of high-quality development, oil and gas storage and transportation security will face more new challenges. The country is bound to invest more forces to strengthen technical breakthroughs. In terms of industry development, with the establishment of the National pipeline network Company, "a national network of oil and gas pipelines" is being built orderly. The establishment of the National Oil & Gas Pipeline Network Corporation is conducive to the rational allocation of oil and gas resources and improve the allocation efficiency of resources. At the same time, the establishment of the national pipeline company can make an overall plan for the construction of national oil and gas pipelines, reduce the waste of pipeline resources and improve the transportation efficiency of oil and gas resources. From the perspective of national policy and industry development trend, while teaching students the concept of environmental protection, students' understanding of oil and gas storage and transportation major is strengthened and their academic confidence is enhanced. Many oil and gas accidents have occurred due to the rapid urbanization of population, frequent occurrence of natural disasters and substandard engineering construction. These accidents not only caused economic losses, but also caused serious ecological losses. The Oil spill in the Gulf of Mexico is an oil and gas accident with a very large impact on the environment. The oil contaminated the ocean area of 100,000 square kilometers with 8,332 species in the affected area. A decade later, high levels of oil contamination are still being found in thousands of fish species, including many popular seafood. It can be seen from this accident that the oil spill has a great impact on the environment. Students can feel the importance of oil and gas storage and transportation safety to environmental protection in this case, and this accident can guide students to establish the concept of environmental protection in their professional study.

## 5. Conclusions

Oil and gas storage and transportation safety courses include several courses, among which *Strength Design and Safety Management of Oil and gas Storage and Transportation Facilities* and *Elastic-Plastic Mechanics* are the representatives. Such professional and theoretical courses need to deeply explore ideological and political elements of the course, and teach ideological and political contents to students through ingenious design by teachers. At the beginning of the course, the oil spirit is used to guide students' patriotic feelings, and typical projects are inserted into the course to enhance students' academic confidence. At last, the course is closely related to the realistic development of the country and the industry, and constantly transmits the latest ideological and political knowledge to students. In recent years, the teaching team has constantly deliberated and designed ideological and political elements in the course of oil and gas storage and transportation safety, which has improved the quality of ideological and political construction of the course and gradually achieved the effect of "Mute, it moistens each thing". The ideological and political elements of oil and gas storage and transportation safety courses are far more than these. In the future, it is still necessary to further explore, accumulate and utilize ideological and political elements to make unremitting efforts to improve the quality of education and teaching.

## References

- [1] Xiaochun Cao. Study on curriculum construction and educational reform of petroleum Engineering major [J]. China Petroleum and Petrochemical, 2017, 4(08): 7-8.
- [2] Xiaoyun Lin. Research on teaching Reform of Petroleum and Natural Gas Geology course [J]. Journal of Yangtze University (Natural Science Edition) science and Technology, 2007, 4(02): 318-320.
- [3] Xiyu Zhu, Ying Cui. A preliminary study on ideological and political education reform of curriculum - taking micro-course of building materials as an example [J]. Modernization of education, 2019, 6(82): 67-68.
- [4] Libo Wang, Qiaoling Cui, Lianshe Cheng, etc. Research on the integration of automobile manufacturing technology course into ideological and political education [J]. Automobile practical technology, 2021, 46(13): 180-182.
- [5] Guofang Zhang, Jianyi Xu, Feng Hu, etc. Research on ideological and political education reform of basic professional course material physical chemistry [J]. Guangdong chemical industry, 2021, 48(12): 223+256.
- [6] Wei Wang. Exploration on ideological and political education reform of atmospheric fluid mechanics course [J]. Education modernization, 2020, 7(11): 66-68.
- [7] Wenjun Zhang. Research on ideological, Political and Educational Reform Methods of Curriculum - Taking "Tunnel Engineering" as an example [J]. Education and Teaching Forum, 2021(09): 55-58.
- [8] Huan Zhang. Research on the Application strategy of "Wisdom Classroom" in Ideological and political Teaching [J]. Modern Communication, 2021(11): 169-171.
- [9] Yonghua Xu. The Influence of mixed teaching on the Effectiveness of Ideological and political Theory Teaching under the Network environment [J]. Modern Education, 2015, (11): 40-41.
- [10] Xuecong Hu. The Origin of "Iron Man" and the Birth of iron Man Spirit [J]. Heilongjiang Archives, 2019, 4(04): 8.
- [11] Chaoxuan Hou, Qimin Wang, "The model of the People": Thinking about "fame, wealth, award" cannot make great [J]. National People's Congress of China, 2020, 4(02): 49-50.
- [12] Zhenghong Li, Yingying Dou. Generations of "Iron men" struggling in the black earth [J]. Journal of Literature and History, 2019, 4(02): 4-8.



# Difficulties and Breakthrough Strategies in the Team Construction of Part-time Teachers in Application-oriented Universities

**Shijie Wang\***

Hefei Information Technology University, Hefei, Anhui, China

## ARTICLE INFO

### *Article history*

Received: 8 September 2021

Revised: 14 October 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### *Keywords:*

Application-oriented universities

Part-time teachers

Dilemma

Strategy

## ABSTRACT

Strengthening the team construction of part-time teachers is required by the transformation and development of the universities, the realization of their goals of being developed into an application-oriented universities and their talent cultivation and long-term development. The existing problem regarding the part-time teachers in current application-oriented universities are the low proportion of part-time teachers, a shortage of high level part-time teachers, the absence of relevant laws and regulations, a lack of systematic policies or financial support for part-time teachers as well as the unsound management mechanism with insufficient scientific and reasonable employment scheme for part-time teachers. To strengthen the team construction of the part-time teachers in application-oriented universities, firstly we should improve the existing laws, regulations and policies and broaden the financial support channels. Secondly, we should develop the recruitment channels for part-time teachers and pay attention to introducing high-tech and highly-skilled talents. Thirdly, we should improve the management over part-time teachers and promote their value. Fourthly, it should adopt a people-oriented management concept and establish an effective evaluation and incentive mechanism for part-time teachers.

## 1. The Significance of Team Construction of the Part-time Teachers in Application-oriented Universities

Part-time teachers are the masters and users of the latest production technology, and the masters of professional standards in relevant industries. They have rich experience in professional projects, and are able to teach with differential styles and types according to needs with potentials to develop their functions in multiple ways. Part-time teachers should meet four necessary criteria: signing employment contracts with colleges and universities according to laws; being able to independently undertake teaching tasks of specific majors; having rich professional

and practical experience; being the professional technical personnel and highly-skilled talents in relevant industries or enterprises.

With the development and transformation of common local colleges into application-oriented universities and the advocating of integrating the production and education in the new education era, the practical education is becoming more and more important and the significance of team construction of part-time teachers has become increasingly prominent. The central government has repeatedly issued documents advocating the adjustment of existing team structure of teaching staff and the increase of part-time teachers during the transformation of ap-

*\*Corresponding Author:*

*Shijie Wang,*

*Hefei Information Technology University, Hefei, Anhui, China;*

*Email: Wang-shijie@qq.com*



plication-oriented universities, especially to encourage outstanding talents with working experience in industries, enterprises, institutions or other areas to join the team of teaching staff.

### **1.1 Strengthening the team construction of part-time teachers is required by the university transformation and development**

The talent cultivation goals of application-oriented universities are targeted at applicable and technical-skilled talents who can directly serve for the regional economic and social development, and the technological progress of industrial enterprises. The cultivation of talents ultimately depends on the teaching practice; therefore, it requires the application-oriented universities to add more teaching staff with professional skills and practical experience to the existing teachers team. However, at present, the teaching staff structure in application-oriented universities in China are commonly featured with a low portion of teachers hired from enterprises while a big portion of teachers directly graduated from colleges and universities, who, although having solid professional theories, lack professional skills and social practical experience and knowledge on the current development status of industrial enterprises. At the same time, they also tend to follow the traditional teaching modes, emphasizing the theory, underestimating the practice, being relatively weak in teaching technical skills, thus causing students to be lack of practical and operational capabilities.

The transformation and development of universities require numerous of teaching staff with practical experience and professional skills. However, it takes a certain period for common universities to cultivate talents with both theoretical knowledge and practical ability, and the output of practical talents with practical experience and professional skills also takes some time. The part-time teachers can well make up for the shortage of professional teachers and practical education instructors who are required during the development and program adjustment of universities, so that they can relieve the working pressure of full-time teachers who need more time and energy for scientific research, and realize the optimal allocation of teaching staff resources.

### **1.2 Strengthening the team construction of part-time teachers is required by the talent cultivation goal of application-oriented universities**

The application-oriented universities are targeted at cultivating and training applied technical and skilled talents. Such a position of talents training and cultivation

puts forward clear directional requirements on the structure of knowledge and ability of teaching staff. Teachers in application-oriented universities should not only have a solid theoretical foundation, an open knowledge system and an in-time update of their knowledge reserve, but also need to have skilled and professional practical ability and practical education ability, so that they will be capable of theoretical teaching, guiding students' practical training and cooperating with enterprises on applied research. Such a team of teachers can train and cultivate comprehensive talents with both solid basic theoretical knowledge and necessary specialized knowledge, as well as with basic abilities and skills required by the practical work in the professional field.

However, the full-time teachers in application-oriented universities have relatively heavy teaching tasks, lacking of time and experience to consistently conduct first-line practical and technical operation. They are often unable to solve the practical problems in the specific field, and at the same time, they may also have difficulties tracking and mastering new technologies and processes of industries or enterprises in time. Therefore, in order to achieve the goal of cultivating and training high-quality talents, the application-oriented universities should actively introduce professionals recognized by the industry and enterprises, and hire part-time teachers from excellent professional and technical personnel, management personnel and highly-skilled talents, who have rich practical work experience and strong professional practical ability, are capable of bringing students with the latest technology, information and production cases from the industry and enterprises in orientation of actual needs and by integration of theory with practice. It is significant for the cultivation and training of the first-line technical and skilled personnel and the innovative scientific and technological talents of professionalism and adaptability, the enhancement on the practical and applicable capabilities of students in specific majors, the promotion of their employment, the strengthening of the schooling distinctiveness and the contribution to local economy, society and industry. Therefore, the talent cultivation goal of application-oriented universities determines that part-time teachers are an important and necessary part of their teaching staff team.

### **1.3 Strengthening the team construction of part-time teachers is required by the highlight of schooling distinctiveness**

Strengthening the construction of part-time teacher system is an adaption of the application-oriented universities in China to the current requirement of transforming from the extension development to the connotative develop-

ment. At present, the application-oriented universities in China are still in the early stage of transformation and development with a serious shortage of teaching staff, especially the "double-qualified and dual-capability" teachers. To establish a relatively stable team of high-quality part-time teachers will not only meet the needs of universities on "double-qualified and dual-capability" teachers in their transition stage, but will also improve the structure of current teaching staff team and their teaching quality, promote the employment rate of students, further strengthen the contact and communication between universities and society, industries and enterprises, and enhance the influence and core competitiveness of universities.

At present, the proportion of part-time teachers in the total number of teaching staff in application-oriented universities is increasing year by year. They play an important role in their respective positions, however, due to the lack of special team construction and management, in the process of recruiting part-time teachers there are still many problems which affect the role of part-time teachers to a certain extent. Therefore, strengthening the team construction of part-time teachers in application-oriented universities and formulating relevant management systems are conducive to the standardized and orderly management of part-time teachers, improving their teaching quality, and thus giving full play to the value of this special team.

## **2. Difficulties in the Team Construction of Part-time Teachers in Application-oriented Universities**

Driven by the dual forces of realistic needs and national guidance, local undergraduate colleges are under constant transformation and development, during which their teaching staff team is also under constant adaption, which indicates the instability of quantity, scale and teaching staff team of the application-oriented universities in China. Part-time teachers, as an important supplement to the teaching staff in application-oriented universities, are recruited from various channels. They have rich working experience and superior professional skills, and can well apply the theory to the practice. However, at present, among the teaching staff of application-oriented universities the part-time teachers accounts a low portion, which is far behind a reasonable portion. In the applied science and technology universities in German, the proportion of part-time teachers accounts for 30% or more, and even more than 50% in some schools. While in the application-oriented universities of China, there is a lack of high-level part-time teachers.

### **2.1 Difficulties in government level**

First, there is a lack of relevance laws and regulations. At present, the management of part-time teachers in application-oriented universities lacks the support of corresponding laws and regulations. Although it may be referred in some legal provisions, there is still a lack of clear stipulations and specifications on the recruitment and dismissal procedures of part-time teachers in application-oriented universities, their post responsibilities, salary and training, which not only effects the management of part-time teachers in application-oriented universities, but also brings difficulties to the protection of their legal rights and interests.

Second, there is the lack of systemic policy for part-time teachers. Although the central government has issued a series of policies to encourage the application-oriented universities to actively hire more part-time teachers to expand the teaching staff team, most of these policies and government documents only put forward advocacy suggestions, without any specific and targeted directions for implementation. For example, there is no clear evidence of specifying the qualifications, recruitment procedures, job description, assessment criteria, salary system and training standards for part-time teachers in application-oriented universities, especially their coordination between the two status being an enterprise employee and a part-time teacher.

Third, there is a lack of financial support for the part-time teachers. In many policy documents issued by the government, it actively encourages application-oriented universities to hire more part-time teachers, but without any clear regulations explaining the financial sources of recruiting part-time teachers. Although the cost of hiring a part-time teacher only accounts for 1/3 or 1/2 of that of a full-time teacher, due to the lack of stable sources of funds, many application-oriented universities can only rely on the surplus funds to pay the salaries or training expenses of part-time teachers. The shortage of funds causes the application-oriented universities lacking motivation for the team construction of part-time teachers, which greatly restricts the development of team of part-time teachers.

### **2.2 Difficulties at university level**

First, there is a lack of sound management mechanism for part-time teachers. First of all, the long-term training and planning of part-time teachers are insufficient in most of application-oriented universities, in which the post-employment training of part-time teachers is limited to attending classes by other teachers or external study,

without any systematic training on their teaching skills. Secondly, the assessment system of part-time teachers needs to be improved, and there is a lack of multi-dimensional assessment system over the teaching quality like the teaching content and means, and the supervision and management mechanism over teaching process. Thirdly, the lack of evaluation incentive system for part-time teachers causes it difficult to mobilize the teaching enthusiasm of part-time teachers.

Second, there is a lack of scientific and reasonable employment scheme for part-time teachers. Many applied undergraduate universities only recruit the part-time teachers based on the completion of teaching tasks with a random process, lacking an overall planning, or a scientific and reasonable employment scheme. Although some colleges and universities hire part-time teachers with the original intention of improving the existing structure of teaching staff and ensuring the teaching quality, in fact, they regard the professional titles and academic qualifications as the priority conditions for hiring part-time teachers. In addition, many application-oriented universities have an incomplete understand on the outstanding professional and technical personnel, management personnel and highly skilled talents from the industry and enterprises, without hiring the experts who are most suitable for teaching as part-time teachers urgently needed in the current local economic and social development. At the same time, the application-oriented universities generally publish the recruitment information of part-time teachers only on the relevant teacher recruitment websites with single and limited information publication channels, which cause those who are willing to become part-time teachers but not familiar with education industry being unable to obtain recruitment information, and missing the application opportunity, therefore it limits the source of part-time teachers.

### **3. The Strategies for the Team Construction of Part-time Teachers in Application-oriented Universities**

With the deepening development of ordinary local colleges to application-oriented universities and the proposal of integrating production and education in the new era, part-time teachers have become a force in the teaching staff that can not be ignored in application-oriented universities. No matter in making up for the shortage of full-time teachers, enriching the strength of teaching staff, optimizing the allocation of resources, relieving the financial pressure of universities, or in enhancing the universities and society communication improving the social adaptability, vitality and flexibility of schooling, and strengthening the schooling distinctiveness, etc., the part-

time teachers all play an irreplaceable role. Therefore, the strengthening of team construction of part-time teachers, the establishment of a stable team of part-time teachers, the improvement of the teaching quality of part-time teachers and the assurance of sustainable development of part-time teachers have become a major issue that needs to be urgently solved in the development of application-oriented universities.

#### **3.1 Improving the existing laws, regulations and policies and broadening the financial support channels**

##### **3.1.1 Improving the existing laws and regulations to protect the legal rights and interests of part-time teachers**

In order to secure the legal rights and interests of part-time teachers, to ensure their income and social status, to strengthen the standardized management of them, and to continuously optimize and promote their overall quality, the relevant national legislative authorities should issue targeted and defined documents on rights and obligations, qualifications and appointments, training and education, and assessment and rewards of part-time teachers in the form of formal legal regulations.

The national legislative authorities and education departments should revise the existing relevant laws and regulations such as Law of the People's Republic of China on Education, Law of the People's Republic of China on Teachers, Law of the People's Republic of China on Vocational Education and Administrative Measures for Part-time Teachers in Vocational Schools. In Law of the People's Republic of China on Teachers, it should revise the concept of teachers by adding an extensional type of "part-time teachers who should be stipulated as special type of teachers and an indispensable and important part of the teaching staff. In the revision of the Law of the People's Republic of China on Vocational Education, it should adopt a qualification system, clarifying and completely regulating the nature, status, role, employment ratio and management measures of part-time teachers. In this way, the employment and team construction of part-time teachers in application-oriented higher education institutions should be placed within the mandatory norms and requirements of national laws and implemented according to laws.

On this basis, it should also improve the management measures over part-time teachers in application-oriented universities by clarifying the rights, responsibilities and obligations among the enterprises and institutions where part-time teachers are employed, the application-oriented

universities and the part-time teachers to provide a basis for standardizing the management and establish and improve rules and regulations such as selection and appointment of part-time teachers, salary incentives, training and professional qualifications, so as to provide a legal basis and assurance.

### **3.1.2 Formulating and improving the educational management policies and moderately increasing the proportion of part-time teachers**

At present, the evaluation scheme of teaching quality in application-oriented universities follows the Evaluation Scheme of Undergraduate Teaching Quality in Colleges and Universities (Trial) issued in 2004 (Jiao Gao Ting No.21), and the schooling criteria refers to the Basic Schooling Criteria for Colleges and Universities (Trial) (Jiao Fa No.2), which are applicable to all kinds of undergraduate colleges and universities. According to the provisions in these two documents, the eligible ratio between students to teachers should be 18: 1. When being added to the total number of teaching staff, the number of part-time teachers should be multiplied by 0.5. In principle, the number of total part-time teachers should not exceed one quarter of the total number of full-time teachers. Obviously, these regulations play a positive role in restricting some colleges and universities from hiring too many part-time teachers while neglecting team construction of full-time teachers. However, it is unreasonable to over limit the proportion of part-time teachers who are important to the schooling target and distinctiveness of application-oriented universities.

It is suggested that the statistics of the total number of teachers should be adjusted, and the number of full-time teachers and part-time teachers should be evaluated separately. Moreover the team construction of full-time teachers should be improved by specifying the ratio between the number of students and the number of full-time teachers. In recent 10 years, the proportion of part-time teachers in the total number of teaching staff in colleges and universities in China has been less than 24%. While referring to the development of application-oriented universities in many developed countries abroad, although the situation varies from country to country, the proportion of part-time teachers is relatively higher, even over 50%. Therefore, it is also suggested formulating and improving the assessment scheme for the professional construction by part-time teachers and their teaching quality which are beneficial to their development in application-oriented universities, "to promote the reform, construction and management by assessment, to combine the assessment with construction, and to focus on the construction". In as-

sessing the professional construction, it should adopt the basic criteria of whether part-time teachers are included in the teaching staff team and whether they reasonably and effectively play the teaching role. The existing teaching evaluation system should also be improved, by which the team construction of part-time teachers in colleges and universities can be supervised by the administrative authorities. Application-oriented universities shall be empowered in schooling, so that they will be able to flexibly employ high-quality and high-skilled part-time teachers based on the schooling goals and distinctiveness, reduce the ratio of students to part-time teachers, and increase the proportion of part-time teachers among the teaching staff. Therefore, the colleges and universities will be able to effectively overcome the spontaneous arbitrariness in the team construction of part-time teachers, and standardize and institutionalize the management of part-time teachers.

### **3.1.3 Broadening the financial support channels to provide material guarantees for the team construction of part-time teachers**

At present, wage and training cost for hiring part-time teachers are entirely borne by universities, which often fail to hire high-quality part-time teachers due to lack of funding. Although universities do not have to bear other welfare expenses except the wage, in order to ensure the quality of teaching, they should arrange the part-time teachers to attend some training, which will virtually bring extra expenditure to the application-oriented universities. In terms of enterprises, for the sake of maximizing their own interests and management convenience, they often lack the enthusiasm to supply part-time teachers. The outstanding talents from enterprises, who are willing to be part-time teachers, are still based on their own interests and intention rather than encouraged by government and enterprises, and many part-time teachers have their own concerns. Therefore, the government and education management authorities, the application-oriented universities and the enterprises should cooperate tightly, broadening the financial support channels for the team construction of part-time teachers and enhancing the relative material guarantees.

## **3.2 Developing the recruitment channels for part-time teachers and emphasizing the introduction of high-tech skilled talents**

### **3.2.1 Determining the qualifications of part-time teachers and formulating the recruitment criteria**

The relevant administrative departments of the government authorities should formulate the employment



criteria of part-time teachers in line with the development of application-oriented high education and undergraduate universities in China, strengthen the standardization and appraisal system of part-time teachers qualifications, and establish the management system over their employment and qualification certificates. Each application-oriented universities should distinguish the requirements of various positions and different curriculum based on their schooling scale and distinctiveness, clarify and refine the recruitment criteria for part-time teachers, establish appropriate academic requirements and increase the weight of practical ability and industry experience in the appraisal index. In the evaluation of part-time teachers who teach theoretical courses, their education background should be more important than work experience; while in the evaluation of those who teach practical courses, their work experience, practical and scientific research ability are more important than academic qualifications. If necessary, the requirements on their academic qualifications of the part-time teachers with high practical ability and rich industry experience can be appropriately mitigated. Although there is a positive correlation between age and social experience to some extent, in order to ensure the successful implementation of the teaching plan, it should set up an upper limit to the age of part-time teachers.

### 3.2.2 Developing diversified talent recruitment channels and expanding the source of part-time teachers

According to its own situation, application-oriented universities should recruit part-time teachers through school-enterprise cooperation, make full use of the convenience of the network information age, open up the network channels for part-time teachers recruitment, and publish the demand of part-time teachers in multiple channels. The local human resources administration, social security departments and education management authorities should play active roles in communication and service providence, collecting and publishing the information of part-time teacher demands of application-oriented universities, organizing communication and exchange meetings between enterprises and universities, inviting senior technical personnel and skilled technicians from enterprises to visit application-oriented universities, and regularly holding technical seminars to help enterprises and universities establish good cooperative relations. The government authorities should also formulate relevant regulations to encourage enterprises to send qualified employees as part-time teachers to colleges and universities, and set up a target on the number of qualified employees sent by the enterprises part-time teachers so that to develop an efficient

channel for the flow, access and exit of part-time teachers <sup>[1]</sup>.

### 3.2.3 Establishing a database for the potential part-time teachers and emphasizing the introduction of high-tech skilled talents

Based on the concept of teaching resources sharing, the database for the potential part-time teachers should be built for the sake of optimal allocation and resources sharing of high-quality part-time teachers among several regional universities. Local governments and education management departments should take the lead in establishing a regional database of the potential part-time teachers together with application-oriented universities, enterprises and scientific research institutions in the region to advocate and encourage highly skilled talents of enterprise, experts of the industry and skilled technician who are qualified as part-time teachers to actively apply the positions in application-oriented universities. Local leading enterprises shall recommend their high-tech skilled talents to the database, and upload their information or short videos of practical operation for the vast publicity. Colleges and universities can also upload the information of part-time teachers and short videos of course teaching with their permission for the convenience of being selected by other colleges and universities. At the same time, in order to ensure the teaching quality, colleges and universities should manage and upgrade the information of part-time teachers such as their teaching quality, morality, service period, reasons of resign and other information in the database. Therefore, other colleges and universities can refer to the corresponding information in the database and reduce the time of background investigation when hiring part-time teachers.

If the application-oriented universities want to hire high-quality part-time teachers for their needs, they should not "wait for it happens", but taking the initiative to contact enterprises and institutions, strengthening their cooperation with enterprises, and actively exploring and inviting senior technical and skilled talents and excellent management talents from outside the school to work as part-time teachers. "Being proactive and initiative, sending out warm invitations, closely communicating and precisely docking with the talents and providing them with personalized service and pleasant conditions are the keys for the colleges and universities to hire suitable part-time teachers, especially the high-quality ones." <sup>[2]</sup> Based on the principle of multi-party collaboration, joint training and mutual benefit, colleges and universities, together with industrial enterprises, scientific research institutions, especially the industry-university-research cooperation



units, should establish a teacher sharing and cultivation mode of "school-enterprise cooperation", establish the "School-Enterprise Teacher Cooperation Agreement" to clarify the job responsibilities, obligations and rights of both colleges and enterprises, and determine the relatively concentrated and flexible channels for selecting part-time teachers.

### **3.3 Improving the management over part-time teachers and promoting their value**

#### **3.3.1 Improving the management system of the team construction of part-time teachers and adopting humanized and standardized management measures**

Part-time teachers, as being non-formal-staff members of the system, are different from full-time teachers, and they are featured with temporaries and mobility. Therefore, in accordance with laws, regulations and policies, and based on their needs of professional talent development, application-oriented universities should set up specialized institutions to be responsible for the employment and management of part-time teachers, establish and improve the management measures, set up employment plan, specify the employment conditions, standards and procedures, and establish the mechanism of training, evaluation and incentives for part-time teachers.

The establishment of rules and regulations and the standardization of management over part-time teachers should be oriented in the humanity value and implemented on the basis of people-oriented management concept. First, it should give enough respect, care and concern to part-time teachers, avoiding bring them the identity illusion of "part-time job taker", and retain the talents by mechanism and emotion care, therefore, to enhance the work enthusiasm and professional identity of part-time teachers. Second, it should take initiative in communicating with part-time teachers, organizing them to attend regular teaching meetings, having regular talks with them, understanding their teaching progress and ideological trends, giving them humanistic care, rationally planing their teaching tasks, and setting up a full-time position to communicate with them. Third it should adopt flexible curriculum management to adapt the schedule of part-time teachers<sup>[3]</sup>. Fourth, it should regard part-time teachers as a part of the school, creating an atmosphere of respect and tolerance, and providing them with equal benefits and resources such as libraries access, school lounges and office space, parking and dining services, etc.

#### **3.3.2 Establishing and improving the training mechanism for part-time teachers and emphasizing their career development**

Part-time teachers have the right to be provided with relative training, which is also an obligation of colleges and universities. Application-oriented universities should set up training plans and programs for part-time teachers to ensure that they can receive the training regularly. For those part-time teachers with no teaching experience, the Academic Affairs Office or the Teacher Professional Ability Development Center of colleges and universities should actively provide them with pre-job training, which, on the one hand, should be a cultural integration to the school organization, and on the other hand, should include the training on teacher literacy, and teaching philosophy and skills.

Due to the time limitation of part-time teachers by their formal jobs, the training of part-time teachers should be flexible and diverse, reducing the centralized classes, and appropriately adopting more flexible activities such as symposiums, salons, thematic seminars, workshops, in-class observation and academic lectures. In order to break through the time limit and geographical limit of centralized training, it should make full use of the online training for part-time teachers to improve their teaching ability.

Application-oriented universities should strengthen the team construction of "double-qualified" teachers and promote the coordinated development of full-time and part-time teachers. They should invite full-time teachers and part-time teachers with rich teaching experience to establish a "teacher partner alliance", in which the full-time teachers provide part-time teachers with teaching materials, assessment requirements, students information and so on, and assist them in setting up teaching plans, selecting teaching methods, conducting teaching tasks, and designing and correcting homework, etc. The "teacher partner alliance" is bidirectional, and the interaction between part-time and full-time teachers can make them learn from each other and improve each other.

#### **3.3.3 Extending the work domains of part-time teachers based on the whole process of talent cultivation**

Application-oriented universities should constantly encourage part-time teachers to participate in the management of teaching and scientific research, empowering them the same right as full-time teachers in participating and making decisions on important issues, improving their recognition and participation in various activities in colleges and universities, and enhancing their professional

pride and professional role awareness. Part-time teachers have rich social experience and excellent professional skills, and are familiar with the latest development of industry and enterprises. The team construction of part-time teachers in application-oriented universities should promote the extension of their work domains based on the whole process of talent cultivation. For example, in demonstrating the positioning of professional posts and talent cultivation specifications, it should also include the part-time teachers; In the construction and development of professional curriculum system, it should listen to the opinions and suggestions of part-time teachers; In the design and implementation of practice education, it should focus on the part-time teachers; In the teaching reform and teaching evaluation, it should involve the part-time teachers from the perspective of industry enterprises<sup>[4]</sup>.

### **3.4 Adopting the people-oriented management concept and establishing an effective evaluation and incentive mechanism for part-time teachers**

#### **3.4.1 Improving the teaching evaluation system of part-time teachers to ensure their teaching quality**

Application-oriented universities should add the evaluation system of part-time teachers to the existing assessment system, comprehensively and systematically evaluating their teaching quality as a routine assessment of teaching quality. The criteria for teaching quality evaluation of part-time teachers should be distinguished according to different professional backgrounds and teaching contents. The teaching supervision group constituted by senior teachers should carry out the teaching quality evaluation of part-time teachers from four dimensions: the supervisor assessment, the institutional assessment, the student assessment and the self assessment. The criteria for teaching content evaluation should be comprehensive, including not only the professional quality of part-time teachers, but also the design of teaching plans, the teaching styles and methods, the teaching contents and the attendance, etc. The teaching supervision team can check and supervise over the teaching quality of part-time teachers by various ways, such as randomly attending the lectures, conducting students questionnaire, arranging symposiums, and referring to test scores, academic performance and skills learning outcomes of students. In addition, colleges and universities shall regularly adopt various means such as selecting and assessing the excellent teaching plans or course ware and arranging class demonstration and so on to improve the teaching quality of part-time teachers. Colleges and universities should

set up a database to keep the teaching evaluation results of part-time teachers, so as to provide basis for future rewards and penalty, contract renewal and employment postponement.

#### **3.4.2 Paying attention to the feedback and incentive effect of part-time teachers evaluation and deepening the school-enterprise cooperation**

The feedback on teaching evaluation should be provided to, first the part-time teachers, and second the enterprises and institutions where part-time teachers formally employed. The feedback to part-time teachers on their teaching evaluation results can help them improve their self-cognition. At the same time, the evaluation results should be linked to their salary and rewards, working as the incentive mechanism of "high efficiency and high salary" to set up a salary gap and establish competition relationship among part-time teachers thus to enhance their work enthusiasm. The feedback on the teaching evaluation results of part-time teachers to the enterprises and institutions where they are employed can strengthen the management of part-time teachers, so as to gradually improve their enthusiasm and initiative.

#### **3.4.3 Adopting diverse incentive measures to improve the treatment of part-time teachers**

A floating and flexible compensation should be adopted to provide part-time teachers with a reasonable treatment according to their ability. The compensation of part-time teachers is constituted with basic class hour wages and floating incentive bonus of which the former is paid for the completion of basic teaching tasks and the latter, as an monetary incentive is paid to those who complete the teaching tasks with high quality. The floating incentive bonus can be referred to two parameters: the teaching years and the teaching quality. The teaching years parameter is used to encourage excellent part-time teachers with long-term cooperation and good teaching quality to continue to work part-time, and the teaching quality parameter is used to provide excellent part-time teachers with floating bonus that they deserve. The floating compensation mechanism can arouse the enthusiasm of part-time teachers, making them improve their teaching, strive for better teaching quality, and enhance their professional identity in the colleges and universities.

In addition, a flexible employment can be adopted to improve the compensation of special talents. Limited by the schooling cost, the part-time teachers generally receive the class hour wages as their teaching compensation, which is basically differentiated according to their

professional titles and technical positions, and somehow harms the enthusiasm of part-time teachers who have low professional titles and technical positions but with rich practical experience, high skill level and strong teaching ability. Therefore, this group of talents should be hired under a flexible employment, such as the one of "high employment from low positions", by which they will be hired as part-time teachers of higher-level posts, together with corresponding higher compensation packages.

In addition to monetary incentives, colleges and universities should also establish and improve the reward system for part-time teachers, such as organizing a series activities like teaching evaluation, scientific research evaluation and commendation of achievements for part-time teachers, and issuing written certificates of excellent performance or honors. Government departments should select outstanding part-time teachers in the province or city, issuing honorary certificates and providing rewards to them. Enterprises and institutions should also take the praise and honor won by employees for their excellent teaching performance as a necessary parameter for their performance evaluation. The multi-dimensional and comprehensive incentives are conducive to improving the overall incentive effect on part-time teachers.

To sum up, as an important part of the teaching staff, part-time teachers play a key role in the development of application-oriented universities. The part-time teachers, with their professional technical knowledge, technical ability and rich practical experience in the industry, provide irreplaceable and valuable resources and services to the structural construction of "double-qualified" teachers.

Therefore, the application-oriented universities, relevant government departments, enterprises and institutions must cooperate with each other, paying attention to and striving for the team construction of part-time teachers, improving the relative policies and regulations as a guarantee, standardizing the recruitment process, enhancing the management and services, and promoting the effectiveness of incentive mechanism for the evaluation of part-time teachers. Only in this way can the part-time teachers play a full role to their overall educational value and to the promotion of developing application-oriented universities with high-schooling quality and distinctiveness.

## References

- [1] Wei, Aiping. The current dilemma and solution of the team construction of teaching staff in application-oriented colleges from the perspective of human capital theory [J]. *Education and Vocation*, 2019(09): 76-80.
- [2] Hun, Jianxiong. *Transformation and Development: Research on the Teaching Staff Structure Optimization in Local Undergraduate Colleges*[M]. Wuhan: Central China Normal University Press, 2017: 402-405.
- [3] Hu, Jianhui. On the team construction of part-time teachers in application-oriented undergraduate universities [J]. *Journal of Mudanjiang College of Education*, 2007 (02): 93-94.
- [4] Zhang, Hongjun, Han, Qingen. Constructing a new path of industry-university cooperation with part-time teacher system[J]. *China Adult Education*, (6): 67-69.

# Discussion of the Relationship between Fairness and Efficiency ——Based on Rawls' "A Theory of Justice"

Wenlin Feng\*

Sichuan Institute of Education Sciences, Chengdu, Sichuan, 610225, China

## ARTICLE INFO

### Article history

Received: 8 October 2021

Revised: 14 October 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### Keywords:

Fairness

Efficiency

Utilitarianism

Two principles of justice

## ABSTRACT

Since China's reform and opening up, from the Third Plenary Session of the 14th Central Committee of the Communist Party of China that put forward "efficiency first and fairness" to the 18th National Congress of the Communist Party of China, "first distribution and redistribution must deal with the relationship between fairness and efficiency, and redistribution pays more attention to fairness" Distribution policy, in 2021, the tenth meeting of the Central Finance and Economics Committee clearly stated that it is necessary to promote common prosperity in stages. The relationship between fairness and efficiency has always been the basic principle and standard for the country to formulate policies, and it is also the core issue discussed by scholars. Both utilitarianism and Rawls' two principles of justice provide us with different perspectives to explore the relationship between fairness and efficiency. This article focuses on Rawls's critique of utilitarianism and the specific content of the two justice principles, and makes a simple discussion on the relationship between fairness and efficiency and its enlightenment on the formulation of distribution policies in our country.

## 1. Criticism of Utilitarianism

Since Bentham and Mill, utilitarianism has become an independent theoretical system and has been improved and valued. Utilitarianism believes that the concept of justice is to maximize the realization of the goodness of the majority of people. In order to realize this goodness, even The interests of a small number of people can be sacrificed. The utilitarian view of justice is a teleological view of justice. The reason why it is teleology is that it only examines the purpose of the system and behavior, that is, whether the result of the system and behavior maximizes the goodness of the majority of people, and defines justice as a means to increase goodness. Between goodness

and goodness, goodness is given priority and justice is subordinated. Although on the surface the goodness and justice of utilitarianism are independent and separate from each other, in fact justice only exists as a dependency of goodness. "This classical form of utilitarianism offsets the goodness brought by an institutional arrangement. The net increase after the loss of damage or dissatisfaction is used as the basis for judging whether it is moral or justice, which makes utilitarianism always use efficiency as the standard of justice."<sup>[1]</sup> Therefore, it is not difficult for us to draw the following conclusion: utilitarian justice According to the view, efficiency is the priority and fairness is a means to achieve efficiency. In order to achieve efficiency, fairness can even be sacrificed.

\*Corresponding Author:

Wenlin Feng,

Sichuan Institute of Education Sciences, Chengdu, Sichuan, 610225, China;

Email: 760875851@qq.com



Rawls' critique of utilitarianism starts from the investigation of intuitionism. Intuitionism believes that the determination of any principle is made by intuition. Based on the sum-division dichotomy of intuitionism, Rawls proposes two types of intuitionism. The basic principle of distribution: efficiency principle and equality principle. Since this is an "intuitionist viewpoint", the two principles are adopted in no order. Therefore, Rawls believes that intuitionism can be either deontological or teleological. It is teleology, which also creates the flaws of intuitionism. Based on this defect and the uncertainty of intuition, utilitarianism deeply criticizes intuitionism, and tries to resolve the conflicts between various ideas by establishing a single standard, and give a specific and clear standard for the construction of behavior and system. So as to get rid of the influence of intuition. From this perspective, utilitarianism's stipulation on the priority of the principle of efficiency can make up for the intuition's interference with reason and the deficiencies in the priority of the two principles of distribution. However, in human society, either the establishment of this kind of system and the production of behavior are inseparable from the role of intuition. Rawls believes that the biggest flaw of utilitarianism is that it completely negates the role of intuition, and chooses goodness as the only criterion, putting efficiency principles in the first place. Only pay attention to the investigation of behavioral results, and ignore the consideration of fairness. Rawls said that "the intuitionist view of justice is only half a view of justice."<sup>[2]</sup> In order to make up for the theoretical flaws of intuitionism and make it a complete deontology, Rawls introduced the lexicographic sequence as a balance standard. The principle of efficiency and the principle of equality have been stipulated in the order of priority, thus proposing their own two principles of justice: the principle of equality and freedom, the principle of fair opportunity and the principle of difference. If according to the utilitarian view of justice, fairness and efficiency should be the priority of efficiency, then Rawls's view of justice is fairness first, taking into account efficiency<sup>[3]</sup>. Rawls criticized utilitarianism by introducing procedural fairness, but did not deny the importance of considering results. "We define deontological theory as a non-teleological theory, not as Regarding the legitimacy of institutions and behaviors as views independent of the nature of their results, all ethical theories worthy of our attention must consider the results when judging the legitimacy. Ethical theories that do not do this are strange and unreasonable. "Following, Rawls tried to amend the utilitarian teleology to deontology, and to transform the relationship of good first to justice first, so that through the ordering of the two justice principles, he can comprehensively give priority

to fairness and justice under the premise of fairness first. Efficiency is cared for and considered.

In summary, from Rawls's investigation of intuitionism and his criticism of utilitarianism, his theory of justice is actually a revision of intuitionism and utilitarianism, and is formed by combining and improving the two to a certain extent. Rather than adopting a stance of totally negating the two theories. Take the essence and remove the dross, so as to form a more complete theoretical system.

## 2. Rawls' Two Principles of Justice

Aristotle said, "The good in politics is justice, and justice is based on the public interest. According to the general understanding, justice is the concept of "equality" (equal) of certain things."<sup>[4]</sup> For the definition of "justice" by J.R. Rawls, we can regard the discussion of justice in Rawls' "A Theory of Justice" as a discussion of fairness to a certain extent. Rawls starts with the research method of contract theory, hypotheses and defines the "primitive state" as the premise of his justice principle. In order to eliminate the influence of accidental factors that cause people's conflicts and prejudices on the principles of justice, Rawls described the "primitive state" as people who are rational and indifferent to others but only care about their own interests. Hobbies, good and evil, and other factors are completely ignorant of the social state, that is, Rawls's so-called "veil of ignorance" concept, only rational and caring about personal interests behind the "veil of ignorance" justice. Only principles can embody fairness and justice to the greatest extent, and abandon the influence of personal interests and world outlook on the principles of justice. In this original state, Rawls chose to prioritize the right to the good as the basic feature of his view of justice.

Aristotle believed that good is justice, that is, public interest, that is, equality. In Aristotle's theory, justice and good are the same concept, but later, many philosophical schools and philosophers divided justice and good into Two independent concepts are defined, and the priority relationship between the two is the object of discussion. From this, we can see the teleology of utilitarianism that prioritizes goodness, while Rawls's view of justice is deontology that prioritizes justice. Rawls introduced Kant's procedural justice into his justice principles. What he proposed was a pure procedural justice, rather than "imperfect procedural justice." He concluded: "The basic sign of imperfect procedural justice is: When there is an independent standard for judging the correct result, there is no procedure that can guarantee it." In Rawls's view, a fair procedure not only means that the standard for judging the result is fair, but the process of reaching the result must



also be fair. . However, Rawls also carefully discovered that following a fair procedure may not be able to achieve fair results, such as fair gambling. Therefore, in order to ensure the full realization of fairness, he proposed two principles of justice: "The first principle: Everyone should have an equal right to a similar system of freedom that is compatible with the broadest basic freedom system owned by others. . The second principle: social and economic inequalities should be arranged in such a way that they are reasonably expected to be suitable for everyone's interests; and they are dependent on status and position and are open to everyone." In summary, this The two principles are the principle of equality and freedom, the principle of equality of opportunity and the principle of difference. The first principle of justice means that everyone has equal rights to freedom, and the second principle of justice means that under the condition of fair opportunity, positions and status are open to everyone; social and economic inequality should meet the minimum benefit The best interests of the recipients, that is, the principle of compensatory fairness to compensate the least beneficiaries. The two principles are arranged in a lexicographical sequence to achieve fairness as comprehensively as possible. Simply put, the first principle takes precedence over the second principle, and in the second principle, principle takes precedence over in principle. Rawls tries to eliminate as much as possible the unfairness caused by accidental factors (including physical conditions, family conditions, intellectual conditions and other natural factors) through a feasible way, and perfect the path to fairness by introducing the concept of procedural fairness, and Through investigation and attention to the results, fairness is the criterion, and a compensatory fair method is introduced to compensate the interests of disadvantaged groups. Rawls tried to establish a perfect theoretical system through all-round investigations, thereby establishing an ideal state of fair starting point, fair process and fair result.

### 3. The Relationship between Fairness and Efficiency: Based on the Interpretation of Rawls' "A Theory of Justice"

The discussion of fairness in the western world has sprouted since ancient Greece. In China, fairness refers to justice, equality, and impartiality. Some scholars believe that fairness is both specific historical and relative, based on relative fairness and equality under certain unfair and unequal natural endowments<sup>[5]</sup>. Under this concept of fairness, the principle of distribution according to work, wealth first leads to wealth, and other viewpoints are produced. This view that fairness is not egalitarianism has certain truths, but under this principle, the old and

the weak are sick. How can the disabled and those with poor natural endowments be treated fairly and justly? Therefore, Rawls put forward a fair view of justice on the basis of just prioritizing goodness. In order to minimize the unfairness caused by natural accidental factors, Rawls proposed the principle of difference to provide a compensation for correcting unfairness. Mechanism, to a certain extent, Rawls' view of fairness implies a kind of egalitarian value orientation, but Rawls' egalitarianism is not absolute average, it is a kind of moderate egalitarianism, and it treats all Differences are allowed under the premise that everyone is beneficial. This is different from the two extreme viewpoints of utilitarianism that blindly pursue the maximization of benefits without hurting the interests of a few people, and that everyone is absolutely evenly distributed. Rawls is very smart in choosing In order to improve the principle of justice in a compromised way, the overall interests and individual interests have been increased. Efficiency refers to the use of limited resources to meet the most demand as much as possible. Ding Huang believes that efficiency can be divided into mechanical efficiency and social efficiency. That is to say, efficiency must be combined with value goals such as public interest, personal value, equality and freedom to make sense."<sup>[6]</sup> Therefore, a society that only blindly pursues efficiency without the guidance of fair values is like an out-of-control train. Running too fast can easily deviate from the track of normal social development.

According to the utilitarian point of view, efficiency should be given priority to fairness and efficiency. There are also some views that fairness and efficiency are two incompatible concepts. Pursuing fairness only leads to low efficiency, and pursuing efficiency only leads to extreme unfairness. To comment on the relationship between fairness and efficiency in Rawls's justice view, I agree with Professor Tong Shijun's statement that "fairness is the priority and efficiency is given consideration". To some extent, Rawls' principle of difference provides a theoretical support for state interventionism. Under the premise of equal freedom and fair opportunity, if the fairness of the results cannot be achieved, the country can only formulate a series of taxation policies and social security policies to ensure compensation for the interests of disadvantaged groups, thereby realizing the fairness of the entire society. According to Liao Shenbai's interpretation, Rawls's view of fairness and justice represents a "democratic, equal and free" distribution system. The transformation into a specific national system can be summarized by the following formula: "free market system + compulsory education + minimum welfare Security and property income tax system". In general, Rawls's concept of fairness and

efficiency is the pursuit of efficiency. It should be carried out on the basis of fairness. Efficiency and fairness should be unified, just like two sides of a coin, indispensable. China's 18th National Congress of the Communist Party of China put forward the policy of "giving consideration to efficiency and fairness in both initial distribution and redistribution, and paying more attention to fairness in redistribution". It has a certain commonality with Rawls' view of justice, and both try to pass certain compensation. The mechanism provides relief to socially disadvantaged groups.

#### 4. Criticism of Rawls' View of Justice

Rawls' two principles of justice have positive reference significance for solving the simple relationship between fairness and efficiency, formulating correct economic development and distribution policies, reducing the gap between the rich and the poor in society, and protecting the interests of disadvantaged groups. However, many Western scholars have also put forward different opinions and criticisms on Rawls's view of justice. Among them, Robert Nozick's "Anarchy, State, and Utopia" is the most vivid critique of "A Theory of Justice". Nozick raised his own questions from Rawls's original state to the principle of difference: "Why do individuals in their original state choose a principle that focuses not so much on individuals as they are on groups? Maximum minimum value Isn't the adoption of the standard to make everyone in the original state agree to maximize the status of the worst individual?"<sup>[7]</sup> Nozick believes that Rawls's theory of justice is based on nothingness conceived out of thin air. Under the premise of the principle of difference, before the implementation of the principle of difference, it is necessary to create social distributable resources through individuals. Therefore, it is unfair to forcibly distribute the wealth created by individuals through their efforts. In Nozick's view, disadvantaged groups My misfortune is not a kind of unfairness, but is determined by accidental factors, and it is precisely because of society's respect for personal values and the existence of differences that make people feel the satisfaction of self-esteem, thereby reducing jealousy to a minimum. From Nozick's point of view, fairness and efficiency should be the pursuit of efficiency first, fairness will be achieved in the process of pursuing efficiency, and capitalist private ownership and free market economy, private property should be protected and other systems are correct. The state It should be "the country in the weakest sense," and it should not interfere too much in economic, social and personal development, and only act as a night watchman. However, under this view, the gap between the rich and the poor in the capitalist society is becoming

increasingly wide. Exploitation and exploitation have become a matter of course. The lives of the disadvantaged and the people at the bottom cannot be guaranteed. In my opinion, Nozick is the capital. The exploitation of ism provides a legitimate excuse and reason to conceal its true unfair nature. Rawls' view of justice supports a strong view of the state and provides theoretical support for national macro-control to intervene in economic and social development. Only through the means of macro-control can the country apply the principle of difference proposed by Rawls. Practice<sup>[8]</sup>.

Of course, Rawls's view of justice still has some flaws, such as how to make people as far as possible not to shift their personal interests when formulating justice principles, how can the state of "veil of ignorance" be achieved, and how can they be as far as possible To ensure procedural fairness, how to define which groups should be compensated, how to grasp this degree, and what defects and unreasonable implied under the seemingly comprehensive principles of fairness, fairness in starting point, fairness in procedure, and fairness in results ? These problems all existed with my reading of "A Theory of Justice".

#### 5. Concluding Remarks

The discussion on the relationship between fairness and efficiency has always been the most fundamental starting point for the country to formulate policies. From the "Efficiency Priority and Fairness" proposed by the Third Plenary Session of the 14th Central Committee of the Communist Party of China, China will continue to the tenth meeting of the Central Finance and Economics Committee in 2021. The meeting clearly stated that it is necessary to promote common prosperity in stages. It reflects that our country is attaching more and more attention to fair value in the process of rapid economic development. The cake must be bigger, but the distribution must be fair. The economic development must be fast, but also stable. The relationship between fairness and efficiency is unified, and the two cannot be neglected. Regardless of whether it is priority to efficiency or fairness, it is based on the national reality, and the best fits the current situation. Rawls's "A Theory of Justice" provides a more comprehensive and reasonable path for the discussion of the relationship between fairness and efficiency. Only under the guidance of fairness values, efficiency will highlight its significance and role.

#### References

- [1] (US) John Rawls. Theory of Justice [M]. Translated by He Huaihong and others. Beijing: China Social

- Sciences Press, 1988.
- [2] Liao Shenbai. The Amendment to Classical Liberalism in "A Theory of Justice"[J]. *Chinese Social Sciences*, 2003,5: 126-137.
- [3] Chen Jian. Analysis of the Concepts of Efficiency and Fairness and Their Relationship[J]. *Exploration*, 2009,2:188-192.
- [4] Ding Huang. Seeking for the coordination and unity of fairness and efficiency——Comment on the value pursuit of modern western new public administration[J]. *Chinese Administration*, 1998,12:80-84.
- [5] (Ancient Greece) Aristotle. *Political Science*[M]. Translated by Wu Shoupeng. Beijing: The Commercial Press, 1965.
- [6] Tong Shijun. Three Enlightenments of Contemporary Western Justice Theories to China[J]. *Exploration and Controversy*, 2011,11:21-23.
- [7] (US) Robert Nozick. *Anarchy, State and Utopia*[M]. Translated by Yao Dazhi. Beijing: China Social Sciences Press, 1991: 194-195.
- [8] Song Yuehong. An Analysis of Rawls and Nozick's Different Understanding of the Difference Principle[J]. *Political Science Research*, 1999,3:83-91.

# "Seed Science and Engineering" Exploration on the Construction of Curriculum Ideological and Political System

Huawei Cui Bin Yang Yixiong Zheng\*

College of Agriculture and Biology, Zhongkai University of Agriculture and Engineering, Guangzhou, 510225, China

## ARTICLE INFO

### Article history

Received: 8 October 2021

Revised: 14 October 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### Keywords:

Seed science and engineering

Curriculum thought and politics

System construction

## ABSTRACT

The specialty of "seed science and Engineering" has trained a large number of scarce seed talents for China. This paper summarizes the experience, existing problems and future improvement direction of the ideological and political system construction of the curriculum of "seed science and Engineering" in our university, in order to improve the ideological and political system construction of colleges and universities.

## 1. Introduction

Since China Agricultural University took the lead in establishing the undergraduate specialty of "seed science and Engineering" in 2002, more than 36 colleges and universities in China have successively carried out undergraduate and graduate education of "seed science and Engineering", which has trained a large number of professionals for China's seed industry. As early as 2013, our university established the specialty of seed science and engineering to speed up the cultivation of seed industry talents. This paper summarizes the stage of the school level teaching reform project of "Ideological and political demonstration major".

## 2. Research Significance

Seeds are known as agricultural "chips". When inspecting Hainan in 2018, general secretary Xi Jinping

put forward: "we must make up our mind to develop our seed industry and grasp the fine varieties with independent intellectual property rights, and protect the national grain security from the source". At present, Guangdong Province has included "modern seed industry and precision agriculture" in the R & D plan of nine major fields of scientific and technological innovation, listed it as the key work of the provincial government for six consecutive years, and took the lead in implementing the modern seed industry improvement project in the country. On April 22, 2020, the Department of science and technology of Guangdong Province, together with the Agricultural Office of the provincial Party committee, the Provincial Department of ecological environment, the Provincial Department of agriculture and rural areas, the Provincial Forestry Bureau, the provincial poverty Alleviation Office and the Provincial Association for science and technology, jointly formulated the science and technology plan for Ru-

\*Corresponding Author:

Yixiong Zheng,

College of Agriculture and Biology, Zhongkai University of Agriculture and Engineering, Guangzhou, 510225, China;

Email: gdsscqs@163.com

ral Revitalization of Guangdong Province, requiring the organization and implementation of the R & D plan in key areas of "modern seed industry and precision agriculture", carry out the action of "strengthening the core" of the agricultural industry, and seize the commanding height of the modern seed industry.

Curriculum ideological and political education is an important part of ideological and political education in colleges and universities and an important starting point for implementing the fundamental task of building morality and cultivating people in colleges and universities. It organically integrates curriculum professional knowledge with ideological and political education, takes the socialist core values as the foundation, fully excavates the ideological and political elements contained in this curriculum, and realizes the organic integration of curriculum and ideological and political education, and lay a solid foundation for cultivating excellent agricultural talents needed in the new era <sup>[1]</sup>. The construction of curriculum ideological and political system stands at the height of professional construction, which can better coordinate the implementation of ideological and political construction of various professional courses, better cultivate students' feelings of "big country, agriculture, rural areas and farmers", family and country feelings and craftsman spirit, enhance national self-confidence and cultural self-confidence, and improve students' innovation consciousness, cultural quality, legal consciousness and professional ethics. Help students apply the knowledge and technology they have learned to solve the practical problems of the national seed industry, and become compound "three rural" talents in the new era with solid theoretical foundation, excellent operation skills, high innovation spirit and professional ethics.

### 3. Experience Summary

(1) Guided by the construction of organization and system

Earnestly implement the rules and regulations for undergraduate education management formulated by the University and the college. The president is the first person responsible for teaching quality, the vice president of teaching is the person in charge, and the department head is the person directly responsible. The person in charge system of ideological and political courses shall be implemented. Full time teachers shall act as the person in charge of professional basic courses, and a teaching team shall be established. The person in charge of each course is encouraged to form a team across colleges and disciplines. Responsible for the organization and implementation of ideological and political teaching, quality control, summary and promotion of teaching reform experience, etc.

College leaders, student work department, Party Committee Publicity Department, ideological and political theory teachers, counselors and experimenters are invited to participate in the course team. Improve students' online teaching evaluation, students' final questionnaire survey, and add ideological and political evaluation indicators in the questionnaire. Teachers of this major are encouraged to listen to each other and hold seminars on the construction of Ideological and political specialty on a regular basis.

(2) Take the revision of talent training program as an opportunity

In the cultivation of talents in various disciplines in the new era, we should run the ideological and political work through the whole process of education and teaching, excavate and sort out the moral education elements of various courses, improve the curriculum system construction of Ideological and political education, give full play to the educational function of various courses, and realize the great ideological and political pattern of full, whole process and all-round education. We should deeply understand the strategic significance of comprehensively promoting the establishment of curriculum ideological and political education, grasp the key of curriculum ideological and political education, and comprehensively improve the ideological and political level and effectiveness of the professional curriculum.

According to the current construction standards of "new agricultural science" and "golden course" <sup>[2]</sup>, the spirit of the guiding outline for curriculum ideological and political construction in Colleges and universities (JG [2020] No. 3) <sup>[3]</sup>, the development orientation of the University, the social needs of the specialty and the needs of local construction, revise the talent training plan to make it a strong support for the training objectives. Refine the training objectives of ideological and political talents of the major, add relevant courses, and resort out the previous curriculum outline. It is required to closely combine the ideological and political elements with the curriculum content to prepare the syllabus, and establish a set of reasonable evaluation system to achieve the talent training goal of "Building Morality and cultivating people" <sup>[4]</sup>.

(3) Dominated by the ideological and political construction of professional courses

With the construction of professional courses and ideological and political courses as the core, all kinds of courses cooperate with professional ideological construction. Implement the socialist core values, relevant laws and regulations, professional ethics and the work spirit of agriculture, rural areas and farmers into various professional courses, refine the educational objectives, teaching



plans, teaching plans and handouts of various courses<sup>[5]</sup>, and implement them into classroom tests, after-school homework and final exams. Take process assessment and multiple assessment as tools, take results as guidance, and take the satisfaction of students, parents and schools as criteria to implement the whole staff education and the whole process education.

The construction process of ideological and political specialty draws lessons from the achievements and experience of previous educational reform, rather than building ideological and political courses in isolation. It emphasizes the "three integration" of curriculum thought and politics with the concept of "student-centered" and information technology, so as to improve the effectiveness of teaching reform. For example<sup>[6]</sup>, during the ideological and political construction of seed engineering experiment, for the teaching of seed production, students of this major (teachers provide guidance) developed the "virtual simulation" teaching software, which was later recommended as a national innovation project. This not only shapes the value orientation of students' exploration and innovation, but also cultivates a serious, dedicated and persistent "craftsman spirit", which is the successful integration of curriculum ideology and politics, information technology and student-centered concept<sup>[7]</sup>.

(4) Assisted by teaching and research projects and teaching competitions

Take the application and implementation of teaching and research projects as one of the main measures for the construction of Ideological and political specialty, and implement the ideas and objectives of ideological and political construction in the project. Teachers are encouraged to participate in teaching competitions at all levels to promote teaching and reform. Support teachers to summarize teaching reform and competition experience and publish relevant teaching and research papers<sup>[8,9]</sup>.

In recent years, the major has presided over 5 teaching and research projects at all levels and published 6 ideological and political teaching and research papers. Some honors won by professional teachers are as follows: (1) The second prize in South China in 2018 National Crop Science young teachers' teaching skills competition. (2) Top ten middle-aged and young teachers of the school in 2020. (3) In 2021, the top four players in the "First National College Teachers' teaching innovation competition". (4) In 2021, the top eight contestants of the "first undergraduate college curriculum ideological and political teaching competition in Guangdong Province". (5) The 10th "my favorite teacher" school level top ten teachers in 2021.

## 4. Existing Problems

The construction of Ideological and political system in this major has carried out a lot of practice and achieved many exploration results. However, there are also the following problems:

(1) Some teachers are not enthusiastic. Although many teachers are enthusiastic and actively participate in various reform activities in the implementation process, a few teachers are not enthusiastic and still have resistance to curriculum thought and politics.

(2) It is difficult to assess the effectiveness of teachers' ideological and political teaching. This study evaluates and summarizes the enthusiasm and teaching effectiveness of teachers' participation in curriculum ideological and political education, but most of them are qualitative descriptions. How to accurately quantify teachers' work participation and work effectiveness is still a difficult problem.

## 5. Outlook

In the future, in addition to trying to solve the above two problems, the project will continue to improve from the following two aspects.

(1) Mobilize the enthusiasm of professional teachers

Professional course teachers are the main body of the construction of "Ideological and political demonstration specialty" of this specialty, which is composed of experienced teachers and newly introduced excellent doctors. Next, through conference discussion, goal decomposition, result assessment, student evaluation, mutual scoring among teachers and other ways, professional teachers will be fully mobilized to participate in the work, and the curriculum ideological and political reform will be promoted in depth<sup>[10]</sup>.

(2) Invite students to participate in the project construction

Give full play to students' strength. Invite student class committee cadres, party activists and other excellent students to participate in the project. Let students make multi-dimensional records and feedback on the effectiveness of curriculum ideological and political implementation, help professional teachers find out the implementation methods of curriculum ideological and political implementation, and improve the effectiveness of ideological and political teaching. Grade and evaluate the behavior and results of teachers' curriculum ideological and political reform, so as to encourage teachers to better participate in the project<sup>[11]</sup>.

In short, the construction of the ideological and political system of the professional curriculum will continue to

consolidate the existing achievements, promote successful experience, solve the problems found in the practice process, and further promote the construction of the ideological and political system of the professional curriculum of "seed science and Engineering", so as to better realize professional education melts ideological and political education, such as salt dissolves in soup and resonates with the same frequency; ideological and political education promotes specialty, like spring breeze and rain, establishing morality and cultivating people.

## Funding

The construction project of "seed science and Engineering" in 2020, a school level "curriculum ideological and political" demonstration specialty.

## References

- [1] YU Yi-he, GUO Da-long, JIANG Yan, et al. Exploration on the establishment of Ideological and political system of horticulture Curriculum under the background of "new agricultural science" [J]. *Journal of higher education*, 2021 (24): 173-177.
- [2] LIANG Ting-ting, ZHANG Yang. Exploring the construction of student-centered hybrid curriculum quality system [J]. *China education informatization*, 2020 (6): 26-29.
- [3] Ministry of education. Notice of the Ministry of education on printing and distributing the guiding outline for curriculum ideological and political construction in Colleges and universities [EB / OL]. Chinese government network, [http://www.gov.cn/zhengce/zhengceku/2020-06/06/content\\_5517606.htm](http://www.gov.cn/zhengce/zhengceku/2020-06/06/content_5517606.htm).
- [4] Liu Guohua, Pang Min. Exploration and Practice of Horticulture Professional Innovative Talent Training Mode Based on New Rural Construction [J]. *Heilongjiang Agricultural Science*, 2020 (9): 97-100.
- [5] Julie. Takes Shandong Agricultural University as an example [J]. *China Agricultural Education*, 2020, 21 (3): 9-15.
- [6] Yu Lijuan changed from "ideological and political course" to "course ideological and political course" [N]. *Guangming Daily*, 2017-07-20.
- [7] Zeng Xiangyue, Jiang Nan. Research on the Ideological and Political Construction of the Open Education Curriculum [J]. *Contemporary Continuing Education*, 2021, (02): 41-47.
- [8] Kan Ping, Zhang Zengtian, Cai Chun. Takes the School of Education of Capital Normal University as an example [J]. *Beijing Education (Higher Education Edition)*, 2021, (05): 67-69.
- [9] Han Shenzhou. Promote the practical innovation of cultivating people by virtue through ideological and political courses [J]. *China Higher Education*, 2019 (23): 12-14.
- [10] again, Lin. Promote the construction of high-level undergraduate talent training system through ideological and political courses [J]. *Beijing Education (Higher Education)*, 2021 (02): 30-32.
- [11] Tian Ling, Zhou Xiaolu. Takes the course of Internet Marketing as an example [J]. *Electronic Commerce*, 2020 (09): 88-89.

# Benefit Evaluation of Real Estate Industry Based on SBM Model

**Mengting Zhuang\***

Anhui University of Finance and Economics Statistics and Applied Mathematics Bengbu, Anhui, 233030, China

## ARTICLE INFO

### Article history

Received: 15 October 2021

Revised: 19 October 2021

Accepted: 20 October 2021

Published Online: 30 October 2021

### Keywords:

Real estate

Benefit evaluation

Super efficiency

SBM

## ABSTRACT

According to the situation of real estate industry in different provinces and cities, the benefit is different, and the benefit of real estate industry in some regions is low. Based on the statistical data of real estate industry in various regions, this paper selects nine indicators, such as the number of enterprises, the average number of employees, the land purchase area (10000 square meters) in this year, to evaluate and analyze the benefit of real estate industry in 31 regions of China by using two-stage super efficiency model. The results show that the input-output of the real estate industry in 17 regions is effective, and the remaining 14 regions are DEA ineffective. The reasons for the inefficiency of the input-output are analyzed, and some suggestions to improve the efficiency are given.

## 1. Introduction

In recent years, with the rapid development of China's economy, housing has become the rigid demand of a family, the scale of real estate development is expanding, and the price is increasing. Market supply exceeds demand, and at the same time, there is a great deal of speculation, which makes housing prices seriously deviate from value, resulting in an economic phenomenon of real estate bubble<sup>[1]</sup>. The development efficiency of the real estate industry in each city will be affected by local policies and economic factors. At the same time, the real estate industry has an impact on the use of land resources and national economy. This paper mainly evaluates the benefit of the cross-sectional data of real estate in 31 regions of China in 2019. Before that, Meng Chuanjin (2008) selected 500 real estate enterprises in China as the decision-making unit, and pointed out that enterprises should pay more

attention to business efficiency<sup>[2]</sup>. But there is no specific suggestion to improve the business efficiency. Zeng Zhao-fa (2013) used the stochastic frontier production function model to conduct an empirical study on the efficiency level of real estate development in China's provinces. It is concluded that there are great differences in the development benefits of various provinces and cities in China, but the ranking and specific benefits of different provinces and cities are not given<sup>[3]</sup>. Yang yingzhe (2017) research shows that: the overall transformation efficiency of China's real estate enterprises is low, and there is a large room for improvement in both the preparation stage and the implementation stage<sup>[4]</sup>. But did not point out the specific problems of each province. Yuan Qingmin (2020) used DEA model to give the efficiency values of the three urban agglomerations in different stages, but did not distinguish the super efficiency areas from other areas<sup>[5]</sup>. In summary, there are a large number of literature on the evaluation

\*Corresponding Author:

Mengting Zhuang,

Anhui University of Finance and Economics Statistics and Applied Mathematics Bengbu, Anhui, 233030, China;

Email: 2748109203@qq.com

of real estate benefits in China, but most of them are the analysis suggestions given from the perspective of some regions or from the perspective of the market. There is no research based on the benefits of the real estate industry in different regions, and there is no specific benefit value of the real estate industry in different regions. Based on the above problems, from the perspective of the real estate industry, this paper selects 31 regions as decision-making units, uses SBM model to solve the benefit value of different regions, and gives suggestions for the regions with invalid input.

## 2. Data Sources and Processing

### 2.1 Data Sources

The data come from the China Statistical Yearbook 2020. Referring to Zhang Qi and Liu Rong, nine indicators are selected as the research objects, which are: number of enterprises, average number of employees, land purchase area (10000 square meters), completed investment this year, newly started housing area this year, completion rate of housing construction area (%), completed value of housing, sales area of commercial housing and main business income. 31 regions in China are selected as decision-making units.

### 2.2 Selection of Indicators

The real estate investment is mainly considered from two aspects: labor input and capital input. The labor input is the number of enterprises and the average number of employees; Selection of capital investment: land purchase area of this year (10000 square meters), completed investment of this year, a total of four investment indicators<sup>[8]</sup>. Output indicators from the perspective of labor output, the main outputs are: the new construction area of housing this year, the completion rate of housing construction area (%), and the indicators of capital output are the sales area of commercial housing, the completion value of housing, and the main business income. These five indicators. Nine indicators and 31 regions were studied as decision-making units.

## 3. The Solution of the Model

### 3.1 Model Introduction

Based on the existing research results, this paper studies the efficiency ranking and efficiency value of 31 regions in China by using the non oriented SBM model with constant scale benefit. Data envelopment analysis (DEA) is a nonparametric method of technical benefit analysis, among which the most basic models are BCC and CCR.

SBM model is evolved from these two models. In the radial DEA model, the measurement of inefficiency only includes the proportion of equal proportion reduction (increase) of all inputs (outputs). For the invalid DMU, the gap between its current state and the strong effective target value includes not only the equal proportion improvement, but also the relaxation improvement. The improved part of relaxation is not reflected in the measurement of efficiency. Tone Kaoru (2001) proposed SBM model<sup>[5]</sup>. The advantage of SBM model is to solve the problem that the radial model does not include relaxation variables in the measurement of inefficiency. This paper studies the efficiency of China's real estate industry based on the non oriented SBM model with constant scale efficiency.

$$\text{Objective function: } \rho_{SE} = \frac{\frac{1}{m} \sum_{i=1}^m \bar{x}_i / x_{ik}}{\frac{1}{q} \sum_{r=1}^q \bar{y}_r / y_{rk}} \quad \left| \begin{array}{l} \bar{x}_i \geq \sum_{j=1, j \neq k}^n x_{ij} \lambda_j \\ \bar{y}_r \leq \sum_{j=1, j \neq k}^n y_{rj} \lambda_j \\ \bar{x}_i \geq x_{ik} \\ \bar{y}_r \leq y_{rk} \\ \sum_{j=1, j \neq k}^n \lambda_j = 1 \\ \lambda, s^-, s^+, \bar{y} \geq 0 \\ i = 1, 2, \dots, m; r = 1, 2, \dots, q; j = 1, 2, \dots, n (j \neq k) \end{array} \right. \quad (1)$$

SBM model is a non oriented super efficiency model with constant scale benefit,  $m$  input index  $x_i$  and  $q$  output indexes  $y_i$ ;  $x_{ij}$  is the  $j$ -th input of the  $i$ -th DMU,  $y_{rj}$  is the  $j$ -th output of the  $r$ -th DMU,  $s^-, s^+$  are relaxation variables, and  $\lambda$  is weight coefficient. The  $\theta$  obtained by this model is the efficiency value of the  $j$  decision unit. In the sBM  $\theta < 1$  model of super efficiency,  $\theta = 1$  is invalid,  $\theta > 1$  is weak and effective, which is the super efficiency.

### 3.2 Result Analysis

Using the SBM model of constant reward and non oriented super efficiency, and with the help of dea-solver software, the efficiency values of real estate industry in 31 regions of China in 2019 are shown in Table 1 and Table 2



respectively.

It can be seen from Table 1 that the 17 regions of Xinjiang, Ningxia, Hehai, Shanghai, Chongqing, Tibet, Jiangsu, Jiangxi, Sichuan, Beijing, Henan, Gansu, Shanxi, Inner Mongolia, Tianjin, Shandong and Heilongjiang are DEA efficient, and the first 16 of them are DEA super efficient, with the efficiency value greater than 1. It shows that there is no waste of resources in the development of real estate industry in these 17 areas, and the real estate industry in these areas has high efficiency. In these areas, there are developed Beijing and Shanghai, where the real estate industry is mature, the market is more standardized, and the urban population density is high; Tibet, Xinjiang and Inner Mongolia have developed rapidly in real estate industry with high efficiency due to the economic development and policy reasons in frontier areas in recent years.

NPC and CPPCC, the highest in one belt, one road in Xinjiang, the highest efficiency in 2.166, 2019 years. After the end of the two sessions, Xinjiang's real estate industry is very important. The "one belt and one road" led to the economic development of Xinjiang. Urumqi's international land port and airport two port construction, Xinjiang's cultural and creative industry exhibition and so on have far-reaching impact on Xinjiang's real estate industry.

It can be seen from Table 2 that Hubei, Guangdong, Jilin, Hunan, Zhejiang, Shaanxi, Anhui, Qinghai, Liaoning, Guizhou, Hebei, Yunnan, Fujian, Guangxi and these 14 regions are DEA invalid. The results show that the benefits of the real estate industry in these areas still need to be improved. The development of real estate should be combined with the local demand and policy, instead of blindly building houses, which is not conducive to the use of environmental resources and the development of local economy. For the 14 invalid DEA decision-making units, the target values of the invalid DEA decision-making units are given, which can be used as a reference for the improvement of the real estate industry in the 14 regions. See Table 3 for details:

In order to study the impact of different indicators, Hubei, Guangdong, Guizhou, Qinghai and Guangxi were selected as representatives to study the result data and analyze the reasons.

The number of enterprises in Hubei decreased by 161, the average number of employees, the land purchase area of this year (10000 square meters) and the completed investment of this year remained unchanged, while the new construction area, the completion rate of the construction area (%) and the completed value of the houses increased. For Hubei only, some real estate enterprises are ineffective and have not brought the greatest economic benefits.

And these inefficient enterprises will occupy the land area, but due to the low efficiency, the new construction area and the completion rate of housing construction area this year will be reduced, which will eventually lead to the low completion value of housing.

Among the input variables in Guangdong, only the completed investment this year decreased by 565.88, and the other three input indicators did not change. However, the newly started housing area, the completion rate of housing construction area (%) and the finished value of housing in this year all increased. For Guangdong, part of the investment has not played a real role. The real economy of Guangdong Province is in recession, but the real estate industry is relatively prosperous, which leads to the hollowing out of Guangdong economy. The excess investment does not lead to the increase of new construction area and completion rate, the completion value does not improve, the pure technical efficiency is not high, and the new construction area and completion rate need to be improved.

Among the input variables in Guizhou, only the average number of employees decreased by 25447, and the remaining three input indicators did not change, while the completion rate (%) of housing construction area, housing completion value and main business income all increased. For Guizhou Province, the problem is that there are too many practitioners in the real estate industry, but some of them are inefficient, which may be caused by professional technology and other reasons, resulting in the low completion rate of housing construction area. The part of the cost needed to be invested is invalid. When the utilization of these invalid resources is reduced, the operating revenue will also increase.

Among the input variables in Qinghai region, only the land purchase area decreased by 61.29 in this year, the other three input indicators did not change, while the completion rate of housing construction area (%), the completion value of housing, the sales area of commercial housing, and the main business income all increased. For Qinghai, the land purchase area is too large in 2019, which leads to the failure of enterprises in the region to complete the production of purchase area, thus reducing the completion rate of housing construction area, greatly improving the completion value of housing, and increasing the sales area and main business income of housing.

Guangxi has the lowest efficiency among the 31 regions, which is more complicated than Hubei, Guangdong, Guizhou and Qinghai. Among the input variables, only the number of enterprises does not need to be changed, the average number of employees needs to be reduced by 1283, the land purchase area this year needs to be reduced

Table 1. DEA effective area score table

<b>region</b>	Xinjiang	Ningxia	River and sea	Shanghai	Chongqing	Tibet
<b>score</b>	2.166	1.343	1.258	1.257	1.148	1.133
<b>region</b>	Jiangsu Province	Jiangxi	Sichuan	Beijing	Henan Province	Gansu Province
<b>score</b>	1.114	1.108	1.096	1.054	1.052	1.051
<b>region</b>	Shanxi	Inner Mongolia	Tianjin	Shandong	Heilongjiang	
<b>score</b>	1.037	1.03	1.02	1.007	1	

Table 2. DEA invalid area score table

<b>region</b>	Hubei	Guangdong	Jilin	Hunan	Zhejiang	Shaanxi	Anhui
<b>score</b>	0.585	0.571	0.556	0.529	0.527	0.486	0.47
<b>region</b>	Qinghai	Liaoning	Guizhou	Hebei	Yunnan	Fujian	Guangxi
<b>score</b>	0.436	0.429	0.384	0.349	0.334	0.327	0.315

Table 3. Target value of invalid decision unit

DMU	Number of enterprises	Average number of employees	Land purchase area of this year	Investment completed this year	New construction area of housing in this year	Completion rate of building area(%)	House completion value	Sales area of commercial housing	Main business income
Hubei	4114	136313	784.9	5111.73	9792.75	27.71	1628.10	8602.04	4837.02
Guangdong	9239	271392	1240.33	15286.28	18557.78	50.77	5776.61	13846.54	16160.51
Jilin	1231	32916	464.02	1104.40	2947.01	34.18	546.43	2122.34	986.81
Hunan	4366	131415	1261.56	4445.47	11933.23	47.86	1154.03	9103.5	3900.54
Zhejiang	6824	130969	1683	8679.00	12730.92	54.72	3312.55	9378.31	9247.5
Shaanxi	2640	86269	485.11	3903.65	6431.21	27.05	1332.71	4401.06	3402.53
Anhui	4112	126022	1294.55	5499.34	11117.46	57.54	2073.517	9229.38	5124.85
Qinghai	304	9280	104.43	406.29	865.9	5.36	172.03	604.70	314.06
Liaoning	1973	52950	651.31	2339.36	4363.65	37.05	1062.75	3696.27	2492.57
Guizhou	2763	85338	534.26	2990.81	7239.89	19.58	741.03	5323.31	2219.97
Hebei	3498	98632	1047.34	3814.44	9452.68	78.43	1150.54	5282.7	2726.97
Yunnan	2860	82813	869.23	3196.81	8018.51	59.92	950.77	4835.41	2307.41
Fujian	3519	112575	1031.7	3720.58	7645.02	73.14	1865	6456.13	3377.07
Guangxi	3056	93613	1053.93	3105.29	8218.52	63.44	1274.60	6711.77	2602.00

Table 4. Improvement value of five cities

region	index	Number of enterprises	Average number of employees	Land purchase area of this year	Investment completed this year	New construction area of housing in this year	Completion rate of building area(%)	House completion value	Sales area of commercial housing	Main business income
Hubei	actual value	4275	136313	784.90	5111.73	8708.85	7.60	961.61	8602.04	4837.02
	target value	4114	136313	784.90	5111.73	9792.75	27.71	1628.10	8602.04	4837.02
	Improved value	-161	0	0	0.00	1083.90	20.11	666.49	0	0
Guangdong	actual value	9239	271392	1240.33	15852.16	18437.38	11.50	4569.93	13846.54	16160.51
	target value	9239	271392	1240.33	15286.28	18557.78	50.77	5776.61	13846.54	16160.51
	Improved value	0	0	0	-565.88	120.40	39.27	1206.68	0	0
Guizhou	actual value	2763	110785	534.26	2990.81	7239.89	3.40	230.25	5323.31	1718.81
	target value	2763	85338	534.26	2990.81	7239.89	19.58	741.03	5323.31	2219.96
	Improved value	0	-25447	0	0	0	16.18	510.78	0	501.15
Qinghai	actual value	304	9280	165.72	406.29	865.90	4.60	31.66	480.52	202.01
	target value	304	9280	104.43	406.29	865.90	5.36	172.03	604.70	314.06
	Improved value	0	0	-61.29	0	0	0.76	140.37	124.18	112.05
Guangxi	actual value	3056	94896	1186.93	3814.41	8218.52	6.80	582.45	6711.77	2342.83
	target value	3056	93613	1053.93	3105.29	8218.52	63.44	1274.60	6711.77	2602.00
	Improved value	0	-1283	-133.00	-709.12	0	56.64	692.15	0	259.17

by 33, and the completed investment this year needs to be reduced by 709.12. The completion rate of housing construction area (%), the completion value of housing, the sales area of commercial housing, and the main business income all increased. In particular, the completion rate increased by 56.64%. It shows that the real estate enterprises in Guangxi have a large development space, and the development is relatively mature. The number of employees, the area of purchase and the amount of investment are in excess, so there is a lot of room for development. There is a gap between the real estate development of Guangxi and the developed areas. The unbalanced development of the real estate industry in Guangxi, the low proportion of the employed population in the real estate industry, the small average registered capital of the real estate development enterprises in Guangxi, and the small proportion of their own funds in the total assets lead to the backwardness of the real estate industry in Guangxi.

#### 4. Summary and Suggestions

First, one belt, one road, and another one, uneven development. From the data, we can see that the real estate industry is influenced by many factors, such as Xinjiang, and is affected by the “one belt and one way”. The resources of real estate industry in developed areas are more efficient. Guangdong, as a coastal city, has the largest amount of investment, but Tibet and Ningxia, as remote areas, have relatively less resources. Therefore, for remote areas, more talents should be introduced, so as to drive the development of local real estate industry and other industries, and promote the good development of regional economy.

Second, the allocation of resources is unreasonable. From the comparison of the target value and time value of DEA data, the problems existing in many regions are the unreasonable allocation of resources. There are four input indicators: the number of enterprises, the average number of employees, the land purchase area of this year (10000 square meters), the completed investment of this year, and the situation of surplus. It shows that the resources in many regions are surplus, or the resources are not fully utilized. As a result, the final output index still has room for development. Regions should make full use of resources, do not “speculation”, adjust measures to local conditions, targeted to the regional real estate industry planning, in order to maximize the use of resources and maximize output.

#### Funding

Research project of Anhui University of Finance and economics “Research on performance evaluation of Financial Sharing Service Center Based on DEA” (xsky21103).

#### References

- [1] Chen Zhigang, Wu Guowei, Zhang Hao. How the real estate bubble affects the real economy investment [J]. *finance and economics science*, 2018, (03): 93-106.
- [2] Yang yingzhe, Huang Guangqiu, Zheng Haotian. Fuzzy Two-stage DEA model for evaluating the transformation efficiency of real estate enterprises [J]. *Journal of Xi'an University of architecture and Technology (NATURAL SCIENCE EDITION)*, 2017,49 (02): 296-303.
- [3] Yuan Qingmin, Yin Shanshan. Evaluation and Analysis on periodic characteristics of real estate efficiency in three urban agglomerations [J]. *Management modernization*, 2020,40 (05): 31-35.
- [4] Deng Ming Liang, Wu Chuan Qing. Research on the input output efficiency of real estate industry in the Yangtze River economic belt [J]. *Statistics and decision*, 2020,36 (18): 114-118.
- [5] Xu Jianzhong, Zhao Yanan. Research on regional low carbon innovation network efficiency based on j-sbm Three-stage DEA model [J]. *Management review*, 2021,33 (02): 97-107.
- [6] Huo Fudong, Lai Jiyu, Zou Lei, Li Xiaojuan, sun Huawei. Analysis of obstacles and Countermeasures for the application of 5dbim in real estate projects based on triangular fuzzy number AHP [J]. *Journal of Jiamusi University (NATURAL SCIENCE EDITION)*, 2019,37 (06): 853-857 + 870.
- [7] Wang Jinghui, Niu xican, Wu Yue, Zhang Huanming. Evaluation of energy conservation and emission reduction performance in Anhui Province Based on DEA and cluster analysis [J]. *Journal of Jiamusi University (NATURAL SCIENCE EDITION)*, 2019,37 (03): 463-466 + 495.
- [8] Guan Siqi. Research on the value relevance and presentation of other comprehensive income of listed real estate companies [D]. *Jiamusi University*, 2018.
- [9] Lu Miaomiao. Evaluation of Reader Satisfaction Based on fuzzy theory and data envelopment analysis [J]. *Journal of Jiamusi University (NATURAL SCIENCE EDITION)*, 2017,35 (02): 344-346.
- [10] Jia Siyu, Yang Penghui, Li Hui, Lin Wenbin. Evaluation of medical services in Grade 3A hospitals based on Data Envelopment Analysis: a case study of Bengbu City in Anhui Province [J]. *Journal of Jiamusi University (NATURAL SCIENCE EDITION)*, 2016,34 (04): 652-656.
- [11] Zhi Dongxiao. The influence of index correlation on the effectiveness of DEA evaluation [J]. *Statistical education*, 2009, (06): 40-44.

## About the Publisher

Bilingual Publishing Co. (BPC) is an international publisher of online, open access and scholarly peer-reviewed journals covering a wide range of academic disciplines including science, technology, medicine, engineering, education and social science. Reflecting the latest research from a broad sweep of subjects, our content is accessible worldwide——both in print and online.

BPC aims to provide an analytics as well as platform for information exchange and discussion that help organizations and professionals in advancing society for the betterment of mankind. BPC hopes to be indexed by well-known databases in order to expand its reach to the science community, and eventually grow to be a reputable publisher recognized by scholars and researchers around the world.

BPC adopts the Open Journal Systems, see on [ojs.bilpublishing.com](http://ojs.bilpublishing.com)

## Database Inclusion



Asia & Pacific Science  
Citation Index



Creative Commons



China National Knowledge  
Infrastructure



Google Scholar



Crossref



MyScienceWork







 **BILINGUAL  
PUBLISHING CO.**  
Pioneer of Global Academics Since 1984

Tel: +65 65881289  
E-mail: [contact@bilpublishing.com](mailto:contact@bilpublishing.com)  
Website: [ojs.bilpublishing.com](http://ojs.bilpublishing.com)

ISSN 2591-7625



9 772591 762216 04